COMPUTER APPLICATIONS IN BUSINESS - I



CENTRE FOR DISTANCE AND ONLINE EDUCATION MANONMANIAM SUNDARANAR UNIVERSITY TIRUNELVELI

MSU/2021-22/UG-Colleges/Part-III(B.B.A.)/Semester-III/Ppr.no.18/Skillbased-1 COMPUTER APPLICATIONS IN BUSINESS - I

L	Т	Р	С
0	0	6	3

Course Objective:

- 1. To gain practical knowledge and depth working application principles in the office packages for the day to day office transactions.
- 2. To provide practical knowledge of basic operations in MSWord, MS Excel, MS Powerpoint
- 3. To integrate Microsoft Office applications for use in business

COURSE OUTCOMES:

CO1: Apply word basic commands, editing and proofing tools, creating tables, changing layout and mail merge concept for creating and managing business documents and effective communication

CO2: Handle business data by applying the in- built features of excel

CO 3: Apply financial and statistical function of excel for financial forecast, project analysis and analysis of business data

CO 4: Create a new presentation, modify presentation themes and add or edit text to slides

CO 5: Design a simple data base, build a new data base with related tables and manage the data in a table

SOFTWARE: MS - OFFICE Package

EXERCISES: Word

Create Table with five columns and six rows. Do the following options using that Table:
 a) Sorting b) The Sum Function c) Merge cell d) Table Headings

Convert Text to a table, Splitting a Table and Table AutoFormat. Show with example.

2. Assuming yourself as the General Manager of a company draft an appointment letter toa

candidate short-listed through an interview. (Use Mail Merge)

3. Create at least two pages of text with multicolumn layouts like magazines and newspapers. Add the following options:

- a) Header and Footer
- b) Borders and shading for title
- c) Use WordArt for heading
- d) Use Text Box

EXERCISES: Excel

1. Prepare a Mark Sheet of a School for 10 Students with 6 Subjects details and Calculate how many students pass and fail by including one column as result in the mark sheet.

2. Prepare an EMPLOYEE Database of an Organization with the following details: (Atleast 10 Details) Name, Emp Id, Gender, Address, Phone No, E-Mail Id Qualification, Designation, Department, Salary, Year Of Joining And Working Station

- > Draw Chart to Find Out The % Of Male & Female Working (Pie Chart)
- Find Out How Many Employees Drawn Salary Above 10000.
- > Draw a Chart For Emp Id And Salary Drawn.

3. Create Balance Sheet and Profit & Loss Statement by your own data for an organization and use at least 10 Different Formulas in Different Cells.

Zone		Sales in Lakhs					
	1 st quarter	2 nd quarter	3 rd quarter	4 th quarter			
North	23	26	32	30			
South	21	25	30	30			
East	24	26	29	27			
West	21	26	28	29			

4. Graphically present the following sales data from ABC Corporation Limited

Use the following chart types: a. Bar Chart b. 3-D Column

EXERCISES: Power Point

- 1. Present the agenda of the Annual General Meeting of a company using PowerPoint.
- a) Set a suitable timing between two slides.
- b) Use appropriate templates, fonts and styles.
- c) Store a copy of the presentation as a PowerPoint show (ie., with a pps extension)
- d) The timing between slides is 30 seconds.
- e) Use different animation effects for each slide.Prepare at least seven slides.

2. Design presentation slides for a products of your choice the slides must include name, brandname, type of product, characteristics, special offers, price etc.

- a) Changing background colour, font colour using wordart.
- b) Use manual mode for the slide show.
- c) Use Top-down, Bottom-up, Zoom in and Zoom out effects.

EXERCISES: Access

i. Create a table, form and report for the database: "Patient details"

ii. Fields are: patient, Patient name, Patient age, Patient Gender, Patient address, Patient phone, Patient mobile, Patient email, Doctor detail, Patients reports (At least 10 records should be included).

TEXT BOOKS:

1. Ananthi Sheshasaayee and Sheshasaayee, Computer Applications in Business And Management - Margham Publications, Chennai.

2. Dr Ahmad Tasnim Siddiqui, Vivekanand Pandey, Computer Application in Management- Himalaya publishing house, Mumbai

REFERENCE BOOKS:

- 1. Sinha, P.K. and Sinha, P. Foundation of computing.- BPB Publications.New Delhi
- 2. Arora, A, Computer fundamentals and applications. Vikas Publishing.
- 3. Rajaraman, V, Fundamentals of Computers. Prentice-Hall, Delhi
- 4. Parameswaran R, Computer applications in business-S Chand & company, New Delhi.

WEB RESOURCES:

- 3. https://www.makeuseof.com
- 1. <u>https://edu.gcfglobal.org</u> 2. <u>https://www.invensislearning.com</u>
 - 4. https://johnacademy.org

	CONTENTS				
UNITS PARTICULARS PAGE					
I	MS WORD	5			
11	MS EXCEL	46			
	MS POWERPOINT	84			
IV	MS ACCESS	99			
	EXERCISES	129			
	SHORTCUT KEYS	157			

Unit – I

M S WORD

MS Office – MS Office contains following application programs Word, Excel, Power Point, Access, Outlook, and Front page.

Word – MS Word is the most famous & useful member of Office suite. With the help of application software by using word processing and Desktop publishing Memo, Resume, Report can be created. MS Word provides various features which works for the text.

- Already available Templates and Wizards helpful in hard documentation.
- Spelling checker corrects all the Spelling mistakes while typing and thesaurus provides the meaning and synonyms of the selected word.

With the help of Mail Merge two different file documents and database for mass correspondence, can be merged.

Table feature helps to set the data in the form of Table.

With the help of Column Settings a document can be divided into multiple columns.

Auto correct feature automatically corrects the mistakes generally occurred in fast typing.

Excel - MS Excel is an application which is used to manipulate the data especially arithmetic data.Features provided by MS Excel makes the task easier.

- Templates –Templates are used for the standardization of data entry files which may containtypical formulas.
- Chart and mapping tools are available to represent the data graphically.
- Information List can be Sorted and filtered very quickly and easily.
- Importing and Exporting Tools are available to move the data in Excel or out of excel for example in Access or any other Database application.

Power Point - Power Point is the only application used to createPresentations.

- Auto content wizard makes the creation of Presentation very easy.
- Completely designed templates of text and graphical slide formats are also available.
- Clip art library is available to provide various pictures related to various fields.
- Multimedia sounds and videos can be inserted in the Presentations.

- Various animation effects are available as graphical feature.
- With the help of Microsoft organization chart, organization chart be inserted in the Presentations.

Outlook – Office suite members provide contact management, email client drive and folder management functionality. Outlook not only helps in time management but helps to manage our personal and professional contacts by the email management. Accession of regularly used information is centralized by it. This change can be easily viewed in Word, where we can use the storage of outlook in our document.

- Capacity to record projects, events.
- Screen dependent views of our daily, weekly, monthly & yearly Schedule.
- Capacity to print our schedule in various formats including famous Planner.
- Capacity to store many names, addresses, phone numbers, birthdates, anniversaries, emailaddresses with all hyperlinks of homepage with contact information.
- Ability to permit the rights to access our schedule & mail folder on network

MS Access – Database management can be done easily with the help of Access. Access is the only Application in Office suite where Database can be created very easily.

- Data base wizard helps us to create complete database including table & report as specified.
- It provides features to create forms, data entry &filter& easy to manage.
- Latest Report wizard it can be used for professional looking report. Report design screenhelps us to create professional looking report.
- Macro conducts all repetitive tasks like data importing.
- Visual basic can be used for Applications.
- Built in HTML edits our data in World Wide Web.

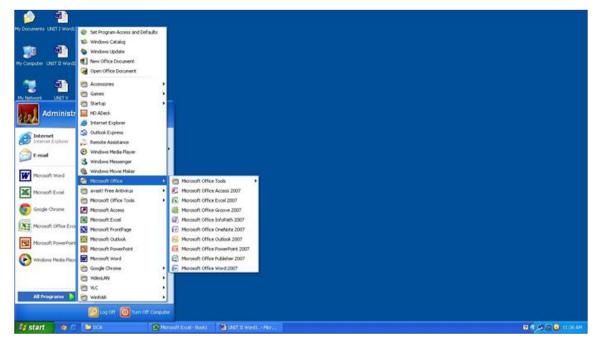
Front Page – Front page is a member of suite used to create a complete website. It has the features like wizards & Templates which are helpful to create as it . These features are as follows-

• Wizards are helpful to create site by the selection of some Stereo type options. We have to select one of many choices & then click on next button and click on finish button after

the creation of site.

- WYSIWYG Editor helps us to write the page & to get the output. WYSIWYG means "What You See Is What You Get". Like as-We can write & format a Paragraph on screen and then take a view.
- Published Wizards helps us to get our site on web.

Below we elaborately discuss about word, excel, power point and access which have included in the syllabus named as 'Computer Applications of Business I'.



Word processing

Whenever we create a new document file in any application program then whatever text we write should be in a sequence it should be in a standard form, for such kind of representation we use Word Processor. In other words we can say that creation of words, creation of sentences, creation of a paragraph or creation of a page is quite simpler with the use of word processor. When we represent the text in such a sequence then the process is known as word processing.

Features of word processing

• Word wrap:- While typing any text when a program automatically changes a line i.e. after the completion of first line it automatically starts second line this process is known as word wrap.

- **Page Formatting:** It includes all the changes and settings performed on a page. we can be set margins, we can set header and footer also we can use Endnote by page formatting.
- **Paragraph formatting**: It includes the changes turn on a paragraph as per our need like as- we can set the starting point of the paragraph, line spacing of the paragraph, space between twoparagraphs etc.
- **Text formatting**:- It includes the changes made on the text as per our requirements we can change font of the text, we can change size of the text, we can make it bold, Italic or underline letters. We can also change the color of text.
- Editing of text: If any kind of mistake occur by typing then we can change the text to correct it, like we can change the text, correct the spellings etc, this is known as editing of text. By using word processor we can also correct the spelling & check the grammar. We can also get the output of the file as a hard copy or soft copy.

Microsoft word (MS-word) - MS word stands for Microsoft word it is the most powerful and developed word processing package generally it is used for the heavy formatting in text material.

Process to open Microsoft word-

To open MS Word very first we will click on start button/menu then take the pointer to All programs & then select MS Word from the submenu. It can also be selected from MS office folder, and then MS Word window appears.

Elements of Microsoft word window

1) Title Bar

The top most horizontal bar of the Word window is called title bar. Name of the application window & current file is written on its left side and on its right click there are three buttons namely minimize, maximize and close these buttons are for operating window.

- 5

- **Minimize Button-** This is to minimize the window. When we click on minimize button, window is stored on Task bar in the form of Icon button.
- Maximize Button- This is to maximize the application window.
- Close Button- Close button is used to close the Application window.

2) Menu Bar

Menu bar contains the list of Functions and Facilities related to the curent Application program. Menu bar has following main menus having several sub menus for different operations-

P	Document1 - Microsoft Word								
	<u>F</u> ile	<u>E</u> dit	View	Insert	F <u>o</u> rmat	Tools	T <u>a</u> ble	Window	Help

When we select any of these we get a list of all available options related to the particular menu calledsubmenu.

3) Borders & Corners- With the help of Borders and Corners we can change the size of Application window.

4) Scroll Bar

Application window contains two types of scrollbars -

- Vertical Scrollbar
- Horizontal Scrollbar

Vertical Scroll Button- By using Vertical Scroll Bar we can move the current page of Application window from Up to down and down to up.

Horizontal scroll Button- By using Horizontal Scroll Button we can move the current page of Application window from left to right and right to left.

Working with MS Word

Menus & Commands

100	Do (ocu	ument	1 - Micr	osoft Wo	ord				
	<u>F</u> ile		Edit	View	Insert	F <u>o</u> rmat	Tools	Table	Window	Help

• File :- it controls operations related with files mgmt like creating opening saving

closing etc.**Edit: -** it is for editing work.

- View :- it facilitates all the operations regarding different view of documents tool bars orother elements like headers and footers etc.
- Insert: it is for inserting different ms word a document like table etc.
- Format :- all commands for the save of formatting your document are available under thismain menu.
- **Tools :-** It provides different powerful tools like spelling & grammar check.
- Table :- this main menu includes sub-menus to control operations related with table.
- Window :- it keeps commands to handle window related operations.
- Help :- to get assistance by different menu this main menu is used.

Toolbars & Buttons

Standard toolbar:-Standard toolbar contains the options related to file & document in the form ofbuttons. Ex: - new, copy, open, paste.

 Standard
 ▼ ×

 □ 22 日 日 100%
 ▼ 3

 □ 22 日 日 100%
 ▼ 3

 □ 22 日 日 100%
 ▼ 3

- New- To create a new file.
- **Open-** To open a created file.
- **Save-** To save the file.
- **E-Mail**-To show Current worksheet in E-Mail body.
- Search-To search any file] WebPages or any outlook item.
- **Print-** To print the Document.
- Print Preview- Shows print preview of File.
- Spelling- Checks Spellings in document.
- Cut- To cut any text, Graphics.
- **Copy-** To copy any text, Graphics.
- **Paste-** To paste cut or copied portion at right place.
- Format Painter- Copies text style.
- Undo- Rejects previous work.
- **Redo**-Repeats previous work.
- Insert a Hyperlink- Adds Hyperlink.

- Tables & Borders-To open Tables & Borders toolbar.
- **Insert Table-**To insert Table in our document.
- Insert Worksheet-To insert Worksheet in the document.
- Columns- Divides text in Columns.
- **Drawing-** To show or hide Drawing toolbar.

Formatting toolbar

Formatting toolbar contains the options related to the editing of text indocument. Ex: - Alignment, bold, italic

Formatting				▼ ×
👍 Normal	 Times New Roman 	• 12 • B I	⊻ ■ = = = ± - \$	日日 健健 🗐 🛛 • 🖉 • 🗛 •

- Font-To change the Font style or language.
- Font size- To change the font size.
- **Bold** To make selected matter bold (Dark).
- Italics-This command is used to italic selected matter.
- **Underline**-To underline selected matter.
- Alignment-To set the alignment of text.
- Line Spacing- To set the space between lines.
- Numbering- To set numbers on various paragraphs of the document.
- Bullets- To set bullets on various paragraphs of the document.
- Decrease Indent-To decrease Paragraph Indent.
- Increase Indent- To increase Paragraph Indent.
- **Outside Border-** To set the Borders of table.
- **Highlight-** To highlight the text.
- **Font Color-** To set the text color.

File operations in ms word

File operations include creating a new file, opening an existingfile, saving a file etc.

Creating a new file:- a file can be created in three different ways-

- We can select new option from file menu.
- We can click on new document button from the standard tool bar

• We can use ctrl + N shortcut

By using three ways we get a new blank document on Word window. Text can be typed on this blank document to create a file.

Saving a document: - To save a file after writing any text we can choose anyone of the following ways-

Save As							?×
Save in:	📋 My Docur	nents	•	- 🗈 🔇	🗙 🛎 🎟	× Too <u>l</u> s ▼	
History	Downloads My Music My Pictures My Webs						
My Documents	Doc1						
Desktop							
Favorites							
My Network	File <u>n</u> ame:	Doc3			•		Save
Places	Save as <u>t</u> ype:	Word Document			-		Cancel

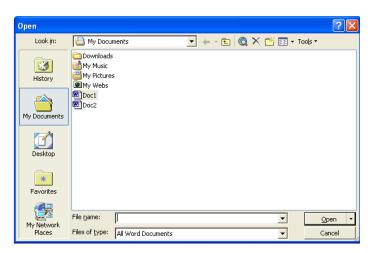
- 1. We can select save option from filemenu
- 2. By clicking save button on standardtool bar
- 3. By using ctrl + s shortcut key

After clicking on save option wehave to fill three options to save the file:-

- Save in: Save in gives the facility to select any drive or folder where the file is to be saved.
- File name: In file name text boxwe type the name of the file.
- Save as type: It allows us to select type of file.

Opening a File:- following ways are used to open a file -

- We can select open option from file menu.
- We can click on open button from thestandard tool bar.
- Ctrl + O (by shortcut key)



After a choose an open option than we have to fill three points /options

- a) Look in:- look in give us facility to select any drive or folder where the file to be opened
- b) File name:- in file name text box we type the name of the file
- c) Files of type:- it keep a list of nature f the file word document

Copying a file:- to create a copy of the file the following steps are usually used

- click file and select open or press ctrl+ o together
- in the look in box click the drive or folder that contains the file you want to copy and the click copy of the shortcut menu
- right click in the folder list and then click paste and the shortcut menu

Renaming a file:- suppose we have created a file and want to change its name we can do idfollowing the instruction as mentioned below

- either click open button on the standard tool bar or choose open form file
- click on the name of file you want to change in the window
- then click right button of the mouse a shortcut box appears choose rename alternatively youpress f2 key
- type the name as desired

Printing a document: - To print a file we do the following-

• Click on the file menu and select print option.

Print			? 🛛
Type:	Send To OneNote 2007 Idle Send To Microsoft OneNote Driver Send To Microsoft OneNote Port:		
ranges : from the section.	page Selection ge numbers and/or page separated by commas counting e start of the document or the For example, type 1, 3, 5–12 , p1s2, p1s3–p8s3	Copies Number of copies:	1 🗘
	Document 💙 All pages in range 💙	Zoom Pages per s <u>h</u> eet: Scale to paper si <u>z</u> e:	1 page
Options			OK Cancel

Click the print button from thestandard tool bar.

• Press ctrl + P from the key board.

While printing we must select some options forprinting available in the print dialog box.

- a) All:- It prints all pages of a file together
- b) Current page:- it prints the page wherethe cursor is presently located
- c) Pages:- it print the select pages

d) No of copies: -If we select no of copieswe want to print just by scrolling the box after we set the options as requiredclick ok.

Previewing a document: - you can see your output on the screen before its goes to final preset it will make you observe layout etc to do this follow the step

- click the file menu and choose print preview or select print preview button from the standardtool bar
- if you want to print it click icon quite left blow the menu bar
- click on close button to close it

Closing a file: - to close a file does this

- Click the file menu and choose or click close button of the document window before wordclose a file its asks you to same changes
- To quite ms word click file and exit

Document formatting

Any file or document created in ms word gives the facility of document formatting. Any kind of changes made on the text written in a file are the part of document formatting document formatting includes text formatting, paragraph formatting, page formatting etc.

Text formatting:-

1. Selection of the text:-To select whole text in a single attempt ctrl + A shortcut key or Select alloptions is used. We can also use the key board, for that we use shift key with arrow keys.

• To select the text with the help of mouse we place the cursor or pointer of mouse at the beginning f selecting text and drag it till the last selecting point.

2. Deletion of text:-Any text in word document can we deleted by the following ways be deleted by the following ways-

- We can select the deleting text by any selection method and press Del to delete the text.
- For deleting the text from right to left direction we use backspace key.
- For deleting the text in left to right direction or use Del key.

Font formatting

- **Bold**: Bold is used for making the text /word dark. To set font bold click the bold button fromformatting toolbar.
- Italic: Italic is used to change the style of text/word into italic. To italic font click the italic buttonfrom formatting toolbar.
- Underline: -This feature is used to underline the text or document. To underline click the underlinebutton from formatting tool bar
- Changing the font of text:- To Change the font of text we select desired font clicking the drop downlist box of font button
- Changing the size of font:- To Change the size of font weselect the desired font size by clicking thedrop down list box of size button
- Change the color of text:- To select desired color of the font click the font color drop down list boxon the formatting tool bar

• **Change the border**:- Border button is used to change the border of text. To change the borders oftext click the border button from the formatting toolbar.

Moving the text: - To move the text from one place to another we have to do the following-

Select the desired text

- Click the edit menu and select cut or click the cut button from the standard tool bar or pressctrl + X from the keyboard.
- Click at the place where the text is to be moved
- Click edit menu and choose paste or click paste button from the standard tool bar or press ctrl + V from the key board

Copying the text: - To copy the text we have to do the following-

- Select the text to be copied
- Click on copy from edit menu or select copy button from the standard tool bar or press ctrl + Cfrom the key board
- Click the place where it has to be copied

Click the place from edit menu or select paste button from the standard tool bar or press ctrl +V from the key board.

Paragraph Formatting: - A paragraph in Word is any text that ends with a hard return. You insert a hard return anytime you press the **Enter** key. Paragraph formatting lets you control the appearance if individual paragraphs. For example, you can change the alignment of text from left to center or the spacing between lines form single to double. You can indent paragraphs, number them, or add borders and shading to them.

Paragraph formatting is applied to an entire paragraph. All formatting for a paragraph is stored in the paragraph mark and carried to the next paragraph when you press the **Enter** key. You can copy paragraph formats from paragraph to paragraph and view formats through task panes.

Paragraph			? ×		
Indents and Space	ting Line and Page	Breaks			
General Alignment:	Left	Outline level:	Body text 💌		
Indentation					
Left:	0"	Special:	B <u>v</u> :		
<u>Rig</u> ht:	0"	(none) 💌	-		
Spacing					
Before:	0 pt 🚖	Line spacing:	<u>A</u> t:		
After:	0 pt 🚔	Single 💌			
Don't add s	pace between paragra	aphs of the same sty	/le		
Pervisus Pangraph Pervisus Pangraph Pervisus Pangraph Pervisus Pangraph Pervisus Pangraph Pervisus Pangraph Pervisus Pangraph Pervisus Pangraph Pervisus Pangraph Sample Text Following Pangraph Following Pangraph Following Pangraph Following Pangraph Following Pangraph Following Pangraph					
		ОК	Cancel		

a. Aligning paragraph :- paragraph is by default aligned left side as we use for writing English or hindi on our copy if requested we can change if required we can change if easily to right side or justify between both side to align in different ways the following icon are used

- use right align button to align text or graphics in the right side
- use Left align button to align text or graphics in the left side
- use center align button to align text or graphics in the center
- use justify align button to justify text or graphics at both ends

b. Spacing between two paragraphs: - in a paragraph space can be left between two lines

- Single spacing: leaves no space between two lines
- Double spacing: leaves one line blank space between to lines To leave space between to paragraph does this-
- select paragraph from format menu
- specify spacing in points between paragraphs after and before in the spacing section

c. Paragraph indents: - The text typed in any text document is generally divided in paragraphs after the margins of the page any space lift in a paragraph from left or right direction is known as indent Apart from margins blanks space on the page right or left is called indent.

There are two types of indeed –

- First line indent
- Hanging indent

First line indent:- by using first line indent the space for first line is left as indent then we set first line indent we words available in first line start shifting in next line

Hanging indent: - when we use hanging indent the space for other lines of paragraph is set whether from the left or right direction. While text with a hanging indent is frequently used for bibliographic, entries, glossary, items, resumes and bulleted and numerical lists

d. Setting text with first line and hanging indent: - to set text with first line and hanging indent

- select the paragraph you want to set incantation
- click the format menu and select paragraph
- in the special full down menu select first line and hanging as required
- click ok

Borders and shadings

we can set any kind of borders on the text paragraph, page or characteras her our requirement to set the border for the text we sellhave to select border and shading dialog box named border and shading we can choose the border for the paragraph from the available design we can also change the color of border.

Borders and Shading	9	X
Borders Page Bo	order <u>S</u> hading	
Setting:	St <u>y</u> le:	Preview
None		Click on diagram below or use buttons to apply borders
Box		
Shadow		
3-D	Automatic <u>Wi</u> dth:	
Custom	½ pt ▼	Apply to: Paragraph
		Options
Show <u>T</u> oolbar	Horizontal Line	OK Cancel

To change border and shading of a paragraph or page do this-

- Select a paragraph or page
- Choose Border and Shading option from format menu.
- Click the desired border under setting section
- To add shading click shading tab and select the shading as desired
- Finally click on ok button.

Finding and Replacing the text

Find and Replace		8	X
Fin <u>d</u> Re <u>p</u> lace	<u>G</u> o To		
Find what:			•
Highlight all item Main Document	is found in:	More ∓ Find Next Ca	ncel

Finding-Find option is used to search a particular word in text documents created in ms- word. To search a word does this -

- Click edit and selectfind; alternative wecan press ctrl+ F on the key board.
- Type the text in find what text box , you want to search
- Click the find nextcontinue repeating thesame the text in thewhole document
- Click on cancel to close it.
- To search in a more advance way click on more.

Replacing: - With the help of replace option, the selected word can be replaced with any otherword also it can replace over or more. To replace the text, do this:

Find and Replace	8 ×
Find Replace	<u>G</u> o To
Find what:	
Replace with:	
	More F Replace Replace All Find Next Cancel

- Click the edit menu and select replace. Or pressctrl+ H together on the keyboard.
- Type the word, phrase, or format in the **Find what:** box that you are searching for.
- Type the word, phrase, or format in the **Replace With:** box that will replace what isin the **Find what:** box.
- Click **Find Next** to conduct your search.
- When Word finds a word of phrase, do one of the following:
- Ignore it.
- Click Replace.
- Click Replace All to replace every occurrence of the selected text with the replacement text.
- Click **Find Next** to bypass it and find the next.
- Click **Cancel** to quit.

Spelling and Grammar

We can check spelling and grammar error and correct those according in the document it is one more how correct English in our document.

		· · ·	· /
Spelling and Gramma	ar: English (U.S.)		? 🛛
Not in Dictionary <u>:</u>			
Theasures –		^	Ignore Once
			Ignore All
		~	Add to Dictionary
Suggestio <u>n</u> s:			
Treasures Thesaurus		<u>^</u>	⊆hange
iniosadi as			Change All
		-	AutoCorrect
Dictionary language:	English (U.S.)	-	
🔽 Check grammar			
	Options	Undo	Cancel

- To we spelling and grammar check, do this:
- Click tools menu and select spelling and grammar
- Select spelling button ABC from standard toolsbar
- Press f7 together from the keyboard.

Change All-Click change all to change all similartext in the whole document.

Ignore-Select ignore button to make no changes **Ignore All** -Select ignore all buttons to bypass on the similar words found in the document.

Add to Dictionary - Select add to dictionary button to include those very words in msworddictionary like Patna, Matura etc.

Cancel-click cancel button to stop the error search.

Shortcut for spelling and grammar check: Right click the wary underlined word a pop-up menubox appears like on figure it display a list of words related the very word .

Customizing spelling check:-

- Point to tools menu and select option.
- Choose spelling and grammar tab after that the spelling and grammar tab appears there are multiple options available as follow.
- Checking spelling as use type: identifies the word not found is the dictionary by a red way line.

- Hide spelling errors in the document: does not highlight the miss felt words with wary lines.
- Always suggest correction.
- Suggest from main dictionary only.
- Ignore word in uppercase.
- Ignore words with numbers.
- Ignore internet and file address
- Select or clear the cheek boxes as desired
- Click ok to close the dialog box

Word Thesaurus

Word thesaurus is a special facility provided by ms- word which is generally used to understand synonyms of any selected word in other words if can be said that with the help of thesaurus we can see the meaning and synonyms of any selected word we can also insert any word inthesaurus box to get the synonyms of it in is same like a dictionary.

Research	• ×
0 0 A	
Search for:	
education	\rightarrow
Thesaurus: English (U.S.)	-
🕲 Back 💌 💿 💌	
Thesaurus: English (U.S.)	~
🖃 teaching (n.)	
teaching	
learning	
schooling	
tutoring	
instruction	
edification	
culture	
Can't find it?	
Try one of these alternatives or see Help for hints on refining your search.	

To use thesaurus do this;

a) Select thesaurus whose alternative you want.

b) Click the tools menu point to language and then select thesaurus or press shift+f7 keys together from the keyboard the box display several different button.

- a) Replace: it replaces the words you have selected of your choice
- b) Look up: it shows you the meanings of the conserved word
- c) **Previous: -** it takes you back.
- Now, we click the replace button to find synonyms and get it replace.
- when we have not select our desired/needy words that time firstly we have insert a word in insertoption
- whenever we have select our desired/needy words it will be automatically gives the meaning orsynonyms after click the replace button

Headers and Footers

header and footer may be text or graphics printed or top and bottom in a document any text document created in ms word may contain different pages the text written in top margin of the page is known as header we can decide the header for each pages as we need the text written is bottom margin area of the page is known as footer.

To insert header and footer do this-

• we will select header & footer option from view menu after this selection to haves of in thesehaves we can type the text wheels is to be created as header & footer

The header and footer toolbar contain the options as mentioned



- Auto text
- Insert page number
- Insert number of pages
- Insert format page number

- Insert date
- Insert time
- Page setup
- show/hide document text
- Same as precious
- Switch between headers
- Show precious
- Show next
- Close-To end the view o header and footer haves either click twice outside or click the closebutton

Deletion of Header and Footer: - for the deletion of header & footer very first we will select header & footer from the view menu after then we will get the header & footer we will have to remove the text from the header pain and the footer pain. After complete this process header and footer will remove from the pages.

Create different headers or footers for odd and even pages:-

- On the View menu click Header and Footer.
- On the Header and Footer toolbar, click Page Setup and click on the layout tab.
- Select the Different odd and even check box and then click OK.
- If necessary, move to the Even Page Header area or even Page Footer box. How?
- Create the header or footer for each even-numbered page. How?
- To move to the header or tooter for each odd-numbered page, click Show Next on the Header and Footer toolbar. Then create the header or footer you want.

Bullets and Numbering

We use bullets and numbering option basically for making a list orarranging item in a particular order. There are different types of style to use making a list.

- Bulleted
- Numbered
- Outline Numbered

Bullets and Numberin	g 🗾	
Bulleted Numbere	d Outline Numbered List Styles	_
None		
•		
Reset	Customize OK Cancel	

To insert bullets, do this: - To insert bullets in our text document first of select list items then open bullets and numbering option from the format menu and select the bullet style which you want to apply on the list item then finally click on theok button. You can also format the bullets style using customize option.

Following Example shows the uses of bullets-

- Ujjain
- Indore
- Dewas
- Ratlam
- Bhopal

Bullets and Numberi	ng		×
<u>B</u> ulleted <u>N</u> umbere	ed O <u>u</u> tline Number	ed List Styles	
None	L L 	1) 2) 3)	I II III III
a b c	a) b) c)	1) 2) 3)	1.
Restart numbering Continue previous list Customize, Reset OK Cancel			

To insert Numbering, do this: - To insert numbering in our text document first of select list items then open bullets and numbering option from theformat menu and select the numbers style which you want to apply on the list items then finally click on the ok button.you can also format the number style using customize option.

Following Example shows the uses of numbering-

- 1. Ujjain
- 2. Indore
- 3. Dewas
- 4. Ratlam
- 5. Bhopal

Using AutoText

Auto correct is a function which automatically corrects the command mistake generally performed by a user is only text document. Autocorrect feature to automatically direct and correct types misspelled words, grammatical arrows, and incorrect capitalization ex : if we type creation , then autocorrect replaces what you have typed with 66 certain'' we can also use autocorrect to quickly in sort text , graphics, or symbols, creating autocorrect entries : to use autocorrect option very fast we will select autocorrect option from tools menu . It will give use a dialog box of autocorrect-feature in these dialog box. We will get to text box shape replace and

with. In replace text box that word is typed. Which is to be replacing that is generally type from by the user and in with text box the replacing word is typed. After the addition of these words we have to click on ok to add the words in autocorrect or *.click the tools menu and select autocorrect .the dialog box appear. *. In the replace text box, types the miss spelt word you think do mistake it quite after.*. In the with text box, type the correct word.

Page Numbers	×
Position: Bottom of page (Footer) ▼ Alignment: Right ▼	Preview
Show number on first page	
Eormat	OK Cancel

Inserting page number – Any document created is MS –word may certain one or more pages these pages can be allotted serial number with the help of page no. option. To insert the page no. in text we will have to select page no. option from the insert menu by doing these we will get page no. dialog box which gives us two option position and alignment .we can select the no. of position with the help of position box i.e. it is to be shown on upper marline or top margin and bottom we can decide the alignment of page no.

Insertion of column in text: - Any text page in MS word can be divided into one or more columns the process to insert columns is follows:

					Cancel
One	Two	Three	Left	Right	-
	of column:	s:	2	÷	Line <u>b</u> etween
ideb and	d an eine e				Description
idth and <u>C</u> ol #	d spacing :: Wįdl	th:	Spacin	ig:	Preview
	: Wįd		<u>S</u> pacin	ig:	Preview
<u>⊂</u> ol #	: Wįd 2.7	5"			Preview
<u>⊂</u> ol # 1:	: Wįd 2.7	5" : 5" :	0.5"	\$	Preview

To divide the page into columns very first we will select columns option from the format menu after doing this we will get a dialog box name columns these dialog box gives us various options to set the columns in the document.

We can decide thenumber of columns by using button inpresets section of column dialog box or we can enter the number in Number of Columns spinner box after selecting the number then we will click on ok button. The text will be divided in entered number of columns.

We can also change / set the width of each column as per the requirement or we can select the width of column equal by selecting equal column width the check box from the column dialog box.

In the apply to drop down list select where from we want to set the columns out of there options available there as follows -

- a) This section-the columns will be set in the very section only
- b) This point forward- This column will be set ahead of the current insertion point only.
- c) Whole document- the columns will be set in the whole document

Insertion of date & time

Ms-word gives us the facility of insert date & time on each page on thetext document.

To insert date & time on the page we will choose date & timeoption from the insert menu when we doso we will get date & time gives us various formats dialog box from which we can select anyone date format to insert the date on the page. click the update automatically cheek box to keepit update as per system date.

Date and Time	×
Available formats:	Language: English (U.S.)
December 12, 2015 12/12/15 2015-12-12 12-0c-15	Calendar type: Western ▼
12.12.2015 Dec. 12, 15 12 December 2015 December 15	
Dec-15 12/12/2015 6:04 PM 12/12/2015 6:04:20 PM	
6:04:20 PM 18:04 18:04:20	Update automatically
	OK Cancel

Tables

Tables are preferred when compared to using spacebar or tab for alignment to give a table format, but Word has another excellent feature for alignment called "Tables". This feature is used tocreate financial reports, catalogues, accounts etc.

Tables consist of rows and columns. The text can be typed in the cells. The size, shape and appearance of a cell are controllable features.

To create a table using table menu- Choose Insert then table option from Table Menu. You will find a dialog box as shown below:

Now type the Number of Columns and rows as you require and set column width auto. So that the Column with will be equal to the width of the text. Now click OK. An empty table is inserted in the document.

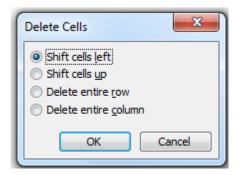
Insert Table		
Table size		
Number of <u>c</u> olumns:	3	\$
Number of <u>r</u> ows:	2	\$
AutoFit behavior		
Fixed column width:	Auto	\$
AutoEit to contents		
O AutoFit to win <u>d</u> ow		
Table style: Table Grid	AutoFor	mat
Remember dimensions for	new tables	
OK		cel

Inserting Rows: Place the cursor in the table, where row is to be inserted Choose Table and click on Insert option and select Row Above option to insert rows above the current position of cursor and select Row Below option to insert rows below the current position of cursor in the table.

Inserting Column: Place the cursor in the table, where column is to be inserted Choose Table and click on Insert option and select Column to

the Left option to insert column left side of current position of cursor and select Column to the Rightoption to insert column Right side of current position of cursor in the table.

Inserting Cells- Place the cursor in the table, where cell is to be inserted Choose Table and click on Insert option and select cell option then following dialog box will appear then select appropriate way to insert cell in a table.



Merge Table Cells- A merging cell is the act of selecting more than one separate cell and mergingthem so that they become one. Following process to mergeing cells are as follows-

a. Select the table cells that you want to combine.

b.Under Table Menu, click on Merge Cells option.

c. After this process selected cells are merged.

Split Table Cells- Splitting a cell is the act of selecting a specific cell, and dividing it into one or more rows or columns. Click the table cell that you want to

split. Following process to merging cells are as follows-

Split Cells	×	
Number of <u>c</u> olumns:	2	
Number of <u>r</u> ows:	1	
Merge cells before split		
ОК	Cancel	

a. Under Table Menu, click Split Cells, and then following dialog box will appear:

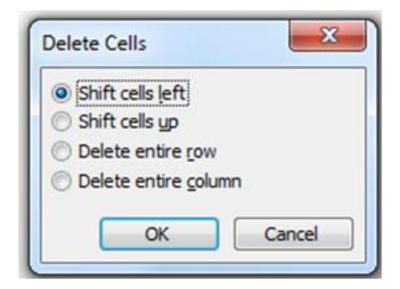
- To divide a cell vertically, in the **Number of columns** box, enter the number of new columns that you want in the selected cell.
- To divide a cell horizontally, in the **Number of rows** box, enter the number of new rows that you want in the selected cell.

Split Table – Place cursor in desired row from which you want split the table in two parts. Under **Table Menu**, click **Split Table.** After this process table is split in two parts.

Deleting Tables, Cells, Rows and Columns- Once you have created a table, it may be necessary to delete parts of the table, or the entire table. The following instructions will lead you through deleting tables, cells, rows or columns.

To delete a table:

- 1. Place the cursor in a cell of the table you want to delete.
- 2. In the Windows menu bar, click Table > Delete > Table.



To delete a cell:

- Place the cursor in the cell you want to delete.
- In the Windows menu bar, click Table > Delete > Cells.
- Use the Shift cells left option if you are deleting a cell from a column and want the otherrows to move to the left to fill the empty cell.
- Use the Shift cells up option if you are deleting a cell from a row and want the other rows to move up to fill the empty cell.
- Use the Delete entire row option if you want to delete the whole row.
- Use the Delete entire column option if you want to delete the whole column.

To delete a row:

- Place the cursor inside any cell of the row you want to delete.
- In the Windows menu bar, click Table > Delete > Rows.

To delete a column:

- Place the cursor inside any cell of the column you want to delete.
- In the Windows menu bar, click Table > Delete > Column.

For the final step in making our framework table into the sample table, we want to delete the bottom row of the table. To do this, we place the cursor in any cell of the bottom row. Click Table > Delete > Rows.

Formula

If you've ever inserted a table of figures into a Word document you might have wished for the Excel capability of inserting a formula to sum the numbers in a column or row, particularly when you have to change a number in the table, and then have to change the Totals that you had manually entered into the table. In fact Microsoft Word provides this facility to enter formulas into a table.

You can also perform addition, subtraction, multiplication, and division operations on numbers in Ms Word table cells. Also you can calculate averages, percentages, and minimum as well as maximum values.

Formula	×
Eormula:	
=SUM(Above)	
Number format:	
#,##0	▼
Paste function:	Paste bookmark:
ABS AND AVERAGE	OK Cancel
COUNT DEFINED FALSE IF INT	

To add the formula in the Word table, do the following:

Having identified the cell in the table that you want the formula to appear in, choose the **Formula...** option from the **Tables** menu in Word 2003.

This will not give you the full capabilities of an Excel spreadsheet, but will allow a range of basic formulas to be entered, including SUM, AVERAGE, MIN and MAX. In addition, table cells can be referenced as A1, A2, B1, B2, etc., remembering that header rows must be counted. So, in this example we apply sum formula in C6 Cell and find the totals of employee salary:

EmpNo.	Employee Name	Salary
101	Karan	5000
102	Manoj	6000
103	Subhash	8000
104	Rahul	7500
105	Pankaj	9500
	Total	36,000

Converting Text to a Table: -You can convert text to a table; however, a delimiter such as a comma, paragraph marker, or tab must separate columns of text. In the exercise that follows, youwill convert comma-delimited text into a table.

Convert Text to Table	
Table size	
Number of columns:	3
Number of rows:	6
AutoFit behavior	
Fixed column width:	Auto 🚔
AutoEit to contents	
AutoFit to window	
Table style: (none)	AutoFormat
Separate text at	
Paragraphs Ocommas	
○ <u>T</u> abs ○ <u>O</u> ther:	+
ОК	Cancel

a) Type the following as shown (do not bold). Roll No, Student Name, Course

- 101, Karan, MCA
- 102 Manoj, DCA
- 103, Subhash, PGDCA
- 104, Rahul, BE

- 105, Pankaj, M.Com
 - b) First of all select the text.
 - c) Choose Table > Convert > Text to Table from the menu.
 - d) Type **3** in the Number of Columns field.

Select fixed Column Width field in the Auto fit behavior option.

- f) Select the Commas radio button in the Separate Text At frame.
- g) Click OK.

Microsoft Word should have converted your text to a table and your table should look like the one shown he

RollNo	Student Name	Course
101	Karan	MCA
102	Manoj	DCA
103	Subhash	PGDCA
104	Rahul	BE
105	Pankaj	M.Com

Table Auto Format

Table auto format is a special facility provided by ms-word for the creation of tables auto format contains some

redesigned formats of tables which can be directly apply that is we need not to design the table we can apply any one the available formats and can entered our data in the same format.

Process to open a table auto correct

- click on table menu
- point to table auto format
- after the selecting of table autoformat option one dialog box will be appear format and click on ok button or apply button

Table AutoFo	rmat			×
Category:				
All table style	s			•
Table styles:				
Table Classic			-	New
Table Colorfu Table Colorfu				
Table Colorfu			=	Delete
Table Column				1
Table Column Table Column				
Table Column				
Table Column				Modify
Table Conten Table Elegant				
Table Grid			-	Default
Preview				
	Jan	Feb	Mar	Total
East	7	7	5	19
West	6	4	7	17
South	8	7	9	24
Total	21	18	21	60
Apply special f	formats to			
Heading			Last row	
First colu	imn		Last colum	n
			Apply	Cancel

Sort the Table- Sorting elements of your table is useful for organizing your data, whether consisting of text, numbers, or dates. You can also perform subsequent sorts on the data, initially sorting by one criterion and then sorting by a second criterion within that sort.

Name Name YSalary	Type: Text	O <u>A</u> scending O <u>D</u> escending
Designation heAddress	Type: Text	Ascending
Using: Paragraph	ns	*
	Type: Text	Ascending
Using: Paragraph	Ype: Text	Ascending
Then by	Ype: Text	Ascending Descending

a. Select the table or column(s) to besorted

b. From the *Table* menu, select *Sort*...

The Sort dialog box appears.

c. From the *Sort by* pull-down list, select the first column by which tosort HINT: If your table contains headings that should be excluded from the sort, in the *My list has* section, select *Header row*.

- d. From the Type pull-down list, select Text, Number, or Date
- e. Select Ascending or Descending order
- f. Click OK

Graphics/ Diagram

we can insert any kind of picture image diagram lines shapes etc, in any text document we or drawing toolbar to insert any image or draw any picture in the text document.

To insert any image, graph, picture or to draw any diagram in our document we use drawing toolbar if the drawing tool bar is not available in word when we use view menu to have it onscreen to open the drawing toolbar we will select toolbar options from the view menu then from the available list the toolbar we will select drawing option

Basic drawing tools:-

- a) Line:- we can draw any line with the help of line button available in the help of line drawingtool bar
- b) Arrow:- we can draw any arrow with the help of arrow button available in drawing toolbar
- c) Oval:- we can draw any oval with the help of oval button available in drawing toolbar
- d) Rectangle :- we can draw any rectangle with the help of rectangle button available in drawing toolbar (shift+ rectangle = square)

Auto shapes

Auto shapes are the collection of sum categories of the basic shapes used in any drawing:-

To insert any predefined shape in our document we use auto shapes button from the drawing toolbar when we click o this button it provides is shapes in various categories we can select anyone of the available and draw it in our document using mouse.

Categories of auto shapes:-

• lines

- connectors
- basic shapes
- block arrow
- flow charts
- store and banners
- callouts
- more auto shapes

Insertion of any image in document

We can insert various kinds of pictures, images, drawings in the text document as her the requirement commonly predefined images.

Process to open:-

- Directly select clipart option from diagram tool bar menu.
- Insert- picture- from file clip art word art etc.

Word Art

Word art is a different kind of tool provided by ms-word to write the text we can write the text in various style text types in word art in word art lettings in the document

Process to open a word art:-Insert- picture- word art

When we click on word art button from the drawing toolbar it gives us various style in a window known as word art gallery. We can select any one of the style and click on ok button to insert them when we do so it gives another window to add the text in the window we can change the font and font's size of the text.

WordArt	WordArt	NordAre	WordArt	WordArt	W
NordAri	WordArt	WordArt	WordArt	WordArt	W
WordArt	WordArt	WordArt	WordArt	WordArt	W
HordArt	WordArt	WordArt	Whith	Section of the sectio	1 00
WoodAnt	Balle	Malilia	A Gund	-	1

Views and layouts

Any text document created in ms-word can be view in various layout and different views use can also view the pages of the document in these view.

Normal View: - normal view is a by default view provided by ms-word to create any document init normal view contain various options to make change in the document it keep the toolbar inmenu bars for the editing and formatting of the text. In other words we can say that formatting related options can be used easily in this view. If normal view is not and label by default it can be activated by selecting normal option from the view menu.

Web Layout: - web layout is generally used to designer web page this layout contains all the options and facility required to design a web page so we can do it easily the pages or document created in this layout can be directly viewed on screen or used as a web page to activate this layout we use web layout option from the view menu.

Print layout: - by using print layout we can design document in printing style related to the formatting of any page like as we can say page numbering margins header and footer etc.

Print preview: - it shows the preview of designed page before print page. Designed by us in msword it shows the print preview before printing the our desired page file- print- preview **Web Page Preview:** - we can view the document or page directly on the web browser with the help of web page preview. It can also be said that of we page preview .it can also be said that we can have a vision of the web page in a web site

Full Screen view: - with the full screen view we can see our page document in full view of preview when we see the page in full view we can't get any ruler or menu or any status bar or any other which is always shown on full view or computer screen.Ctrl + print screen sys this shortcut issued for copy window's picture from one place to another place.



Template and wizard

Template- It is a special kind of documents available in MS word, by using this template we cancreate new documents on thebasis of the particular template. In other words it can be said that template are some predefined types of documents, templates contain all the tool bars and option related to the particular template. Document created by the user can also be save in the form of templates or we can say that a user can create its own templates .templates are useful for designing the various kind of documents.

Creation of templates– In ms word user can designed his own templates as we desire to create a new template in MS word.

Firstly we will select new option from the file menu and then select on my computer option from the task pane. when we do so we will get a tab –window on screen from which we have to select the template radio button and click on ok .then we will get a blank page to design a template where we can design a template.

Saving a template: –For saving a template or general document open file menu and click on save option where We click option we get a dialog box or save the document then click on save as type and choose their document template . After that opened save in template folder. we mention any name of the document and click on save like this we create our template or transfer our general document in template.

Modification in template: If we choose any template for work then we can do any changes in it which we want we use only that format for work but text will be modify by us .It can make our work easy.

Wizard

Wizards are some pre-designed templates provided by us MS word which is used toperform any specific task rapidly and easily. When we use wizard we have to follow its instructions one by one to perform the task easily .It can also be said that wizard gives us step by step instruction with the help of which ,we can send the time as well as the task is perform in smooth manner. When we completely follow instruction we get a structure where we just need to add the text related to wizard and to perform any kind of formatting in the design structure some common wizardavailable in MS word are-letter ,wizard, fax wizard, envelopes etc.

Letter wizard –letter wizard is available in a form of windows which contains four differentinformation related to the document, these are.

- Letter Format: In these format the first option is to decide the date style which is to be printed on the letter we can also decide the printing style of the letter from letters style option and the format of the letters is choose are from page design option.
- **Recipients Information:** -this tab contains the options to require the information of the recipientslike receiver's name, address etc.
- Other Elements:- this option contain reference line, mailing instruction , attention , subject and salutation for the letters .
- Senders Information: This tab contains the option for gathering the information related

to the sender of the letter like his name, address with this information we can also select closing lines for he letter and no. of enclosures in it.

Mail Merge

Mail Merge is a special function provided by using mail merge a user can send any document to many people at a single time, mail merge generally used to send letters, fax, invitations, mails, messages etc. Since by using mail merge a single document can be send to many people at a time so we can say that it saves users time on a large scales. In mail merge we merge two different document and files these two documents are main documents and data sources. Main documents contains the letter or message which is to be send to many peoples and database contain the record of all those people like their names, address etc to whom the main documents is to be send.



When we merge these two documents by using mail merge it creates a separate main document for each record available in data source. To use mail merge we will select letters and mailing option from the tools menu. Mail merge works like a wizard which gives us step by step instructions by following these instructions Mail merge can be used easily.

STEP 1: Selecting the document type-

Select document type							
What type of document are you working on?							
 Letters 							
C E-mail messages							
C Envelopes							
\bigcirc Labels							
 Directory 							

Your options for document type include the following:

Letters: allows you to tailor one letter to many individuals.

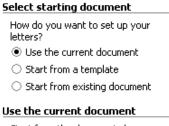
E-mail messages: allows you to personalize a message as youwould form letters and send them via email.

Envelopes: allows you to print envelopes with different addresses.

Labels: allows you to print labels with different addresses.

Directory: allows you to gather varied but related information in to a list. For example, to create a departmental or organizational directory, list the names, office locations, and phone numbers.

STEP 2: Establishing the starting document-



Start from the document shown here and use the Mail Merge wizard to add recipient information.

Your options for the starting document include the following:

Use the current document: uses the document currently open.

Start from a template: uses a preset Word template .Once you make this selection, the *Select template* link appears. Clicking it takes you to the *Select Template* dialog box, where you can choose the template you want to use.

Start from existing document: uses a previously saved document. Once you make this selection, you can choose from a list of recently used files or select another of your files.

STEP 3: Selecting the recipients-

Select recipients						
Use an existing list						
\bigcirc Select from Outlook contacts						
🔿 Type a new list						
Use an existing list						
Use names and addresses from a file or a database.						
Browse						
🛒 Edit recipient list						

Your options for selecting recipients include the following:

Use an existing list: uses a previously saved list. Once you make this selection, the Browse link

appears. Clicking it takes you to the *Select Data Source* dialog box, where you can choose the file you want to use.

Select from Outlook contacts: uses your Outlook contacts as recipients. You must use Outlook and have existing *Contacts*. Once you make this selection, the *Choose Contact Folder* link appears. Clicking it takes you to the *Choose Profile* dialog box, where you can select the *Contacts* list folder you want to use.

Type a new list: allows you to create your own list by typing each recipient.

STEP 4: Writing your document-

During this step, you will be adding text and variable information to your document. To assist you in this, Word has a number of pre-formatted entries along with the fields from your recipient list. Frequently used optionsinclude the following:

Address block: allows you to specify the format of recipient names, whether to insert the company name and postal address, and the format of the postal address.

Greeting Line: allows you to format how the greeting line will appear (e.g., *Dear Mr. Randall,*) and choose which format to use for invalid names (e.g., *Dear Sir or Madam,*).

More items: allows you to insert additional database fields.

STEP 5: Previewing your documents

At this point, you are almost ready to merge. Before you do so, it is a good idea to preview your documents. You can browse through the documents by clicking the PREVIOUS or NEXT button. You can also locate specific recipients.

Based on what you see during this preview, you may decide to edit your document, edit the recipient list, or exclude one or more recipients from the merge.



STEP 6: Completing the merge



Once the merge is complete, you can print the merged documents or, prior to printing, you can edit individual documents.

- To merge all the documents, click all.
- To merge only the document that you see in the document window, click Current record.
- To merge a range of documents, click From, and then type the record numbers in the From and Toboxes.

Merg	e to Printer
Print	records
۲	All
0	Current record
0	Erom: <u>T</u> o:
	OK Cancel

Unit - II

MS EXCEL

A spreadsheet is essentially a matrix of rows and columns. Consider a sheet of paper on which horizontal and vertical lines are drawn to yield a rectangular grid. The grid namely a cell is the result of the intersection of a row with a column. Such a structure is called a Spreadsheet.

A spreadsheet package contains electronic equivalent of a pen, an eraser and large sheet of paper with vertical and horizontal lines to give rows and columns. The cursor position uniquely shown in dark mode indicates where the pen is currently pointing. We can enter text or numbers at any position on the worksheet. We can enter a formula in a cell where we want to perform a calculation and results are to be displayed. A powerful recalculation facility jumps into action each time we update the cell contents with new data.

MS-Excel is the most powerful spreadsheet package brought by Microsoft. The three main components of this package are

- Electronic spreadsheet
- Database management
- Generation of Charts

Each workbook provides 3 worksheets with facility to increase the number of sheets. Each sheet provides 256 columns and 65536 rows to work with. Though the spreadsheet packages were originally designed for accountants, they have become popular with almost everyone working with figures. Sales executives, book-keepers, officers, students, research scholars, investors bankers etc, almost any one find some form of application for it.

Excel features

There are a number of features that are available in Excel to make your task easier. Some of the main features are: AutoFormat - lets you to choose many preset table formatting options.

a) Auto Sum - helps you to add the contents of a cluster of adjacent cells.

b) List AutoFill - automatically extends cell formatting when a new item is added to the end of a list.

c) AutoFill - feature allows you to quickly fill cells with repetitive or sequential data such as chronological dates or numbers, and repeated text. AutoFill can also be used to copy functions. You can also alter text and numbers with this feature.

d) Auto Shapes toolbar will allow you to draw a number of geometrical shapes, arrows, flowchart elements, stars and more. With these shapes you can draw your own graphs.

e) Wizard - guides you to work effectively while you work by displaying various helpful tips and techniques based on what you are doing. Drag and Drop - feature will help you to reposition the data and text by simply dragging the data with the help of mouse.

f) Charts - features will help you in presenting a graphical representation of your data in the form ofPie, Bar, Line charts and more.

g) **Pivot Table -** flips and sums data in seconds and allows you to perform data analysis and generating reports like periodic financial statements, statistical reports, etc. You can also analyse complex data relationships graphically.

h) Shortcut Menus - commands that are appropriate to the task that you are doing appear by clicking the right mouse button

Starting Excel 2003

- Click the Start button to display the Start menu.
- Navigate to All Programs.
- Choose Microsoft Office Excel 2003, to launch a blank worksheet.
- If needed, maximize the application window for better usability.

MS-Excel Window

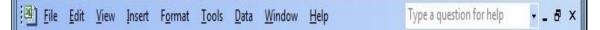
	Aicrosoft	Excel - Book	L								- 0	x
1	<u>F</u> ile <u></u>	dit <u>V</u> iew	Insert Form	nat <u>T</u> ools	<u>D</u> ata <u>W</u> i	ndow <u>H</u> el	р	Ту	pe a questio	n for help	• _ é	7 ×
10	😂 🖬	🔒 🎯 🖸	V 🍄 📖 I	x 🗈 😤	- 🍼 🔊	- (* - 😣	Σ - <u>2</u> ↓	7. I 🛍 🔤	100%	- 🕜 📘		
_		Arial									- 3 - A	
		-	fx.						.00 9.0 1 1			
	А	В	С	D	E	F	G	н	1	J	K	T
1												
2												
3		_										
5												
6												
7												
8												
9 10												
11												
12												
13												=
14												
15												
16 17												
18												
19												
20												
21												
22												
23 24												
24												+1
26												
27												
28		Shoot1 / Sk	neet2 / Shee	+2 /							•	
-												
Rea		AutoShapes	5• \ \ [લા રુટે 🚨	<u>⊠</u> <u>∽</u> ;	<u></u>	= = = =		NUM		
кеа	iy .									NUM		

Components of the Excel Window

Title bar-The title bar is located at the top of the window and it identifies the application. On your screen. you see "Microsoft Excel - Book 1" in the title bar. The title bar also houses the standard buttons to Minimize, Maximize/Restore and Close.



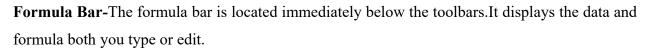
Menu bar-The menu bar is located directly below the title bar, each one of which opens up a list of commands. The options available under each Menu seem to be limited at times. This feature is meantto keep track of your command-usage habits.



Toolbars-When you first launch Excel, two toolbars appear. The upper toolbar is the Standard toolbar and the lower toolbar is the Formatting toolbar.

```
      Image: Imag
```

Name Box-Name box is an indicator to the cell that is selected.



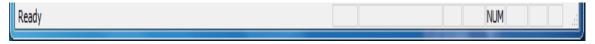
B3



Worksheet Window- The document window, usually called the worksheet window, contains the sheet you are creating, editing, or using. The worksheet includes a series of vertical columns identified by lettered column headings and a series of horizontal rows identified by numbered rowheadings.

Scroll bars-The vertical scroll bar (far right side of workbook window) and the horizontal scroll bar(lower right corner of workbook window) let you move quickly around the worksheet.

Status bar-It displays information about what is happening in your workspace.



Sheet tabs-The sheet tabs let you move quickly between sheets by simply clicking the sheet tab. Youcan also use the sheet tab scroll buttons to see sheet tabs hidden from view.

K ← ► N Sheet1 / Sheet2 / Sheet3 /							
------------------------------------	--	--	--	--	--	--	--

Workbook Management:-

X N	Microsoft Excel - Book1								
:2	<u>F</u> ile <u>E</u> dit	<u>V</u> iew <u>I</u> ns	ert F <u>o</u> rmat	<u>T</u> ools <u>D</u> a	ata <u>W</u> in	dow <u>H</u> elp	_ 8 ×		
10	📂 🖬 🕻		🛕 💞 👌	i 🗈 🛍 •	• 🛷 🖻	- 😫 Σ -	⊉↓ 🏨 🕝 📮		
Aria	əl	- 10	- B I	Ū∣≣	= =		· <u>A</u> - ,		
	A1	•	fx .						
	A	В	С	D	A Nev	• Workbook	▼ ×		
1					•				
2					_				
3					New		0		
4						Blank workbool	(h)		
5					1	From existing v	vorkbook		
67					Tem	plates			
8					Sea	arch online for:			
9							Go		
10					8	Templates on C	Office Online		
11					×	On my compute	er		
12					v 🚡	On my Web site			
14 4	→ M \Sh	eet1 / She	et2 < 📖						
Read	ły					NUM			

Creating a workbook

A blank workbook is displayed when Microsoft Excel is opened. You cantype information or design a layout directly in this blank workbook.

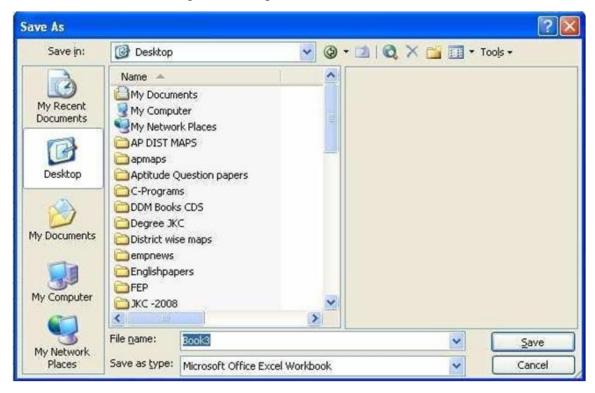
To create an Excel workbook:

- Choose **File** \rightarrow **New** from the menu bar.
- The New Workbook task pane opens on theright side of thescreen.
- Choose Blank Workbook under the new category heading.
- A blank workbook opens in the Excelwindw. The NewWorkbook task pane is closed.

Saving a Workbook

Every workbook created in Excel must be saved and assigned a name to distinguish it from other

workbooks. The first time you save a workbook, Excel will prompt you to assign a name through the **Save As** operation. Once assigned a name, any additional changes made to the text, numbers, or formulas must be saved using the **Save** operation.



To save a newworkbook:

- Choose File \rightarrow Save As from the menu bar.
- The Save As dialog boxappears.
- Click the SaveIn: drop-down menu, and locate where the file will be saved. Local Disk (C :) to save the file to your computer.
- Type a name foryour file in the File Name: box.
- Click the Save button.

To save changes made to an existing workbook:

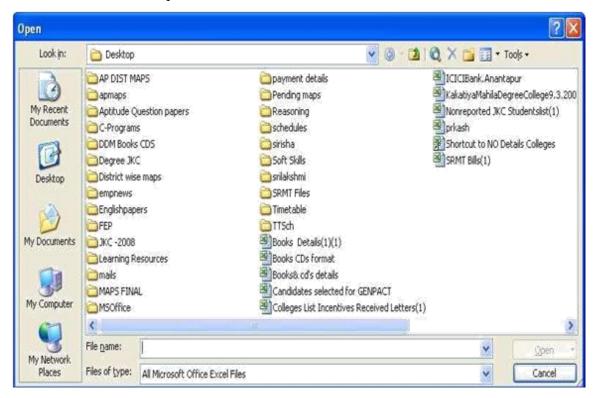
- Choose File → Save from the menu bar, or Click the Save button on the Standard toolbar.
- If you're saving the file for the first time and you do not choose a file name, Microsoft Excel willassign a file name for you.

Opening a Workbook

You can open any workbook that has previously been saved and given a name.

To open an existing Excel 2003 workbook:

• Choose File \rightarrow Open from the menu bar.



- The Open dialogbox opens.
- In the Look in list, click the drive, folder, or Internet location that contains the file you want to open.
- In the folder list, open the folder that contains the file. Once the file is displayed, click the file you want to open.
- Click the Open button.

Closing a workbook-To close an existing Excel 2003 workbook:

• Choose File \rightarrow Close from the menu bar. The workbook in the Excel window is closed.

Data Manipulation Entering Data

Start Excel, Click File and then New. An empty worksheet appears as shown below Type Expenditure cell A1 then press down arrowkey to move to cell A2. Type Month then press the

down arrow key to move to cell A3 Continue to type the data. The resulting worksheet should appear like the following screen. Save your work by clicking File and then Save As. This dialog box appears. Type cash in the File Name text box and then clicks save button. Excel automatically adds the extension .xls to your file name.

🖾 Mice	rosoft Excel - Book2							1	- 7 🛛
	e Edit Yew Insert Fy					_		question for help	# ×
	iew Roman 📃 10 💽 🗍					, 2 1 1 1	10 A 12 A 1	2 9 6	
Draw .	El States		: 🛯 🔄 💁 🚅						
-	A	В	С	D	Е	F	G	Η	-
1		Expend	iture	[
2	Month	Jan	Feb	Mar					
3	Rent	200	200	200					
4	Electricity	20	22	18					
5	Household	150	145	150					
6									1
7									
8									
9									
10									

Editing data- Click File and then click Open and Click cash.xls and then click Open. Move the mouse pointer to cell D4, click and release. The cell is highlighted and 18 appear in the formula bar.

	B B B B B B B B B B								
	ew Roman 💽 10 💌					, <mark>ia</mark> ta ta e	10001501	可喝回	
	D4 ↓ f		: 🗷 🖄 🍐 - 🚄	·▲·≡≡∓					
	A	В	С	D	Е	F	G	Н	
1		Expend	iture						
2	Month	Jan	Feb	Mar					
3	Rent	200	200	200					
4	Electricity	20	22	18					
5	Household	150	145	150					
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
• •	> Sheet1 / Sheet2 /	Sheet3 /			5		15 UR		>

Move the mouse pointer to the formula bar and click once to the right of 18. Use the Backspace key to delete 8, then type 4 and press Enter. Cell D4 now contains the value 14.

Replacing cell data- Make the cell B5 active by clicking on it. Type 200 and press Enter. The cellB5 will now contain the value 200 replacing old value (150).

Deleting Cell Contents- Move to cell C5 and click to select. Press the Delete key. The cell becomes blank. Drop down the Edit menu and click Undo to reinsert the 145.

Copying Data- Open the cash spread sheet. Select the cells D3 to D5 Click Edit menu and then click Copy. Select the cells F3 to F5. Click Edit menu and then click Paste. Now the cells D3 to D5 are copied into F3 to F5.

Moving Data - Open cash.xls spreadsheet. Select the cells from B3 to B5. Click Edit menu and thenclick Cut. Select the cells G3 to G5. Click Edit menu and then click Paste.

Fill Numeric Data using Auto Fill option- There is an easy method to fill the data in columns androws. The data may be Numeric or dates and text. To fill Serial no by using auto fill-

- Type Serial no for 2 cells i.e. 1, 2 in the cells A1 and A2 respectively.
- Select two cells and drag the Fill Handle.

Fill Date Data using Auto Fill option - There is an easy method to fill the date data in columns androws. To fill Serial no by using auto fill-

- Type any date for 2 cells i.e. 01/08/2015 and 02/08/2015 in the cells A1 and A2 respectively.
- Select two cells and drag the Fill Handle.

Creating Custom List:-We can customize the lists with different text data to minimize the redundancy of work. Some of the lists are listedbelow:

- □ Jan, Feb, Mar, Apr, May, June, July.... like months
- □ Sunday, Monday, Tuesday, Wednesday, Thursday...Likeweek days
- □ Adlibbed, Anatapur, Chittor, Cuddapah... like District names
- □ Ravi, Kiran, Praveen, Rama.... like employees list

To create a customized listfollowsthestepsgivenbelow:-ClickToolsMenu, Click Options then click Custom Lists tab, Then you will find the figure given below:

tions	~	~	~		·	
Color	International	Sav	e Ei	ror Checking	Spelling	Security
View	Calculation	Edit	General	Transition	Custom Lists	Chart
Justom lis	ts:	Ľ	ist <u>e</u> ntries:			
Sunday, I Jan, Feb,	, Tue, Wed, Thu, F Monday, Tuesday, Mar, Apr, May, Ju February, March, J	Wec In, J				<u>A</u> dd Delete
Press f	Enter to separate li	ist entries.				
Import	: list from cells:					Import
				6	OK	Cancel

- Click NEW LIST and enter the list in the List <u>entries</u> window.
- Click Add button then click OK button then your list will be added to the Custom Lists. That listyou can use as and when required to type.
- Now you can Drag the fill handle (+) to get the list automatically.

Excel Functions

Microsoft Excel has a set of prewritten formulas called *functions*. Functions differ from regular formulas in that you supply the value but not the operators, such as +, -, *, or /. For example, you can use the SUM function to add. When using a function, remember the following:

- Use an equal sign to begin a formula.
- Specify the function name.
- Enclose arguments within parentheses.
- Use a comma to separate arguments.

Listing of the most useful Microsoft Excel functions are as follows-

- Mathematical Functions
- Statistical Functions
- String/ Text Functions

- Logical Functions
- Date & Time Functions

Mathematical Functions

The Excel Math Functions perform many of the common mathematical calculations, including basic arithmetic, conditional sums & products, exponents & logarithms, and the trigonometric ratios.

a) SUM- the Excel SUM function adds together a supplied set of numbers and returns the sum of these values.

The syntax of the function is:

SUM (number1, [number2], ...) Where the number arguments are a set of numbers (or arrays of numbers)that you want to find the sum of.

Example – Here (Fig-1) we get sum of D2:D4 cells are 32950. Becausewe write sum function on D5 cell that is shown below-

```
= Sum (D2:D4)
```

	A	B	С	D
1	Product Name	Price	Quantity	Total Price
2	Keyboard	150	3	450
3	Mouse	500	5	2500
4	Monitor	3000	10	30000
5			Net Amount-	32950
		Fig-1		

Sum and Product Function Example

b) PRODUCT-The Excel PRODUCT function returns the product (multiplication) of a supplied setof numerical values.

The syntax of the function is:

PRODUCT (number1, [number2], ...)

Where the number arguments are a set of numbers (or arrays of numbers) that you want to calculate the multiplication.

Example – Here (Fig-1) we get multiplication of B2 and C2 cell is 450, B3 and C3 cell is 25000 and B4 and C4 cell is 30000 Because we write **Product** () function on D2, D3 and D4 cells that

are shown below-

=PRODUCT (B2, C2) =PRODUCT (B3, C3) =PRODUCT (B4, C4)

c) **POWER-**The Excel Power function calculates a given number, raised to a supplied power. Thesyntax of the function is:

Syntax- POWER (number, power)

	A	В	С
1	Task	Number	Result
2	Calculate Power Of=	2	32
3	Calculate Square Root Of=	36	6
4	Calculate Absolute Value Of=	-25	25
5	Calculate Factorial Of=	6	720
6	Display Pi Constant Value=		3.141592654

Power, Sqrt, Abs, Fact and Pi Function Example

Fig-2

Where the number and power arguments are numerical values. These can be supplied to the function directly, as values returned from other functions, or as references to cells containing numbers. **Example** – in fig-2 we calculate power 5 of entered number in B2 cell. We write **Power ()** function on C2 cell for calculating power-

=power (b2, 5)

d) SQRT-The Excel Sqrt function calculates the positive square root of a supplied number. Thesyntax of the function is:

Syntax- SQRT (number)

Where the number argument is the numeric value that you want to find the square root.

Example – in fig-2 we calculate Square root of entered number in B3 cell. We write **Sqrt** () functionon C3 cell for calculating Square root-

=Sqrt (b3)

e) **PI**-The Excel PI function returns the value of the mathematical constant π (<u>pi</u>), accurate to 15 digits (14 decimal places).I.e. the function returns the value 3.14159265358979. The Pi functiontakes no arguments and therefore has the simple format:

	Power, Sqrt, Abs, Fact and Pi Function Example					
	A	В	C			
1	Task	Number	Result			
2	Calculate Power Of=	2	32			
3	Calculate Square Root Of=	36	б			
4	Calculate Absolute Value Of=	-25	25			
5	Calculate Factorial Of=	6	720			
6	Display Pi Constant Value=		3.141592654			

Fig-2

Sysntax-PI()

Example – in fig-2 we displayed value of the mathematical constant π in C6 cell. We write **Pi()** function on C6 cell for finding mathematical constant π -

=Pi (C6)

f) ABS- the Excel ABS function returns the absolute value of any supplied number. The syntax of the function is:

Syntax- ABS (number)

Where the **number** argument is the numeric value that you want the modulus.

Example – in fig-2 we displayed absolute value of the entered number in B4 cell. We write **ABS** () function on C4 cell for finding absolute value -

=ABS (B4)

g) **FACT**-The Excel FACT function returns the factorial of a supplied number. The syntax of the function is:

Syntax- FACT (Number)

Where the **number** argument is the positive integer that you want to calculate the factorial.

Example - in fig-2 we displayed factorial of the entered number in B5 cell. We write

Fact ()

function on C5 cell for finding factorial -

=Fact (B5)

h) MOD-The Excel MOD function returns the remainder of a division between two suppliednumbers. The format of the Syntax is:

Syntax-MOD (number, divisor)

Where the arguments are as follows:

Number-The number to be divided.

Divisor-The value that the number argument is divided by.

Example-=MOD (20, 6) result is 2 because you have 3 times 6 in 20 and the rest is 2.

i) **ROUND-** The Excel Round function rounds a supplied number up or down, to a specified number of decimal places. In other word we can say that this function removes decimals rounding upthe last decimal if the next one is 5 or over. The syntax of function is:

Systax- ROUND (number, num_digits)

Where the arguments are as follows:

Number - The initial number.

num_digits - The number of decimal places to round the supplied number to.Note that:

- A positive num_digits value specifies the number of digits to the right of the decimal point;
- ➤ A num_digits value of 0 specifies rounding to the nearest integer;
- A negative num_digits value specifies the number of digits to the left of the decimal point.

Example- So if you have 4.126 in cell A1 and use the formula **=ROUND (A1, 2)** the result will be 4.13 if the value in A1 is 4.123 the result will be 4.12.

Text/string Functions

Excel has many functions to offer when it comes to manipulating text strings. The Excel String Functions perform many of the common string operations, including converting lower case to upper case , upper case to lower case and removeing extra (unwanted spaces) from strings etc.

a) LOWER FUNCTION -The Microsoft Excel LOWER function converts all letters in the specified string to lowercase. If there are characters in the string that are not letters, they are unaffected by this function.

Syntax- LOWER (Text)

Where the text argument is a text strings.

Example In fig-1 To convert B1 Cell text to Lower Case we write Lower Function in B5 cell likethis- =Lower (B1)

Example 2) = LOWER ("OMEGA")

Result: omega

	A			В		
1	Text-String Is=	This	is	OMEGA	College.	
2						
3	Task	Result	(Oper	ation On B	(1)	
4	Upper Function=	THIS	IS	OMEG.	A COLLE	GE.
5	Lower Function=	this	is	omega	college.	
6	Proper Function=	This	Is	Omega	College.	
7	Len Function=					41
8	Trim Function=	This is	OMEC	A College.		

Upper, Lower, Proper, Len and Trim Functions Example

Fig-1

b) UPPER FUNCTION-The Excel Upper function converts all characters in a supplied text string to upper case.

Syntax-UPPER (text)

Where the text argument is the original text string.

Example In fig-1 To convert B1 Cell text to Upper Case we write Upper Function in B4 cell likethis- =Upper (B1)

Example = LOWER ("omega")

Result: OMEGA

c) LEN FUNCTION- the Excel LEN function returns the length of supplied text string.

Syntax-LEN (text)

Where the **text** argument is the text string.

	A			B	
1	Text-String Is=	This	is	OMEGA	College.
2					
3	Task	Result	(Oper	ation On E	81)
4	Upper Function=	THIS	IS	OMEG	A COLLEGE.
5	Lower Function=	this	is	omega	college.
6	Proper Function=	This	Is	Omega	College.
7	Len Function=				41
8	Trim Function=	This is	OMEC	GA College.	

Upper, Lower, Proper, Len and Trim Functions Example

Fig-1

Example In **fig-1** to find B1 Cell text length we write Len Function in B7 cell like this- = LEN (B1)

Example 6) = Len ("omega")

Result: 5

d) **PROPER FUNCTION-**The Microsoft Excel PROPER function sets the first character in eachword to uppercase and the rest to lowercase.

SYNTAX-PROPER (Text)

Example In **fig-1** to show B1 Cell text in proper case we write Proper Function in B6 cell likethis- =**Proper (B1)**

Example = Proper ("omega and Helios")

Result: Omega And Helios

e) TRIM FUNCTION-The Excel Trim function removes extra spaces (i.e. all spaces exceptfor single spaces between words or characters) from supplied text string.

SYNTAX- TRIM (Text)

Where the text argument is thetext string.

Example- In **fig-1** B1 Cellcontain text with extra spaces to displaying with no extra spaces we use Trim Function in B8 cell like this- =Trim (B1)

f) CONCATENATE FUNCTION- The Excel CONCATENATE function joins together a series of supplied text strings or other values, into one combined text string.

Syntax- Concatenate (text1, [text2], ...)

	A	B	С
17	Text1	Text2	Concatenate Function
18			
19	Omega	Helios	Omega-Helios

Where the text arguments are a set of one or more text strings or other values that youwant to join together.

Example 1)-To concatenate A19 and B19 celltext in C19 cell

We use Concatenate Function like wise-

```
=Concatenate (A19,"-", B19)
```

Example- =CONCATENATE ("Tech on the ", "Net")

Result: "Tech on the Net"

a) LEFT FUNCTION -The Excel Left function returns a specified number of characters from thestart (left side) of supplied text string.

	A	В
10	Text-String Is=	EDUCATION
11		
12	Task	Result (Operation On B10)
13	Left Function=	EDU
14	Right Function=	TION
15	Mid Function=	CAT

Left, Right and Mid Functions Example

Fig-2

Syntax- LEFT (text, [num_chars])

Where the function arguments are:

Text - The original text string. **[num_chars]**- An optional argument that specifies the number of characters to be returned from the start of the supplied text. If omitted, the [num_chars] argument takes on the default value of 1.

Example-In fig-2 we use Leftfunction in B13 cell like this-

=Left (B10, 3)

b) RIGHT FUNCTION - The Excel Right function returns a specified number of characters from the end (right side) of supplied text string.

Syntax- RIGHT (Text, [num_chars])

Where the function arguments are:

Text - The original textstring. [num_chars] - An optional argument that specifies the number of characters to be returned from the end of the supplied text. If omitted, the [num chars]argument takes on the default value of 1. Example- In

fig-2 we use Right functionin B14 Cell like this-

=Right (B10, 4)

c) MID Function-The Excel Mid function returns a specified number of characters from the middleof supplied text string.

Syntax-MID (Text, start_num, num_chars)

Where the function arguments are:

Text- The original text string. **Start_num-** An integer that specifies the position of the first character that you want to be returned. **Num_chars-** An integer that specifies the number of characters (beginning with start_num), to be returned from the supplied text.

Example-In fig-2 we use Mid function in B15 cell like this-

=Mid (B10, 4, 3**)**

Date and Time Functions

Excel has many functions to offer when it comes to manipulating Date and Time. The Excel Date and Time Functions perform many of the common date and time operations, including finding current date and time, extract date, year and month in date etc.

a) TODAY Function- The Excel TODAY function returns the current date from the computerssystem clock.

Syntax- =TODAY ()Example- = Today ()

Result - 12/22/2015

b) Now Function- The Excel NOW function returns the current date and time. The NOW function isonly updated when the spreadsheet is calculated.

c) DATE Function- The Excel DATE function returns the sequential serial number for the specifieddate and formats the result as a date. The DATE function is most useful when the year, month and day arguments are formulas.

Syntax- =DATE (year, month, day)

Where the function arguments are:

Argument	Purpose
Year -	The year of the specified date and can be entered using up to four digits
Month-	A positive or negative number representing the month of the year from 1
	- 12. Can be used to add or subtract months to and from a date
Day-	A positive or negative number representing the day of the month from 1 -
	31

Examples of the DATE function in use can be found below-

AS-EXCEL SHEET			Result		
	A	В	С	Function	Result
	Day	Month	Year	=DATE(C2,B2,A2)	20/03/201
2	20	3	2010	=DATE(C2,B2,A2-10)	10/03/201
				=DATE(C2,B2+6,A2)	20/09/201

d) **DAY Function-** The Excel DAY function returns the day corresponding to a date represented by a number between 1 and 31.

Syntax - =DAY (serial_number)

Where serial_number is the date from which you want to extract the day.

Example- =Day ("12/22/1991"**)**

Result = 22

e) MONTH Function-The Excel MONTH function returns the month corresponding to a daterepresented by a number between 1 and 12

Syntax =MONTH (serial_number)

Where serial_number is the date from which you want to extract the month.

Example- =Month ("12/22/1991")

Result = 12

f) YEAR Function- The Excel YEAR function returns the year corresponding to a date representedby a number in the range 1900 to 9999.

Syntax=YEAR (serial_number)

Where serial_number is the date from which you want to extract the year.

Example- = Year ("12/22/1991")

Result = 1991

g) HOUR Function-The Excel, Hour function returns the hour corresponding to a time representedby a number in the range 0 to 23.

Syntax= Hour (serial_number)

Where serial number is the time value from which you want to extract the Hour.

Example- = HOUR ("3:35:40 PM")

Result = 3

h) Minute Function- The Excel, Minute function returns the minute corresponding to a timerepresented by a number in the range 0 to 59.

Syntax- =Minute (serial_number)

Where serial_number is the time value from which you want to extract the Minute.

Example- =MINUTE ("3:35:40 PM")

Result = 35

i) Second Function-The Excel, Second function returns the second corresponding to a time represented by a number in the range 0 to 59.

Syntax- =Second (serial_number)

Where serial_number is the time value from which you want to extract the Second.

Example-=SECOND ("3:35:40 PM")

Result = 40

Statistical Functions

There are a number of Excel statistical functions which can be used to analyse the data in your spreadsheet. These include, but are not limited to Count, Average, Min and Max.

a) LARGE Function-The Excel LARGE function is used to return a largest value dependent upon its ranking in a range of values. For example, the LARGE function can be used to return the 2nd or 3rd largest number from a range.

Syntax- =LARGE (array, k)

Where array and k are arguments they are define as follows.

Array- The range of cells you want to find the k-th largest value in

K-The position in the range of numbers, from the largest, that you want to return

Example- In **fig-1** we searched 3 largest salary from Cell Range C3 to C7 in C14 Cell using Large function like this-

=Large (C3:C7, 3)

Result-10500

	Α	В	С
1	Sno.	Employee Name	Salary
2			
3	1	Kamal Patidar	5000
4	2	Rahul Patidar	8000
5	3	Vivek sharma	15000
6	4	Vivek Tiwari	18000
7	5	Pankaj Shekhawat	10500
8			
9	Sno.	Task	Result
10			
11	1	Maximum Salary=	18000
12	2	Minimum Salary=	5000
13	3	Average Of Salary=	11300
14	4	3 Largest Salary=	10500
15	5	2 Smallest Salary=	8000

Max, Min, Large, Small and Average Functions Examples

Fig-1

b) SMALL Function-The Excel SMALL function is used to return a value dependent upon its ranking in a range of values. For example, the SMALL function can be used to return the 2nd or 3rd smallest number from a range.

Syntax-=SMALL (array, k)

Where array and k are arguments they are define as follows.

Array- The range of cells you want to find he k-th smallest value in

K- The position in the range of numbers, from the smallest, that you wants to return.

Example- In **fig-1** we searched 2 smallest salary from Cell Range C3 to C7 in C15 Cell using Smallfunction like this-

=Small (C3:C7, 2)

Result-8000

c) MAX Function- The Excel MAX function returns the largest value from a supplied set ofnumeric values.

Syntax- =MAX (number1, [number2] ...)

Where the number arguments are one or more numeric values (or arrays of numeric values). **Example-** In **fig-1** we searched maximum salary from Cell Range C3 to C7 in C11 Cell using Maxfunction like this-

=Max (C3:C7)

Result- 18000

d) MIN Function-The Excel MIN function returns the smallest value from a supplied set of numericvalues.

Syntax- =MIN (number1, [number2] ...)

Where the number arguments are one or more numeric values (or arrays of numeric values). **Example-** In **fig-1** we searched minimum salary from Cell Range C3 to C7 in C12 Cell using Minfunction like this-

=Min (C3:C7)

Result- 5000

e) AVERAGE Function- The Excel AVERAGE function returns the average (arithmetic mean) of the numbers provided.

Syntax- = AVERAGE (number1, [number2] ...)

Where the number arguments are one or more numeric values (or arrays of numeric values). **Example-** In **fig-1** we calculate average of salaries from Cell Range C3 to C7 in C12 Cell using Average function like this-

= Average (C3:C7)

Result-11300

f) COUNT Function- The Excel Count function returns the count of numeric values in a suppliedset of cells or values. This count includes both numbers and dates.

Syntax- =COUNT (value1, [value2] ...) Example- In **Fig-2,** if we want to counthow many cells C2 to C11 containsnumeric values, use count function likethis-

=Count (C2:C11)

Result-5

	Α	В	С
1	Sno.	Employee Name	Salary
2	1	Kamal Patidar	5000
3	2	Rahul Patidar	
4	3	Vivek sharma	Not Given
5	4	Vivek Tiwari	6500
6	5	Pankaj Shekhawat	Not Given
7	6	Suresh Prajapat	Not Given
8	7	Manish Sharma	8000
9	8	Lalit Verma	7500
10	9	Jay Lalawat	8500
11	10	Harsha Sharma	

Count, CountA, CountBlank and CountIf Functions Example

Fig-2

g) COUNTIF Function=The COUNTIF function counts the number of values in a range that meet specific criteria. Syntax-

=COUNTIF (range, criteria)

Where Range and criteria are arguments they are define as follows.

Range- The range of cells to evaluate. **Criteria-** The condition that defines which cells is to be counted.

Example- In Fig-2, if we want to count

how many cells C2 to C11 contains salary greater than 6500, use countif function like this-

=Countif (C2:C11,">6500")

Result-3

h) COUNTBLANK Function- The COUNTBLANK function counts the empty cells in a givenrange.

Syntax-=COUNTBLANK (range)

Where Range is aruments which represents the range of cells you want to count.

Example- In **Fig-2**, if we want to count how many cells C2 to C11 are blank, use countblankfunction like this-

=CountBlank (C2:C11)

Result-2

i) **COUNTA Function-** The COUNTA function counts the number of non empty cells in a givenrange. COUNTA will count cells containing values, labels (Text) and formulas.

Syntax-=COUNTA (value1, value2...)

Example- In **Fig-2**, if we want to count how many cells C2 to C11 are not blank, use counta functionlike this-

=CountA (C2:C11) Result-8

Logical Function

Logical functions include the Boolean operators and conditional tests, which will be an essential part of many working spreadsheets. All the logical functions return either the logical TRUE or logical FALSE when their functions are evaluated.

a) **IF Function** -The Excel IF function tests a user-defined condition and returns one result if the condition is true, and another result if the condition is false.

Syntax- IF (logical_test, value_if_true, value_if_false)

Where the arguments are as follows:

IF Function Example

	Α	В
1	Age	Result
2	25	Valid for Voteing
3	17	Not Valid For Voteing

Fi	g_	
_	-	

Logical_test-

The user-defined condition that is to be tested and evaluated as either TRUE or FALSE.

Value_if_true-

The result that is to be returned from the function if the supplied logical_test evaluates to TRUE. Value_if_false- The result that is to be returned from the function if the supplied logical test evaluates to FALSE.

Example- in Fig-1, we check either age isvalid or not for voteing using If Function-

=IF (A2>=18,"Valid for Voteing","Not Valid For Voteing")

Since B2 Cell is specified above condition that's why we get result "Valid for Voteing".

But B3 Cell is not specified above condition that's why we get result "Not Valid for Voteing".

b) AND Function- The Excel AND function tests a number of supplied conditions and returns a result of: TRUE if ALL of the conditions evaluate to TRUE or FALSE otherwise (i.e. if ANY of the conditions evaluate to FALSE).

Syntax- =AND (logical_test1, [logical_test2], ...)

Where the logical_test arguments are one or more conditions that evaluate to either TRUE or FALSE.

Formula	Description (Result)
=AND (TRUE, TRUE)	All arguments are true. Result: TRUE
=AND (TRUE, FALSE)	One argument is false. Result: FALSE

Example- in Fig-2, we check age specified given condition or notusing And Function-

And Function Example

	Α	В	
1	Age	Result	
2	35	TRUE	
3	45	FALSE	
Fig-2			

=AND (A2>=18, A2<40)

Since B2 Cell is specified above both conditions that's why we get result "TRUE". But B3 Cell is not specified above one condition that's why we get result "FALSE".

a) OR Function-The Excel OR function tests a number of supplied conditions and returns either:TRUE if ANY of the conditions evaluate to TRUE or FALSE otherwise (i.e. if ALL of the conditions evaluate to FALSE).

Syntax-OR (logical_test1, [logical_test2] ...)

Formula	Description (Result)
=OR(TRUE, TRUE)	All arguments are true. Result: TRUE
=OR (TRUE, FALSE)	All arguments are true. Result: TRUE
= OR (FALSE,TRUE)	All arguments are true. Result: TRUE
=OR(FALSE,FALSE)	Both arguments are False. Result: FALSE

Where the logical_test arguments are one or more conditions that evaluate to either TRUE Or FALSE.

OR Function	Example
--------------------	---------

	A	В	
1	Color	Green Or Red	
2	Red	TRUE	
3	Green	TRUE	
4	Blue	FALSE	
5	Red	TRUE	
6	Green	TRUE	
7	Blue	FALSE	
8	Yellow	FALSE	
9	Pink	FALSE	
10	Red	TRUE	
Fig-3			

Example- in **Fig-3**, we check color is either green or red return TRUE but color is not either green or red return FALSE using OR Function-

=OR (A2="Red", A2="Green")

Since B2 Cell is specified above only one condition that's why we get result "TRUE".

But B4 Cell is not specified above both conditions that's why we get result "FALSE".

Chart

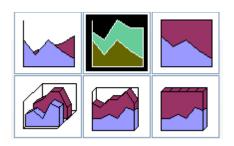
Excel includes a powerful and versatile charting engine. You can choose from a large variety of business and technical chart types. In addition, you can enhance the appearance of your charts with items such as lines, arrows, pictures, and so forth. In Excel, the chart represents one of the most widely used components for business applications. Essentially, a chart visually presents a table of numbers. Displaying data in a well thought out chart can make your data more understandable and can helpyou quickly get your point across during a presentation.

Because a chart is a visual representation of your data, it is particularly useful for understanding a relatively long series of numbers and their relationships. With a chart, you can identify trends and patterns that would be difficult to identify justin a series of numbers.

Excel allows you to create charts in a variety of types: Bar Charts, Column Charts, Line Charts, Area Charts, Scatter Charts, Pie Charts, and Stock Charts. You can define a chart type when creating your chart in Step 1 of the Chart Wizard, or on an existing chart using the technique described below.

Types of Charts

Area Chart- An area chart emphasizes the trend of each value over time. An area chart also shows the relationship of parts to a whole.



Column Chart- A **column chart** uses vertical bars or columns to display values over different categories. They are excellent at showing variations in value over time.

i) One of the most common chart types.

ii) Often used to compare discrete items.

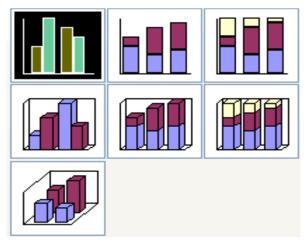
iii) Displays each data point as a vertical column, the height of which corresponds to the value.

iv) The value axis (i.e., continuous axis) is displayed in the vertical axis, which is usually on the left side of the chart.

v) Can specify any number of data series, and the corresponding data points from each series can be stacked ontop of each other.

vi) Can depict the differences between items in a series or items across multiple series.

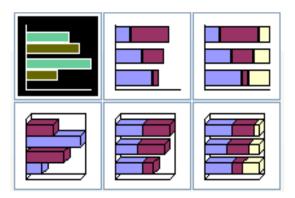
vii) Typically, each data series is depicted in a different color or pattern.



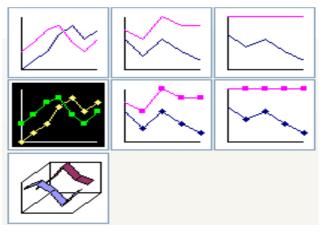
Bar Chart- A **bar chart** is similar to a column chart, except these use horizontal instead of vertical bars. Like the column chart, the bar chart shows variations in value over time.

- **a.** Essentially a column chart that has been rotated 90degrees clockwise.
- **b.** Advantage: the category labels may be easier to read.

c. Like a column chart, can include any number of dataseries, and the bars can be 'stacked' from left to right.



Line Chart- A line chart shows trends and variations in data over time. A line chart displays a series of points that are connected over time. Often used to plot continuous data and are useful for identifying trends. Normally, the category axis displays equal intervals. Can use any number of data series; the lines are distinguished using different colors, line styles, or markers.

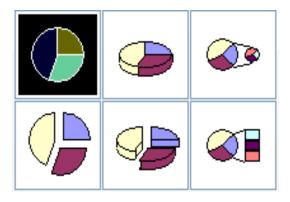


Pie chart- A **pie chart** displays the contribution of each value to the total. Pie charts are an effective way to display information when you want to represent different parts of the whole, or the percentages of a total.

- **a.** Useful when you want to show relative proportions or contributions to a whole.
- **b.** Can use only one data series.

- c. Most effective with a small number of data points
- **d.** Usually no more than five or six data points (or slices).
- e. Values used must all be positive numbers.

f. Any negative values used will be converted to positive values, which is probably not what you intended.



Other charts-Other charts that can be created in Excel 2003 include **Doughnut**; Stock XY (scatter);Bubble; Radar; Surface; and Cone, Cylinder, and Pyramid charts.

	A	В	С	D	E	
1		Toy Sales				
2						
3	Products	Region 1	Region 2	Region 3		
4	Dolls	900	1275	650		
5	Trucks	1325	1370	800		
6	Puzzles	1650	1525	1100		
7						

Creating a Chart –Using Microsoft Excel, you can represent data in a chart. You can choose from avariety of chart types. And, as you change your data, your chart willautomatically update. You can use Microsoft Excel's Chart Wizard to takeyou through the process step-by-step. After you have created the spreadsheet, you are ready to create your chart.

	A	В	С	D	E
1		Toy	Sales		
2					
3	Products	Region 1	Region 2	Region 3	
4	Dolls	900	1275	650	
5	Trucks	1325	1370	800	
6	Puzzles	1650	1525	1100	
7					

□ Highlight cells A3 to D6. You must highlight all the cells containing the data you want in your chart. You should also include the data labels.

- \Box Choose *Insert* > *Chart* from the menu.
- □ Click Column to select the type of chart you want tocreate.
- □ In the Chart Sub-type box, choose the Clustered Column icon to select the chart sub-type.
- □ Click Next.
- □ To place the product names on the x-axis, select theColumns radio button.
- □ Click Next.
- □ Type Toy Sales in the Chart Title field. Toy Saleswill appear as the title of your chart.

Type Products in the Category (X) Axis field. Products will appear as your x-axis title.

Chart Wizard - Step 3 of 4 - Chart Titles Axes Gridlines I		Labels	Data Table	? ×	
Chart title: Toy Sales		т	oy Sales		
Category (X) axis: Product Names Value (Y) axis: Toy Sales Second category (X) axis: Second value (Y) axis:	1800 1600 1400 1200 1000 200 0	Region1	Region2 Re	i Dolls Trecks Puzzles gion3	
Cancel < <u>B</u> ack <u>N</u> ext > <u>F</u> inish					

- □ Type Units Sold in the Value (Y) Axis field. Units Sold will appearas your y-axis title.
- $\hfill\square$ Choose the Data Labels tab.
- □ Select Value in the Labels Contain Frame to display the data labels as values.
- \Box Choose the Data Table tab.
- □ Select Show Data Table. The data table will appear below your chart.
- \Box Click Next.

□ Choose as Object in Sheet1 to make your chart an embedded object and part of the worksheet.

- \Box Click Finish
- \Box Your chart will appear on the spreadsheet.

Data Types

Microsoft Excel recognizes four kinds of information: **Logical** values (TRUE or FALSE, also called Boolean values), **Numerical** values, **Text** values, and *Error* types. The four kinds of information are known, in technical parlance, as *Data Types*. What is important for you, the user is to begin to think of your own information in this manner, and consider how the machine is going to use it.

Note that Excel will do the very best it can to figure out which of these types it THINKS you intend, once you complete typing into a cell and hit the enter key. For example, if you type a series of numerals, it assumes you intend a number type.

Different types of Data type

• Logical Data Type- Logical values are either TRUE or FALSE. In most cases, logical values will be present as the result of the evaluation of an expression or function. For example: The statement "1 is less than 2" is recognizable as a true statement. Another way to put that is:

1 < 2 = TRUE.

- Number: cells that contain only numerals, commas, and decimal points that can be used innumerical calculations.
- Dates and Times- cells that contain only date or time that can be used in date calculations.
- **Text-** cells that contain only date or time that can be used in date calculations.

Database Creation-

If your data is not in an Excel Table, follow these steps to prepare it-

StudentDatabase							
	A	В	С	D	E		
1	RollNo	Student Name	City	Course	Fees		
2	101	Amit	UJJAIN	DCA	5000		
3	102	Arjun	INDORE	PGDCA	10000		
4	103	Rakesh	DEWAS	DCA	15000		
5	104	Manish	BHOPAL	BCA	8000		
6	105	Subhash	UJJAIN	PGDCA	4000		
7	106	Lokesh	INDORE	DCA	5000		
8	107	Varun	DEWAS	BCA	9000		
9	108	Harsh	BHOPAL	BCA	7000		
10	109	Jay	BHOPAL	DCA	6000		
11	110	Tarun	UJJAIN	PGDCA	8500		
12	111	darshan	DEWAS	DCA	7800		
13	112	Diksha	UJJAIN	PGDCA	9600		
14	113	Elesh	BHOPAL	PGDCA	5200		
15	114	eakesh	UJJAIN	DCA	6300		
16	115	Vaibhaiv	BHOPAL	PGDCA	4500		

Fig-1

Add headings: In the row directly above the data, enter a heading for each column. In the example shown here, the data starts in row 2 of the worksheet, and the headings are inrow 1.

- No blank rows or columns: You can leave blank cells in a row or column but make sure that there are no completely blank rows or columns within the database.
- Separate: The ideal setup is to store your database on a worksheetwhere there is no other data. If that's not possible, keep the database separated from other data on the worksheet, with at least one blank row at the end of the database, and a blank column at the right. If the database doesn't start in cell A1, ensure that there is a blank row above, and a blank column to the left.
- After complete this process we can create a database in **ms**-excel here we create a student database shown in fig-1.

	Α	В		C	D	E
1	RollNo	Student Na	ame	City	- Course	Fees
2	101	Amit		Ascending Descending	DCA	5000
3	102	Arjun	100.00	rescenting	PGDCA	10000
4	103	Rakesh	(All) (Top	10)	DCA	15000
5	104	Manish	(Cust	om)	BCA	8000
6	105	Subhash	BHOP DEW/	C. (77.)	PGDCA	4000
7	106	Lokesh	INDO		DCA	5000
8	107	Varun	IALLU	DEWAS	BCA	9000
9	108	Harsh		BHOPAL	L BCA	7000
10	109	Jay		BHOPA	L DCA	6000
11	110	Tarun		UJJAIN	PGDCA	8500
12	111	darshan		DEWAS	DCA	7800
13	112	Diksha		UJJAIN	PGDCA	9600
14	113	Elesh		BHOPAL	L PGDCA	5200
15	114	eakesh		UJJAIN	DCA	6300
16	115	Vaibhaiv		BHOPAL	L PGDCA	4500

StudentDatabase

Query/ Filtering a Database

AutoFilter - AutoFilter is an easy way toturn the values in Excel column intospecific filters based on the cell contents. In other words, The AutoFilter feature makes filtering, ortemporarily hiding, data in a spreadsheet easy. This allows you to focus on specificspreadsheet entries. For example-1, if we would like to only view data of the Ujjain City from (Student Database in Fig-2), follow thisprocess to filtering data-

- First of select City column in the Student Database.
- Go to Data
- Filter
- AutoFilter.

	A	В		С	D	E
1	RollNo	Student Na	me	City	Course	Fees
2	101	Amit		Ascending Descending	DCA	5000
3	102	Arjun	10000	Jescenoing	PGDCA	10000
4	103	Rakesh	(All) (Top 10)		DCA	15000
5	104	Manish	(Custo	om)	BCA	8000
6	105	Subhash	BHOPAL DEWAS INDORE		PGDCA	4000
7	106	Lokesh			DCA	5000
8	107	Varun	UJJAI	DEWAS	BCA	9000
9	108	Harsh		BHOPAL	BCA	7000
10	109	Jay		BHOPAL	DCA	6000
11	110	Tarun		UJJAIN	PGDCA	8500
12	111	darshan		DEWAS	DCA	7800
13	112	Diksha		UJJAIN	PGDCA	9600
14	113	Elesh		BHOPAL	PGDCA	5200
15	114	eakesh		UJJAIN	DCA	6300
16	115	Vaibhaiv		BHOPAL	PGDCA	4500

- Once you've enabled this feature, your columns display with a drop-down arrow to the right. If you click the arrow control, you'll see all the distinct values for that particular column. To turn off the feature, you deselect Auto filter from the same submenu.
- In the example above, I can see all the entries that show in the City column.
- Just select any one city from the drop-down list only that city data will display.
- Here we select Ujjain city from drop-down list and only that student record will show who belongsto Ujjain city.

You will immediately notice that the categories have drop-down buttons. Using these buttons, you can set your filter options.

- Sort Ascending: Sort data in ascending order based on the data in that column; numbers are sorted 1, 2, 3, 4, 5, etc. and words are sorted alphabetically starting with a, b, c, d, e, etc.
- Sort Descending: Sort data in descending order based on the data in that column; numbers are sorted in reverse order 5, 4, 3, 2, 1, etc. and words are sorted in reverse alphabetical order, e, d, c, b,a, etc.
- **Top 10:** The first 10 rows of data in your spreadsheet (when initial setting is "All") or the first 10rows of data from the filtered selection
- Various data points: You may sort the data based on all other data points in that column. Excel combines data points that are the same. For example, students that live in the same city can be sortedusing only one data point.

Custom: As handy as these filters are, there are times when you need to **filter based on specific criteria within a cell.** We can use a custom filter to find these items. There are different types of comparisons operator available in custom filter are as follows-

- □ equals
- \Box does not equal
- \Box is greater than
- \Box is greater than or equal to
- \Box is less than
- \Box is less than or equal to
- \Box begins with
- \Box does not begin with
- \Box ends with
- \Box does not end with
- □ contains
- □ does not contain

For example-2, if we would like to view data of only that students who belong INDORE and DEWAS City in Student Database in Fig-2, follow this process to filtering data-

- First of select **City** column in the Student Database.
- Go to Data
- Filter
- AutoFilter. •

drop From the down list select (Custom...) The Custom AutoFilter dialog opens. Your column name should show above the first list box.

- In Fig-3 we select equals operator from the first dropdown list, and in the text box, type a value Indore.
- We choose **Or** operator for combines conditions.
- We select equals operator from the second dropdown list, and in the text box, type a value Dewas.

	A	В	С	D	E
1	RollNo	Student Name	City 💽	Course	Fees
3	102	Arjun	INDORE	PGDCA	10000
4	103	Rakesh	DEWAS	DCA	15000
7	106	Lokesh	INDORE	DCA	5000
8	107	Varun	DEWAS	BCA	9000
12	111	darshan	DEWAS	DCA	7800

• Finally click on ok button we get desired output shown in Fig-4.

Adding Worksheets, Rows, and Columns-

- Worksheets Add a worksheet to a workbook by selecting Insert -> Worksheet from the menubar.
- **Row** To add a row to a worksheet, select **Insert** \rightarrow **Rows** from the menu bar, or • highlight the row by clicking on the row label, right-click with the mouse, and choose Insert.
- Column Add a column by selecting Insert -> Columns from the menu bar, or

highlight the column by click on the column label, right-click with the mouse, and choose Insert.

Resizing Rows and Columns

There are two ways to resize rows and columns-

a) Resize a row by dragging the line below the label of the row you would like to resize. Resize a column in a similar manner by dragging the line to the right of the label corresponding to the column you want to resize.

b) Click the row or column label and select $Format \rightarrow Row \rightarrow Height$ or $Format \rightarrow Column \rightarrow Width$ from the menu bar to enter a numerical value for the height of the row or width of the column.

Freeze Panes

It is sometimes difficult to read and understand very large spreadsheets. When you scroll too far to the right or down, you lose the headings that are located at the top and down the left side of the worksheet. Without the headings, it's hard to keep track of which column arrow of data you are looking at. To avoid this problem use the **freeze panes** feature in Microsoft Excel. It allows you to "freeze" certain areas or panes of the spreadsheet so that they remain visible at all times when scrolling to the right or down. Keeping headings on the screen makes it easier to read your data throughout the entire spreadsheet. There are two types of Freezing-

- **Column Freezing-** The Freeze Panes option freezes all the columns to the left of the active cell. To freeze only those columns you want to stay on screen, click on the cell to the right of the columns that you want to remain on screen.
- **Row Freezing-**The Freeze Panes option freezes all the rows above the active cell. To freeze only those rows you want to stay on screen, click on the cell *below* the rows that you want to remain on screen.

Example of freezing panes using the active cell-

To keep rows 1, 2, and 3 on the screen and columns A and B:

- \Box Click in cell C4 with the mouse to make it the active cell.
- □ Click on the Window Menu □Freeze Panes option from menu bar.
- □ Click on the Freeze Panes option in the list to freeze both columns and rows.

□ A black border should appear to the right of column B in the worksheet and below row 3 indicating that the areas above and to the right of the lines have been "frozen".

□ Scroll to the right in the worksheet. If you scroll far enough, the columns to the right of column Bwill begin disappearing while columns A and B will stay on the screen.

□ Scroll down through the worksheet. If you scroll far enough, the rows below row 3 will begin disappearing while rows 1, 2, and 3 will stay on the screen.

□ Click on the Window Menu □Freeze Panes option from menu bar to unfreeze Column and Rows.

Split Panes-A very handy feature of Excel is its ability to allow you view more than one copy of your worksheet, and for you to be able to scroll through each pane of your worksheet independently. You can do this by using a feature called Split Panes, which will allow you to split your worksheet both horizontally and vertically.

When you split panes. The panes of your worksheet work simultaneously. If you make a change in one, it will simultaneously appear in the other. If you wish to move the split, just place your mouse over it, hold down your left mouse button and drag to where you want it. To get rid of the split, just double click it, or go to Window>Remove Split.

- Horizontal Split-To create a horizontal split in your worksheet, highlight the row where you wish the split to be placed, go to Window>Split.
- Vertical Split-To create a vertical split, highlight the column where you wish the split to be placed, go to Window>Split.
- To create both Horizontal and Vertical Split-Click in a single cell of your worksheet and go to Window>Split. This will break your worksheet into four panes with a vertical and horizontalline.

Hiding Rows, Columns, Worksheet and Work Book

- **Rows:** Choose Format \Box Row, and then either Hide or Unhide.
- **Columns:** Choose Format \Box Column, and then either Hide or Unhide.
- Worksheet: Choose Format \Box Sheet, and then either Hide or Unhide.
- Workbook: Choose Window then either Hide or Unhide.

Unit III

MS-Power Point

PowerPoint is a special program provided by MS-office. PowerPoint is used to create various Presentation slide, Photo prints etc. The Presentation created in PowerPoint is used for seminars, conferences, various education programs etc. PowerPoint provides us various tools and features to create a presentation we can make our presentation more attractive and easier using this tools.

Process to open a MS Power Point

- Click /point on start button.
- Point to all program PowerPoint.
- After then we will select ms-office option.
- Select ms-PowerPoint from ms-office option.
 Or
- Start all programs ms office 2003 Ms Power Point

Presentation

It is the way of presenting skills or showing or expressing skills. For the attracting or effective task we will use PowerPoint presentation. Through presentation use have express of views, feeling, opinion, presentation is generally used in business, conference, education system, seminars etc. In presentation there are three main elements.

- a. Slide
- b. Notes Page
- c. Handouts

Slides- Slides are a kind of pages used to create presentation the main page of a power point programis known as slide. Any presentation created in power point with the help of two or more slides .it can also be said that every page used in a presentation is a slide. we can include that , graph, clip arts, titles text, images, sounds, video etc...in a slide.

Notes Page- Notes page is a kind of helping tool which contain any remark lesson or notes which is useful for the viewers of the presentation, these notes can also be used by the presenter at the time of presentation we can create separate notes for each slide used in the presentation.

Handouts - Handouts are a kind of printout which contains the slides .Which print the slides used in a presentation in small size. A handouts can contain 1, 2, 3, 4, 6 or 9 slides on a single page. These handouts can be distributed in the viewers or audience who helps to understand the presentation.

Creation of Presentation

We can create our presentation through three main ways:

- a) Blank Presentation.
- b) Design template.
- c) Auto content wizard.

Blank Presentation- With the help of blank presentation we can design the slide as per our requirement it gives us some predefined layouts of slides which can be used to create a blank presentation. To design the slide by using blank presentation option, we will select new option from the file menu and then select blank presentation option from the task pane .when we select blank presentation it gives a default slide. If we don't want to us the default slide then we can select any slide layout. After the completion of one slide to create a new slide click on new slide button from the standard toolbar.

By using design Templates- Design templates provide us some predesigned formats of presentation we can select any one of them and create the presentation. It can also be said that design formats are directly used to create the presentation.



To begin a new presentation with a design template: -

- Open Power Point.
- In the task pane under New, click From Design Template.
- Another way to select template design option is Format-Slide Design.
- A list of templates appears.
- Move your mouse pointer through the different designs, or use thescroll bar.
- Click the down-pointing arrow in the gray box next to the templateyou like.
- Choose Apply to All Slides.

Applying a design template to selected slides: -

As you're working on your presentation, you can choose **Apply to Selected Slides** if you want one or more slides to have a different look.

AutoContent Wizard - [Training]							
Start Presentation type Presentation style Presentation options Finish	<u>All</u> <u>General</u> <u>Corporate</u> Bra	tation you're going to give eneric ecommending a Strategy ommunicating Bad News aining ainstorming Session ertificate					
[Cancel < <u>B</u> ack	Add <u>R</u> emove					

Auto content wizard: - The auto content wizards give some instruction to the user by following these instructions, a new presentation can be created this is the easiest way to create a presentation. To use the auto content wizard we will select new option from the file menu and then select from thisselection we will get the window auto content wizard which gives us following steps.

Start: - The creation of presentation start with this step.

- **Presentation type:** The option provided by this step. Gives the type of presentation. We can select anyone of them as a presentation
- **Presentation style:** presentation style five different style we can selected any of them as the presentation
- **Presentation option:** by using presentation option we can include title, footer and slide number in our presentation.
- Finish: it is the last option of auto content wizard which end of steps.

Working with presentation

• **Opening a presentation:** - To open an already created presentation we will select open option from the file menu then choose the drive or folder in which the presentation is saved from the looking box. We will get a list of all the saved item the presentation and click on open button to open the presentation we can also double click the presentation to

open it.

- Saving a presentation: To save a presentation we will select save dialog box from the file menu. We will type a name of presentation in into file name box and then click on save button to save the presentation.
- Saving the presentation in another format: To save a presentation in another format we will select that format from the list of save as type box available in save as dialog box and then clickon save.
- **Copy the presentation:** To make a copy of presentation we will select open option from the filemenu and then select the presentation and select open as copy option from the shortcut menu appeared by click on the open button.

Slides and its different views

Slides are the pages used in the presentation. It can also be said that each page of a presentation is known as slide it can include any text, graphics, titles, shapes, designs etc.

PowerPoint provide us various views to view the slides on we can use three different buttons. Normal view, Slide Sorter view and Slide Show view respectively these three buttons are available on button left of the PowerPoint window.

- Normal View: Normal view is a general view of h slide in general when we create a all design a slide then it appears it normal view. Normal view provides us three different paints to view the slides these panes are available at the left of the slide
- **Outline Pane:** Outline pane provides the feature in view the text written in the slide by using this pane we can also edit the text of slides.
- Slide Pane: Slide pane provides the feature to view all the slides used in the presentation in small sizes we can have the actual view of slides that is the slide including text, graphics diagramsetc.
- Notes Pane: -We can include notes pages or view the notes in the slides by using notes pane.
- Slide Sorter View: We can view all the slides used in the presentation on a single page at a time in small sizes we can add new slides, delete the slides, change the sequence of the slides and also apply the same animation on various slides at the time.
- Slides Show View: We can view the slides in full screen mode including all its effects

by using this view we can also decides the time to view the slides. One by one automatically when we decide the time next slide automatically appear after the time frame. If we don't decide the time then we can use either mouse click or page down key to view the next slide.

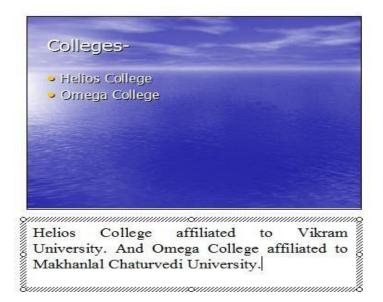
Inserting, Deleting and Copying of slides

- Insertion of slide- To insert a new slide in the presentation we will click on new slide option from the insert menu or we will right click on the slide pane and then select new slide option from the shortcut menu and also we can press clrt + m to insert a new slide in presentation. Using above three approaches, we can get a new slide on screen.
- **Deletion of slides-** To delete a slide in the presentation we will click on delete slide option from the edit menu or we will right click on the slide pane and then select delete slide option from the shortcut menu and also we can press del key to delete a in presentation. Using above three approaches, we can delete slide from the presentation.
- **Copying of slides-** For copying of one slide from one place to another we will firstly select that particular slide then after we will select copy options after selecting of copy option we have go to our destination place where we want to be copied and click on paste option for copy of our slide.

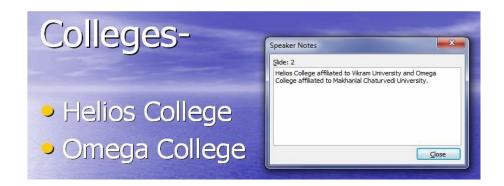
Notes Page

When you give your presentation, you may need to refer to notes to elaborate on a slide's material, or to remind you to mention some detail. For this purpose we can create a notes for slides used in the presentation this note is available below the slides. We can type any notes, remark or any help message.

Creation of Notes Pages– To create note page we will click on notes pages option from the view menu. When we do so we will get a text boxbelow the slide in this text box we can type any note as per the requirement after clicking on notespage view to create the note. This note can also be type in the text box available below the slide in normal view.



Viewing notes during the slide show presentation- To view the notes related to the particular slidewe click on control button available on the bottom left of slideshow viewscreen then select Screen - Speaker's notes option from the available list by doing so. We will get the note on screen.



Printing Notes Page- We can also print the notes pages with slide used in the slides of the presentation to get the prints of

notes very first we will select the particular slide and then click on print option from file menu to getthe print dialog box. Then we will select notes option from the print what list and click on ok button to get the print out of the notes.

Print		? ×
Printer		
<u>N</u> ame:	lange Send To OneNote 2007	Properties
Status: Type: Where:	Idle Send To Microsoft OneNote Driver Send To Microsoft OneNote Port:	Fin <u>d</u> Printer
Comment:		Print to file
-Print range		Copies
All	© Current slide O Selection	Num <u>b</u> er of copies:
Custom	Show: 👻	1
🔘 Sl <u>i</u> des:		
	numbers and/or slide ranges. For example,	
1,3,5-12		✓ Collate
Print what:	Handouts	
Notes Page	Slides per page: 6 🖵	12
Color/grayso		
Color	_	
	Scale to fit paper	Print <u>h</u> idden slides
	Frame slides	
	Print comments and in <u>k</u> mark	·
Pr <u>e</u> view		OK Cancel

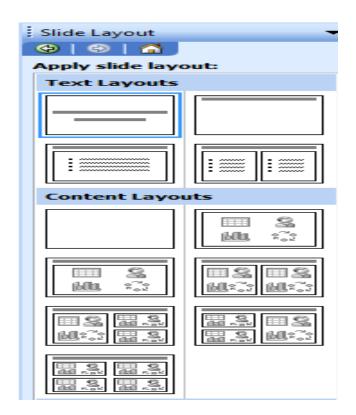
Handouts – Handout is a printed form of any presentation we can print all the slides used in the presentation is small sizes on a single page. We can print 1, 2, 3, 4, 6 or 9 slides on a page. We can distribute these handoutsamong the viewer during presentation.

Print		? ×
Printer		
<u>N</u> ame:	lange Send To OneNote 2007	 Properties
Status: Type: Where: Comment:	Idle Send To Microsoft OneNote Driver Send To Microsoft OneNote Port:	Fin <u>d</u> Printer
Print range		Copies
	© <u>C</u> urrent slide © <u>S</u> election	Number of copies:
	numbers and/or slide ranges. For example,	
1,3,5-12		Colla <u>t</u> e
Print <u>w</u> hat: Handouts Color/graysc	Handouts Slides per page: 6	
Color	Order: Order: Horizontal	Vertical 5 6
	☐ Scale to fit paper ✔ Frame slides Print comments and ink m	Print <u>h</u> idden slides
Pr <u>e</u> view		OK Cancel

Printing handouts- Toprint the handouts very first we will open the particular presentation then select print option from the file menu or press control + p from thekeyboard to open the print dialog box. We will select handouts option from the print what list in the print dialog box. When we do so we will get all the printing options of handouts. After that we select the number of slides to be printed on each page from the slide per page option and also we can decide the position of slide that is the horizontal or vertical then we click on ok button to get the handout prints.

Slide Layouts

Slide layouts define containers, positioning, and formatting for all of the content that appears on a slide. Placeholders are the containers in layouts that hold such content as text (including body text, bulleted lists, and titles), tables, charts, Smart Art graphics, movies, sounds, pictures, and clip art. An arrangement of one or more of these placeholders is a Slide Layout. PowerPoint provides a variety of different slide layouts grouped into four categories.



- Text Layouts: contain text placeholders only.
- **Content Layouts:** contain the blank slide layout and layouts withplaceholders for media such as pictures, diagrams, charts and video clips.
- Text and Content Layouts: contain text and media placeholders.
- Other Layouts: contain miscellaneous slide layouts with text, media and object only placeholders.

To change the slide layout:-

- Display the Slide Layout task pane if it is not already displayed. Click Format > Slide Layout. The Slide Layout task pane is displayed.
- Display the slide you wish to format. You can select several slides by holding the Ctrl key whilst selecting them.
- Click on the slide layout in the task pane that you want. The layout is applied to the selected slides.

Slide Transition

Once you've completed all of your slides, create a cohesive presentation by adding a transition. You can move from slide to slide with interesting transitions that affect the timing, entrance, and exit of your slides. A transition is an effect that is applied to some or all of the slides in a presentation.

To make transitions from slide to slide:

- Click Slide Show Slide Transition.
- In the Slide Transition pane, choose the effect you want from the drop-down menu, such as Blinds Horizontal, Blinds Vertical, Box In, Box Out, Cover Down, Cover Left, Cover Right, and Cover Up.
- Automatically **preview** each transition by clicking on it. (Auto Preview must be selected).
- Click Apply to All when you have chosen an effect.
- You can change the speed of the transition by using the corresponding drop-down under **Modify transition**. The Slow, Medium, and Fast options refer to the speed of the

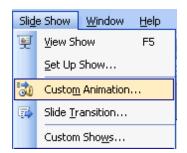
transition. Again, you'll see a preview of what they do when you select each option. Sound can be added to the transition by selecting from the corresponding drop-down.

Slide Tra		×			
	selected slides:				
No Trans	sition	-			
Blinds Ho	prizontal				
Blinds Ve	ertical	=			
Box In					
Box Out					
Checker	board Across				
Checker	board Down				
Comb Ho	prizontal				
Comb Ve	ertical				
Cover D	own				
Cover Le	eft				
Cover Ri	ight				
Cover U	p				
Cover Le	eft-Down	-			
Modify t	ransition				
Speed:	Fast	-			
Sound:	[No Sound]	-			
	Loop until next sound				
Advance	e slide				
🔽 On n	nouse click				
🗖 Automatically after					
Apply to All Slides					
🕨 Play	Slide Show				
🔽 AutoPr	review				

- The other option is **Advance**. The default is to have each slide transition after the mouse has been clicked. You can also tick the box next to **automatically after**. This lets you set how many seconds/minutes to wait before the next slide appears.
- To see how your transition works, **preview the slide show**. Some transitions work well with effects that have been added to text and graphics. Others do not. Preview a variety of transitions before finalizing your slide presentation.

Custom animation

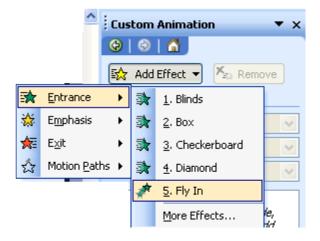
Animation is a process to activate any text or object by using custom animation you can alive (live) any dead object. It can also be said that animation are used to make the presentation active by using custom animation we can make the moving object used in different slides like text, graphic, picture, images. This object can also be effected or animated with various sound by using the presentation can be make very effecting and attractive.



The following steps will show you how to animate an object whileworking in Slide View.

- Select the object (Text, Image, chart etc.) which you want toanimate.
- From the Slide Show menu, select Custom Animation. The Custom Animation task pane will appear.
- From the Custom Animation task pane, we can see different types of animation options they are as follows: -Entrance, Emphasis, Exit andMotion Path.
- Entrance: -Entrance effects are animations that control how the shape becomes visible on the slide. For example, this could involve having the shape appear to move onto the slide from outside the slide boundaries, such as flying in from the right edge of the slide; or having the shape become visible in place in a particular manner, such as dissolving into visibility. If the first effect assigned to a shape in the main sequence is an entrance effect, that shape is not initially visible when the slide is loaded. The shape becomes visible when PowerPoint performs the entrance effect assigned to it. You do not have to assign an entrance effect to a shape in order to assign other effects to it.
- Emphasis: Emphasis effects refer to effects that do not move the shape on the slide. You can use emphasis effects to call attention to shapes already displayed on the slide. Using emphasis effects, you can make shapes rotate, grow or shrink, change color, and other effects.
- Motion path: A motion path is an invisible track you lay on your slide for a shape to run along. For example, you can move text from one place on your slide to another; create a hand-drawn entrance or exit for a piece of art; or lay a path that an arrow could follow at crucial points in your narrative, to show a process. Unlike with an entrance or exit effect, you can use a path simply to move something on the slide from one position to another.
- Exit: Exit effects are animations that control how the shape becomes invisible on the

slide. You can use exit effects to appear to remove shapes from the slide, to make room for other shapes on the slide, or to focus attention on the remaining shapes on the slide.

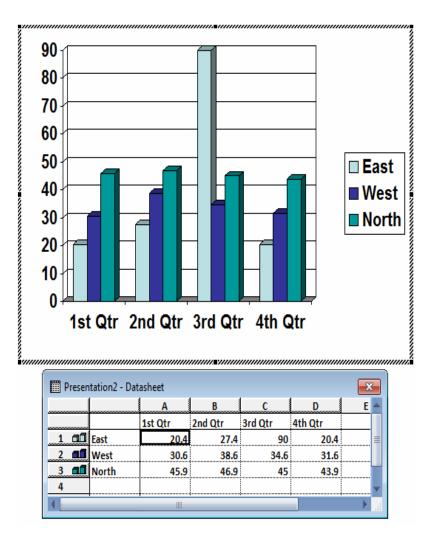


Animate any object (Text, Chart, Images): -To animate any object or text use in the slide or presentation very first use we will open the particular presentation then select animation scheme option from the slide show menu or we canalso select custom animation option from the slide show menu. Then we have to click on add effect button available in the custom animation and select any animation from the different categories provided by custom animation options. By doing this the selected animation can be apply on the selected object in the slide. To view the animation effect we will click on Play button available in the task pane or we can also select auto preview check box to get automatic preview of the effect or animation apply on various object.

Adding sounds to the slides: various kinds of sound can also be applied on different slides at the time of creating presentation to apply the sound on slide very first we will select the slide & then click on slide transition option from the slide show menu. Slide transaction box will appear in task pane. It also contains the option for adding the sound with transaction.

We can select any sound from the list available in sound option presented in Modify Transition & it will be applied to the selected slide, to apply the same on each slide click on Apply to all slides button.

Inserting a chart



Click on insert menu and select chart option.

- A chart appears with a datasheet and sample data.
- Replace the sample data in the data sheet with actual data you want to present. The Y axis is for values or numbers, like the number of hours worked or amount of money earned. The X axis is the label for the information. It now reads East, West, and North.
- You can delete some information in columns or rows of the sheet. Right-click the row or column and choose Cut, Delete, or Clear Contents.
- Notice as you enter new data and titles that the chart on the slide changes to show this new information.

Insert video or sound clips into slide

Attention: Always put the movie, sound and video in the same folder as your PowerPoint presentation. If you later move the PowerPoint presentation to another computer, copy the movie too.Keeping your movie in the same folder as your presentation ensures the link will still work. However, you should always test the movie on a new machine just to be certain. Re-insert the movie, if necessary.

On the **Insert menu**, point to Movies and Sounds, and then click Movie from File. Click the video you want to use and then click OK.

After you click OK, you're prompted with a message asking how you want the movie to start in theslide show.

Recommend choosing automatically even if you want the movie to play when clicked - I'll talk about how to set this part too. (If you choose When Clicked you have to click the black box to start the movie. Because I don't like to show the black box on the slide, I do this a little differently.

Right-click the movie objects (the small rectangle) and on the shortcut menu, clicks Edit Movie Object.

The Movie Options dialog box appears. Select what you want, and then click OK.For example: Play the movie full Screen.

Test this now to see how it works by starting the slide show. (On the Slide Show menu, click View Show.) Advance to the slide with the movie, (best if you have the title of the movie on it). Within a couple of seconds, the movie starts to play full screen. When the movie finishes, you return to the same slide (but no unsightly box appears). Click to advance to your next slide.

Unit IV

MS Access

Microsoft Access is a Database Management System (DBMS) from Microsoft that combines the relational Microsoft Jet Database Engine with a graphical user interface and softwaredevelopment tools. It is a member of the Microsoft Office suite of applications, included in the professional and higher editions.

- Microsoft Access is just one part of Microsoft's overall data management product strategy.
- It stores data in its own format based on the Access Jet Database Engine.
- Like relational databases, Microsoft Access also allows you to link related information easily. For example, customer and order data. However, Access 2013 also complements other database products because it has several powerful connectivity features.
- It can also import or link directly to data stored in other applications and databases.
- As its name implies, Access can work directly with data from other sources, including many popular PC database programs, with many SQL (Structured Query Language) databases on the desktop, on servers, on minicomputers, or onmainframes, and with data stored on Internet or intranet web servers.
- Access can also understand and use a wide variety of other data formats, including many other database file structures.
- You can export data to and import data from word processing files, spreadsheets, or database files directly.
- Access can work with most popular databases that support the Open Database Connectivity (ODBC) standard, including SQL Server, Oracle, and DB2.
- Software developers can use Microsoft Access to develop application software.

Microsoft Access stores information which is called a database. To use MS Access, you willneed to follow these four steps:

- Database Creation Create your Microsoft Access database and specify what kind of data you will be storing.
- Data Input After your database is created, the data of every business day can be

entered into the Access database.

- Query This is a fancy term to basically describe the process of retrieving information from the database.
- **Report** (optional) Information from the database is organized in a nice presentation that can be printed in an Access Report.

Architecture

- Access calls anything that can have a name an object. Within an Access desktop database, the main objects are tables, queries, forms, reports, macros, data macros, and modules.
- If you have worked with other database systems on desktop computers, you might have seen the term database used to refer to only those files in which you store data.
- But, in Access, a desktop database (.accdb) also includes all the major objects related to the stored data, including objects you define to automate the use of your data.

MS Access uses "objects" to help the user list and organize information, as well as prepare specially designed reports. When you create a database, Access offers you Tables, Queries, Forms, Reports, Macros, and Modules. Databases in Access are composed of many objectsbut the following are the major objects:

- ✓ Tables
- ✓ Queries
- ✓ Forms
- ✓ Reports

Together, these objects allow you to enter, store, analyze, and compile your data. Here is a summary of the major objects in an Access database;

Table

Table is an object that is used to define and store data. When you create a new table, Access asks you to define fields which is also known as column headings

- Each field must have a unique name, and data type.
- Tables contain fields or columns that store different kinds of data, such as a name or an address, and records or rows that collect all the information about a particular instance of

the subject, such as all the information about a customer or employee etc.

• You can define a primary key, one or more fields that have a unique value for eachrecord, and one or more indexes on each table to help retrieve your data more quickly.

Query

Query is an object that provides a custom view of data from one or more tables. Queries are a way of searching for and compiling data from one or more tables.

- Running a query is like asking a detailed question of your database.
- When you build a query in Access, you are defining specific search conditions to find exactly the data you want.
- In Access, you can use the graphical query by example facility or you can write Structured Query Language (SQL) statements to create your queries.
- You can define queries to Select, Update, Insert, or Delete data.
- You can also define queries that create new tables from data in one or more existing tables.

Forms

Form is an object in a desktop database designed primarily for data input or display or forcontrol of application execution. You use forms to customize the presentation of data that your application extracts from queries or tables.

- Forms are used for entering, modifying, and viewing records.
- The reason forms are used so often is that they are an easy way to guide peopletoward entering data correctly.
- When you enter information into a form in Access, the data goes exactly where the database designer wants it to go in one or more related tables.

Report

Report is an object in desktop databases designed for formatting, calculating, printing, and summarizing selected data.

- You can view a report on your screen before you print it.
- If forms are for input purposes, then reports are for output.
- Anything you plan to print deserves a report, whether it is a list of names and addresses, a financial summary for a period, or a set of mailing labels.

- Reports are useful because they allow you to present components of your database in an easy-to-read format.
- You can even customize a report's appearance to make it visually appealing.
- Access offers you the ability to create a report from any table or query.

Let us now take a look at other MS Access objects.

Macro

This object is a structured definition of one or more actions that you want Access to perform in response to a defined event. An Access Macro is a script for doing some job. For example, to create a button which opens a report, you could use a macro which will fire Open Report action.

- You can include simple conditions in macros to specify when one or more actions in the macro should be performed or skipped.
- You can use macros to open and execute queries, to open tables, or to print or viewreports.
- You can also run other macros or Visual Basic procedures from within a macro.
- Data macros can be attached directly to table events such as inserting new records, editing existing records, or deleting records.
- Data macros in web apps can also be stand-alone objects that can be called from other data macros or macro objects.

Module

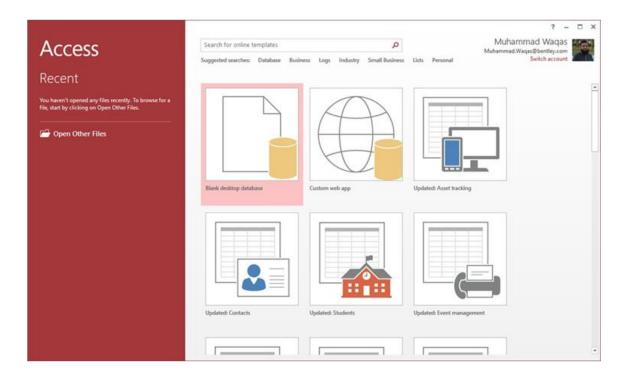
Module is an object in desktop databases containing custom procedures that you code using Visual Basic. Modules provide a more discrete flow of actions and allow you to trap errors.

- Everything that can be done in a macro can also be done in a module, but you don'tget the macro interface that prompts you what is needed for each action.
- Modules are far more powerful, and are essential if you plan to write code for amultiuser environment, because macros cannot include error handling.
- Modules can be standalone objects containing functions that can be called from anywhere in your application, or they can be directly associated with a form or a report to respond to events on the associated form or report.

Create a database

In this chapter, we will be covering the basic process of starting Access and creating a database. This chapter will also explain how to create a desktop database by using a template and how to build a database from scratch.

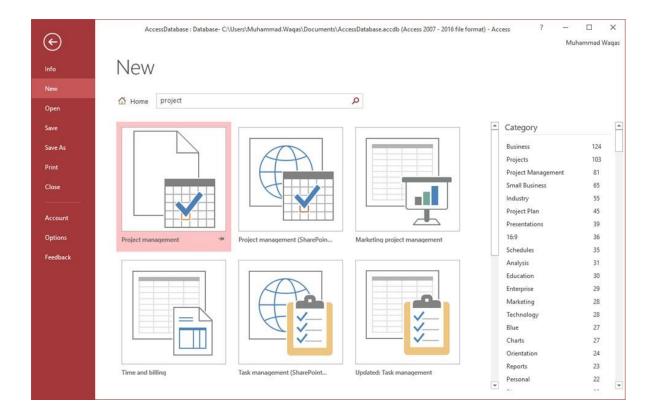
To create a database from a template, we first need to open MS Access and you will see the following screen in which different Access database templates are displayed.



To view the all the possible databases, you can scroll down or you can also use the search box.

Let us enter project in the search box and press Enter. You will see the database templates related to project management.

Select the first template. You will see more information related to this template.



e	AccessDatabase : Database- C\Users\Muhammad.Waqas\Documents	(AccessDatabase.accdb (Access 2007 - 2016 file format) - Access	7 - M	uhammad Waqas
III.	New			
N _{rtew} O _{Open} S _{Jave}	G Home stolet		×	
A Save As P Print C Close	Image: State Design State Image: State Image: State	Provided by: Microsoft Corporation Create a project tracking database to track multiple projects, including time-sensitive deliverables, owners, and budgets, using this popular Access template. Navigate by projects, tasks, and employees, keep an eye on costs, priorities, and status. Assign tasks and produce useful reports such as Project Tasks and Tasks by Assigned To.	inagemint desil	124 103 81 85 55
D _{Account} T _{Options} K _{rieedback}	Project minimadement Project minimadement Review Re	Download size: 569 KB Should I create an Access app or an Access desktop database? File Name Database1.accdb C:\Users\Muhammad.Waqas\Documents\	$ \mathbf{O} $	45 39 36 35 31 30
		Create	(DF)	29 28 27 27
	Time and billing Task management (ShaerPolet.	Updated: Task management Pecco	đự:	34 23 22

Let us enter project in the search box and press Enter. You will see the database templates related to project management.

After selecting a template related to your requirements, enter a name in the **File name** field and you can also specify another location for your file if you want.

¢		Access			- 🗆 🗙 d Waqas - 🎬
Into	New				
New					
Open	Home project	Q		_	
See		New Only Revailed Database Team		× = egory	
Save As		III Project Octails	Provided by: Microsoft Corporation	ness ects	124
Print		Untitled	Create a project tracking database to track multiple projects, including time-sensitive deliverables, owners, and budgets, using	ect Management	
Close		Name	this popular Access template. Navigate by projects, tasks, and employees, keep an eye on costs, priorities, and status. Assign tasks	Il Business	
		Project Details Project Tasks	and produce useful reports such as Project Tasks and Tasks by Assigned To.	stry	
Account		Celegory (1) Calegory w End Date Priority (2) Normal w Budget	Download size: 569 KB	ect Plan	45
Options	L.L.L.L.L	Status Not Started y Budget in Days	Should I create an Access 2013 app or an Access desktop database?	bions	
Options	Project management		File Name MyDatabase.accdb	dules	
		L	C:\Users\Muhammad.Wagas\Documents\	ysis	
		Budget 3s Days 6.00 Budget Total Task Cost 3r Days 0.00 Total Task Co		ation	
		Balance of Days 0.00 Balance Record + 1 of 1 + Of Attende Search		rprise	29
			* A	ceting	
			Create	mology	
				annetts.	
				Drientation	24
				Reports	
	Time and billing	Task management (SharePoint Up		Personal	
				Picture	

Now, press the Create option. Access will download that database template and open a new blank database as shown in the following screenshot.

E	AccessDatabase : Database- C:\Users\Muhammad.Waqas\Documents\AccessDatab	ase.accdb (Access 2007 - 2016 file format) - Access	? — 🗆 🗙 Muhammad Waqas
Info	New		
New			
Open	A Home project	×	
Save	Proi	ect management	y .
Save As	Mone Cente Esternal Data Database Texts	ed by: Microsoft Corporation	124
1.000		a project tracking database to track multiple projects,	
Print	Name using t	ng time-sensitive deliverables, owners, and budgets, his popular Access template. Navigate by projects,	snagement 81
Close	Coner in team Data status.	ind employees, keep an eye on costs, priorities, and Assign tasks and produce useful reports such as	ness 65 55
	Category [1] Category w End Date Project	Tasks and Tasks by Assigned To.	55 10 45
Account	and and hotsense Andre until	pad size: 569 KB I create an Access app or an Access desktop database?	39
Options	Project management File Na		36
Feedback		tabase.accdb	
	Total Task Cost In Days 8.00 Total Task Co	rs\Muhammad.Waqas\Documents\	
	Balance of Days 0.00 Salance Balance H 1 of 1 + H - Of Relation		29
	*		
		eate	yy 28
		Charts	
		Reports	
	Time and billing Task management (SharePoint Updat	ed: Task management Personal	

Now, click the Navigation pane on the left side and you will see all the other objects thatcome with this database.

		abase : Database- C:\U DATABASE TOOLS	sers\Muhammad.W	faqas\Documents\N	1yDataba	se.accdb (Access	2007 - 2013 file for	mat) - Access		? Muhammad	– 🗆 X Waqas - 🌌
View Clipboard r	Sort				Find	ab Replace → Go To + & Select + Find	з <i>г</i> <u>и</u> А-	- │ - ↓ : 호· ☆ - │ = Text Formatting	1∃ 4≅ 4≅)	5. e :	
Projects Navigation Search. Projects Completed and Deferred Projects	> © > *	1223328	ect List	E-mail List	3 Empl	oyee List <u>R</u> epo	orts		avorites de Feedback	Sav	e Filter
Completed and Deterred Projects Project Details Project List Project List Project Salance Sheet Project Salance Sheet Project Tasks Employees Supporting Objects	* * *	ID • Proj * (New) Total	ect Name •	Owner		Category - (1) Category	(2) Normal	- Connect	Start - 6/17/2016	End	• Budget - \$0.00
Form View		Record: H 4 1 of 1	► н > 1% н	o Filter Search					NUM LOCK		E 🖌

Navigate To Category Filter Fagorites Save Filter Fagorites Projects Navigation ************************************	FILE HOME CREATE	Filter	scending escending	rt 🍸 Tog	ction * anced *	Refresh All + Dela	e 🎸 Spelling	Find	ab Replace → Go To * Replace → Select *	B <i>I</i> <u>U</u> Å	- · · · · · · · · · · · · · · · · · · ·	日在個月	(*)	I Waqas - 🎬
Object Type ID Project Name Owner Category Priority Status Status End Budge Tables and Related Views Greated Date (1) Category (2) Normal Not Started 6/17/2016 \$0 Modified Date ets Filter By Group 0 - <			P		Proje		E E-mail List	AS Emp	lovee List Rep	orts			Sa	
Projects Tasks × Employees × Supporting Objects ×	<u>T</u> ables and Related Views <u>⊆</u> reated Date		*	ID • (New)		ct Name 🔹	Owner	-	Category	Priority	Status	Start •	End	- Budge \$0.
	Projects Tasks Employees Supporting Objects		*											

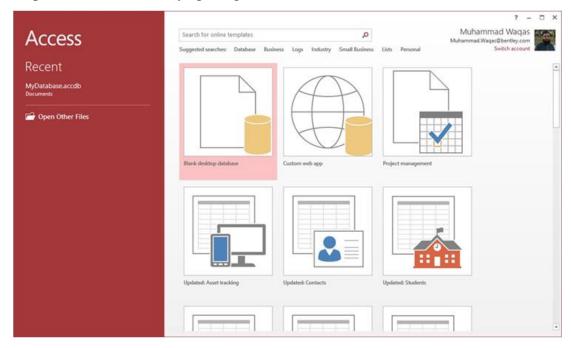
Click the Projects Navigation and select the Object Type in the menu.

You will now see all the objects types — tables, queries, etc.

A S · C · →	MyDa NAL DATA	tabase : Database- C:\U DATABASE TOOLS	sers\Muhammad.W	aqas\Documents\N	/yDataba	se.accdb (Acces	s 2007 - 2013 file f	ormat) - Access	,	? Muhammad W	
View Paste Format Painter			Refresh All - X Dele	The second second second	Find	 ab Replace → Go To * Select * 	b <u>iu</u> A	- - 日 - 空 - 点 - 日	15 16 (e) M		adas 🖉
Views Clipboard G		t & Filter	and the second sec	ords		Find		Text Formatting		G	
All Access Objects	• «	Project List									
arch_	P	Pro	ect List					Filter F	ayorites		~
Tables	* *	E FIO	ect List							Save	Filter 🚰
Common Tasks		New Project	Sollect Data	E-mail List	38 Emp	loyee List Rep	orts	✓ ② Provid	de Feedback		
Employees		ID • Proj	ect Name 🔹	Owner		Category	 Priority 	Status	Start •	End	- Budget
Filters		* (<u>New</u>)				(1) Category	(2) Normal	Not Started	6/17/2016		\$0.
Projects		Total	0								
Tasks											
Jueries	*										
Common Tasks Append											
Completed and Deferred Projects											
Employees Extended											
Dpen Projects											
🗇 Open Tasks											
Project Totals											
Common Tasks Update Add Field											
Forms	\$										
Common Tasks											
Common Tasks Subform											
Completed and Deferred Projects											
B Employee Details											
Employee List											
B Filter Details											
Project Datasheet Subform	-	Record: H 4 1 of 1	I HIS TON	Filter Search	-	4]					
orm View	-		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Jeanch	10-10	1111 C			NUM LOCK	E	E M

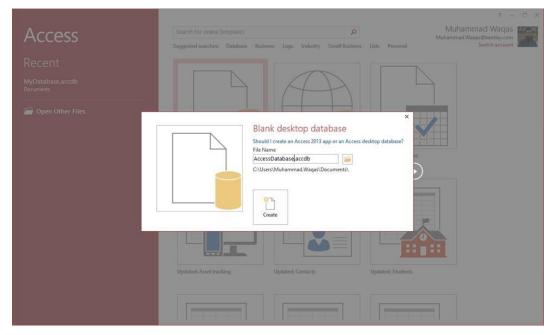
Create BlankDatabase

Sometimes database requirements can be so specific that using and modifying the existing templates requires more work than just creating a database from scratch. In such case, we make use of blank database.



Step 1: Let us now start by opening MS Access.

Step 2: Select Blank desktop database. Enter the name and click the Create button.



Step 3: Access will create a new blank database and will open up the table which is also completely blank.

B States		able Tools	AccessDatabase : Datab	ase- C:\Users\Muham	mad.Waqas\Documents\AccessD.		<u>а</u> х
File Home Create External Data	Database Tools Field	ts Table	V Tell me what you w	ant to do		Muhar	nmad Waqa
View Paste Right Copy Filter	scending T/ Selection - scending TAdvanced move Sort T Toggle Filt Sort & Filter	. Refresh	lier New ∑ Totals ⊯ Save ∜ Spelling ≫ Delete • ₩ More • Records	Pind [®] Replace → Go To * ▷ Select * Find	Calibri (Detail) * 11 B I U <u>A</u> • ½ · <u>A</u> Text Form		
All Access Objects 🛛 🔍 «	Table1						0
Search. P Tables & I Table1	10 - Cl	ick to Add					
Datasheet View	Record: I4 4 1 of 1	5. H 5. 7	S. No Filter Search			Num Lock	

Data types in MS Access

Every field in a table has properties and these properties define the field's characteristics and behavior. The most important property for a field is its data type. A field's data type determines what kind of data it can store. MS Access supports different types of data, each with a specific purpose.

- The data type determines the kind of the values that users can store in any givenfield.
- Each field can store data consisting of only a single data type.

Here are some of the most common data types you will find used in a typical MicrosoftAccess database.

Type of Data	Description	Size
Short Text	Text or combinations of text and numbers, including numbers that do not require calculating (e.g. phone numbers).	Up to 255 characters.
Long Text	Lengthy text or combinations of text and numbers.	Up to 63, 999 characters.
Number	Numeric data used in mathematical calculations.	1, 2, 4, or 8 bytes (16 bytes if set to Replication ID).
Date/Time	Date and time values for the years 100 through 9999.	8 bytes.
Currency	Currency values and numeric data used in mathematical calculations involving data with one to four decimal places.	8 bytes.
AutoNumber	A unique sequential (incremented by 1) number or random number assigned by Microsoft Access whenever a new record is added to a table.	4 bytes (16 bytes if set to Replication ID).
Yes/No	Yes and No values and fields that contain only one of two values (Yes/No, True/False, or On/Off).	1 bit.

If you use previous versions of Access, you will notice a difference for two of those data types.

- In Access 2013, we now have two data types short text and long text. In previous versions of Access these data types were called text and memo.
- The text field is referred to as short text and your memo field is now called long text.

Here are some of the other more specialized data types, you can choose from in Access.

Data Types	Description	Size
Attachment	Files, such as digital photos. Multiple files can be attached per record. This data type is not available in earlier versions of Access.	Up to about 2 GB.
OLE objects	OLE objects can store pictures, audio, video, or other BLOBs (Binary Large Objects)	Up to about 2 GB.
Hyperlink	Text or combinations of text and numbers stored as text and used as a hyperlink address.	Up to 8,192 (each part of a Hyperlink data type can contain up to 2048 characters).
Lookup Wizard	The Lookup Wizard entry in the Data Type column in the Design view is not actually a data type. Whenyou choose this entry, a wizard starts to help you define either a simple or complex lookup field.A simple lookup field uses the contents of another table or a value list to validate the contents of a single value per row. A complex lookup field allowsyou to store multiple values of the same data type in each row.	Dependent on the data type of the lookup field.
Calculated	You can create an expression that uses data from one or more fields. You can designate different result data types from the expression.	You can create an expression that uses data from one or more fields. You can designate different result data types from the expression.

Data Types	Description	Size
Attachment	Files, such as digital photos. Multiple files can be attached per record. This data type is not available in earlier versions of Access.	Up to about 2 GB.
OLE objects	OLE objects can store pictures, audio, video, or other BLOBs (Binary Large Objects)	Up to about 2 GB.
Hyperlink	Text or combinations of text and numbers stored as text and used as a hyperlink address.	Up to 8,192 (each part of a Hyperlink data type can contain up to 2048 characters).
Lookup Wizard	The Lookup Wizard entry in the Data Type column in the Design view is not actually a data type. Whenyou choose this entry, a wizard starts to help you define either a simple or complex lookup field.A simple lookup field uses the contents of another table or a value list to validate the contents of a single value per row. A complex lookup field allowsyou to store multiple values of the same data type in each row.	Dependent on the data type of the lookup field.
Calculated	You can create an expression that uses data from one or more fields. You can designate different result data types from the expression.	You can create an expression that uses data from one or more fields. You can designate different result data types from the expression.

These are all the different data types that you can choose from when creating fields in a Microsoft Access table.

Create tables

When you create a database, you store your data in tables. Because other database objects depend so heavily on tables, you should always start your design of a database bycreating all of its tables and then creating any other object. Before you create tables, carefully consider your requirements and determine all the tables that you need.

Let us try and create the first table that will store the basic contact information concerning the employees as shown in the following table:

Field Name	Data Type
EmployeelD	AutoNumber
FirstName	Short Text
LastName	Short Text
Address1	Short Text
Address2	Short Text
City	Short Text
State	Short Text
Zip	Short Text
Phone	Short Text
PhoneType	Short Text

Let us now have short text as the data type for all these fields and open a blank database in Acess.

■ 12 1 C			AccessDatabase : Database- C:\l	Users\Muhammad.Waqas\Docume	nts\AccessD	
File Home Create External Data	Database Tools	Fields Table			Muha	mməd Wəqa
Very Pate Ba Copy Filter 11 De	cending Y Select scending Adva move Sort T Togg Sort & Filter	nced *	New ∑ Totals	Calibri (Detail) → Go To + D: Select + Find	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	
All Access Objects 🛛 🐵 «	Tablet	Click to Add	8			
rables A International A Internationa	* Nev					
	Record: 14 + 1 of	1 1 1 1 1 1 1 7	No Filter Search			

This is where we left things off. We created the database and then Access automatically opened up this table-one-datasheet view for a table.

🗄 5×0×+				AccessDatabase : Database-	C:\Users\Muhammad.Waqas\Documents\AccessD ?	- 🗆 ×
File Home Create	External Data	Database Tools	Fields Table	Q Tell me what you want t		Muhammad Waq
View AB 12 Short Number Currency Text Add &	Date & Time Ves/No More Fields * Delete	×		Modify Modify Memo Lookups Expression Settings - perties	Data Type: AutoNumber Required Formati Formatiing Vinique \$ % * 58 Indexed Vidiation Formatting Field Validation Field Validation	
All Access Objects	• «	Table1				
Search	Q	ID	Click to Add New)	•		
Tables Table1	*					
		Record: 14 -4	1 of 1 🕨 H 🛌 🍸	No Filter Search		
atasheet View					Nu	m Lock 🛅 🔛

Let us now go to the Field tab and you will see that it is also automatically created. The ID which is an AutoNumber field acts as our unique identifier and is the primary key for this table. The ID field has already been created and we now want to rename it to suit our conditions. This is an Employee table and this will be the unique identifier for our employees.

🖁 2. G. t				Table Too		AccessDataba	se : Database	- C:\Users\N	luhammad.Waqas	s\Documents\AccessD ?	- 0	
File Home Create	External Data	Database	Tools	Fields	Table	♀ Tell me w	hat you want				Muhammad Wa	aqa
View Short Number Currenc Text Add 8	Date & Time Ves/No E More Fields ~ & Delete	Delete	E Name			Iodify Modif okups Express ties	y Memo	Format:	Formatting			
All Access Objects	⊛ «	Tab		 Click to A 			_					
Reach Tables III Table1	<u>م</u> *		(Nev									
Datasheet View		Record:	l4 ≪ [1 of	1) N.)	- <u>F</u> 1	lo Filter Sea	ich				m Lock 🛅 🔛	

Click on the Name & Caption option in the Ribbon and you will see the following dialogbox.

Name	EmployeeID
Caption	Employee ID
Description	Number created automaticaly

Change the name of this field to **Employee ID** to make it more specific to this table. Enter the other optional information if you want and click Ok.

Statistics			Table Tools	AccessDatabase	: Database- C:\Users\	Muhammad.Waqas	\Documents\AccessD ?	- 0 ×
File Home Create	External Data	Database Tools	Fields Table	Q Tell me what	t you want to do			Muhammad Waqi
	C Date & Time Ves/No More Fields = Delete			Modify Modify Lookups Expression	Memo Formati	Formatting	Required Required Validation Field Validation	
All Access Objects	 € « 	Table1						
earch.	Q	Employee	(New)	id -				
Tables Table1	\$							
		Record: 14 4 1	of 1 A MA	No Filter Search				n Lock

We now have our employee ID field with the caption Employee ID. This is automaticallyset to auto number so we don't really need to change the data type. Let us now add some more fields by clicking on **click to add**.

🖶 Shender 🛊	Table Tools AccessDatabase : Database - C\\Users\Muhammad.Waqas\Documents\AccessD ?	- ¤ ×
File Home Create External Data	Database Tools Fields Table Q Tell me what you want to do	Muhammad Waqa
View Short Number Currency Work Add & Delete		
All Access Objects 🛛 🛞 «	Tablet	
earch	Employee ID + Click to Add +	
Tables &	 (New) As Short Jest 12 Number Cyrrency Bate & Time Yec/No Lookup & Relationship Ao Rich Tegt As Long Test Attachmont Calculated Field * Paste as Fields 	
	Record: H + 1 of 1 + H + To No Filter Search	
Datasheet View	Num Li	at II K

Choose **Short Text** as the field. When you choose short text, Access will then highlight that field name automatically and all you have to do is type the field name.

	Table Tools	AccessDatabase : Database- C:\Users\Muhammad.Waqas\Documents\AccessD ?	- • ×
File Home Create External Data D	Database Tools Fields Table	Q Tell me what you want to do	Muhammad Waq
AB 12 Short Number Currency More Fields - Text Add & Delete	Delete M	fx ab Data Type: Short Text Required odify Modify Memo Format: Formating Unique Validation \$ % * 100 ±00 \$ % Formatting Indexed ites Formatting Formatting Field Validation	
All Access Objects 🛛 💿 « 🗍	Table1		
earch_	Employee ID + FirstName	Click to Add •	
Tables *	* (New)		
Table1			
	Record: H 🗧 🗼 H 📭 🌄 N	Io Filter Search	

Type First Name as the field name. Similarly, add all the required fields as shown in the following screenshot.

File Home Create External Data	Databa	ase Tools	Fields	Table	Tell me what yo								Muhammad Wa
AB 12 R Date & Time Short Number Currency W Nore Fields - Text Add & Delete	Delete	E Name Default	Value		dify Modify sups Expression S	Memo Format:	Formatting	Req	que Validation				
All Access Objects	_	Table1											100
earch	1			FirstName •	LastName -	Address1 •	Address2 •	City	- State	*	Zip -	Phone	 Phone Type
Tables 🏾 🕆	*	(N	ew)										
III Table1													
	Datos	d: 14 - 4	1.6	H 10 1 No	Filter Search	4			12				

You will now see the Save As dialog box, where you can enter a table name for the table.

Save As	?	×
Table <u>N</u> ame:		
tblEmployee		

Enter the name of your table in the Table Name field. Here the **tbl** prefix stands for table.Let us click Ok and you will see your table in the navigation pane.

File Home Create External Data AB 12 Image: Currency of the string of the	Delete	Name & Cap Default Value Field Size	ntion Mor Look Propertie	s Expression S	ab Data Typ Memo	* 0 00 00 00 00 00 00 00 00 00 00 00 00	City •	Validation	Waqas ^ X
AB IZ Ver/No Short Number Currency More Fields * Add & Delete Add & Delete	Delete	Default Value	Mor Look Propertie	dify Modify Lups Expression S s	Memo ettings - \$ %	Formatting	Unique Indexed	Validation *	×
archP		ployee ID 🔹	FirstName +	LastName •	Address1 •	Address2 -	City •	State	
arch_ P Tables *	*		FirstName •	LastName •	Address1 •	Address2 -	City -	State	
ables	*	(New)							
tblEmployee									
	Record: 1	• •	H H T No	Filter Search	4				ST.

Table DesignView

As we have already created one table using **Datasheet View**. We will now create another table using the **Table Design View**. We will be creating the following fields in this table. These tables will store some of the information for various book projects.

Field Name	Data Type
Project ID	AutoNumber
ProjectName	Short Text
ManagingEditor	Short Text
Author	Short Text
PStatus	Short Text
Contracts	Attachment
ProjectStart	Date/Time
ProjectEnd	Date/Time
Budget	Currency
ProjectNotes	Long Text

Let us now go to the Create tab.

⊟ 5°°°÷		Ta	ble Tools	ccessDatabase : Da	ntabase- C:\Users\M	/uh ?	-	o x
File Home Create External Data	Database Tools	Fields	s Table	🛛 Tell me what yo	u want to do		Muhan	nmad Waqas
Application Parts * Table Table SharePoint Templates Tables Query Q	esign Desi	ign For Fo	Navigation More For More For	n * Report Rep	Doort Blank La lign Report Reports	eport Wizard bels	Macros & Cod	
All Access Objects	tblEmployee		Firstblama	LastName •	Address1 -	Address2	City	×
Search	Employee	(New)	FirstName •	Lastiname •	Address1 -	Address2	- City	- Si
Tables *		()						
tblEmployee								
	Record: I4 4 1 c	of 1	No 🕅 🕅	Filter Search	•			Þ
Datasheet View						1	Num Lock	

In the tables group, click on Table and you can see this looks completely different from the Datasheet View. In this view, you can see the **field name** and **data type** side by side.

		Table To	and the second second second second	ase- C:\Users\Muhammad.W		
File Home Create Extern	al Data Database To	ols Design	Tell me what you wa	ant to do		Muhammad Waq
Here Drimany Ruilder Text Validation		operty Indexes Sheet Show/Hide	Create Data Rename/ Macros * Delete Macro Field, Record & Table Events	Relationships Object Dependencie Relationships	s .	
All Access Objects 💿 «	tbiEmployee	Tablet				
	Field Na	ame	Data Type	D	escription (Optional)	
Parch_	ProjectID		AutoNumber			
ables 🌣	ProjectName		Short Text			
1 tblEmployee	ManagingEditor		Short Text			
	Author		Short Text			
	PStatus		Short Text			
	Contracts		Attachment			
	ProjectStart		Date/Time			
	ProjectEnd		Date/Time			
	Budget		Currency			
	ProjectNotes		Long Text			
	rejections		cong reat			
				eld Properties		
			n	eld Properties		
	General Lookup					
	Field Size	Long Integer				
	New Values	Increment				
	Format Caption	_				
	Indexed	Yes (Duplicat	et 00			
	Text Align	General			A field name can be up to	64 characters long.
					including spaces. Press F names	

We now need to make **Project ID** a primary key for this table, so let us select **Project ID** and click on **Primary Key** option in the ribbon.

⊟ 5· °· ÷		Table To AccessDatabase : Datab	base- C:\Users\Muhammad.Waqas\Do	ocum ? — 🗆 🗙
File Horne Create Exte	rnal Data Database Tools	Design Q Tell me what you v	vant to do	Muhammad Waqa
View Views Views	EQ Modify Lookups Sheet	w/Hide Field, Record & Table Events	Relationships Object Dependencies Relationships	
All Access Objects 💿 «				
Search	Field Name ProjectID	Data Type AutoNumber	Description	ion (Optional)
Tables 🏦	ProjectName	Short Text		
tblEmployee	ManagingEditor	Short Text		
	Author	Short Text		
	PStatus	Short Text		
	Contracts	Attachment		
	ProjectStart	Date/Time		
	ProjectEnd	Date/Time		
	Budget	Currency		
	ProjectNotes	Long Text		
		1	Field Properties	
	General Lookup			
		ong Integer		
		crement		
	Format			
	Caption Indexed Ye	es (No Duplicates)		
		eneral	A fiel	Id name can be up to 64 characters long,
			inclu	uding spaces. Press F1 for help on field names.
Design view - F6 = Switch pages - F1 = He				Num lock 🖽

∃ 5 · C · +					Table Too	AccessD	atabase : Datab	xase- C:\Users\M	uhammad.Wa	sqas\Docu	?	æ/	۰	×
File Home Create	Extern	al Data	Databas	e Tools	Design	🖓 Tell i	me what you w	vant to do				Muha	mmad V	Vaqas
View Primary Builder Test Val Key Rul	idation	€= Insert F ➤ Delete ☑ Modify		Property Sheet Show/I			Rename/ Delete Macro & Table Events		Object Object Dependencies					~
All Access Objects	⊛ «	tbi8		Table1	1									×
Search_	Q	84. <u> </u>	Field	i Name		Data	Туре	_	De	scription (Opt	ional)			-
Tables	\$	_												-14
		Genera	Lookup				F	ield Properties						Ŧ
										A field name c including spi	aces. Press name	F1 for he	p on fiel	d
Design view. F6 = Switch panes. F	F1 = Help	6									Num	Lock	目	¥

You can now see a little key icon that will show up next to that field. This shows that thefield is part of the table's primary key.

Let us save this table and give this table a name.

Save As		?	×
Table <u>N</u> ame:			
tblProjects			
	ОК	Ca	ncel

Click Ok and you can now see what this table looks like in the Datasheet View.

⊟ 5° ° ° •		Table To	ols AccessDatabase : Datab	pase- C:\Users\Muhamn	nad.Waqas\Docum ?	- 0	×
File Home Create Exter	nal Data Database Tool	Design	Q Tell me what you w	rant to do		Muhamma	d Waqas
View Primary Builder Test Validation	C Modify Lookups She	erty Indexes	Create Data Macros - Delete Macro Field, Record & Table Events	Relationships Obj Depend			~
View Access Objects «	tbiEmployee 🛄 tt	Projects					×
	Field Nam	e	Data Type		-		
C	V ProjectID		AutoNumber				
	ProjectName		Short Text				
tblEmployee	ManagingEditor		Short Text				
tbiProjects	Author		Short Text				
	PStatus		Short Text				
	Contracts		Attachment				
	ProjectStart		Date/Time				
	ProjectEnd		Date/Time				
	Budget		Currency				
	ProjectNotes		Long Text				
	General Lookup			ield Properties			¥
	Field Size	Long Intege	r				
	New Values	Increment					
	Format						
	Caption	Yes (No Dup	Venter				
	Text Align	General	ncates)		A field name can be u	o to 64 characters	long
					including spaces. Pre na	ss F1 for help on i mes.	lield
Design view. F6 = Switch panes. F1 = Help	Ш р.				No	um Lock 🛛 🔝	K

Let us click the datasheet view button on the top left corner of the ribbon.

🖶 5·C·+		Table Tools	AccessDatabase : Data	base- C:\Users\Muhamr	mad.Waqas\Docum ?	- 🗆	
File Home Create Ext	ernal Data Database Tools	Fields Table	Q Tell me what you	want to do		Muhammad	i Waqas
Views Clipboard To	Image: Selection of the selection	vanced *	■ New ∑ Totals Save ⁴⁵ Spelling Collecte ~ □ More ~ Records	Find P	BIU = H	- ⊞ • ≡ ≡ ⊿•	,
All Access Objects 💿	x tblEmployee 🛄 tblP	rojects					>
Fables	* New	ctNam + Managing	Ed • Author •		ProjectStart + U(0)	ProjectEnd -	Bud
tblEmployee							
	Record: H 4 1 of 1	No Filter	Search 4				
Ready		S NOTING				Num Lock	M

Let us click the datasheet view button on the top left corner of the ribbon.

🖬 5·0·+				Tabl	e Tools	AccessData	base : Data	abase- C:\Users\I	Muhamr	mad.Waqas	s\Docum ?	- 0	
File Home Create E	oternal D	ata Database	Tools	Fields	Table	🛛 Tell me	what you	want to do				Muhamm	ad Waqas
Views Clipboard 5	Filter	2↓ Ascending ↓ Descending 2# Remove Sort Sort & Fi	Adv	anced *	Refresh		Totals Spelling	Find > (Replace So To + Select +	BI	Detail) + 1 <u>U</u> → ← → + T Z - <u>A</u> - = = Text Formatting	- ■ - = @ -	~
All Access Objects	-	tblEmployee		ojects		incerta.		1010			Teact of matering		×
	۵	ProjectID ·		tNam -	Managing	Ed 🖌 Aut	hor -	PStatus		0	ProjectStart •	ProjectEnd -	Budge
	*	(New)								(0)			
tbiEmployee													
tbiProjects	Rec	cord: 14 4 1 of 1	h		No Filter	Search							
Ready	II we			1 5%	the mer 1		1.1				,	Num Lock	

Click Ok and you will see the changes.

AB 12 Solution AB 12 AB AB 12 AB	Date & Time Ves/No More Fields * te Project ID	 Default Value Field Size 25 tblProjects ProjectName 	tion Modi Modi Looku Properties	fx fy Modify ps Expression S	Memo Settings - \$ % *	Formatting	Required Dinique Indexed Field Vali	Validation	d Waqa
AB IZ Add & Delet	Yes/No More Fields * Te ProjectID	 Default Value Field Size 25 Holprojects ProjectName 	Modi Looku Properties	fy Modify ps Expression S	Memo Settings - \$ % *	Formatting	Unique	Validation	,
arch P ables *	ProjectID	ProjectNam	ManagingEd .						
arch P ables *	Projectio				Televice roller providence			1	
tbiEmployee		w)	managingea	Author	 Project Statu - 	0 (0)	ProjectStart •	ProjectEnd •	Buc
	Record: 14 4 1 0	f1 > H > 15	No Filter Searc	h 🕴					

Adding data

An Access database is not a file in the same sense as a Microsoft Office Word document or a Microsoft Office PowerPoint are. Instead, an Access database is a collection of objectslike tables, forms, reports, queries etc. that must work together for a database to function properly. We have now created two tables with all of the fields and field properties necessary in our database. To view, change, insert, or delete data in a table within Access, you can use the table's Datasheet View.

- A datasheet is a simple way to look at your data in rows and columns without anyspecial formatting.
- Whenever you create a new web table, Access automatically creates two views thatyou can start using immediately for data entry.
- A table open in Datasheet View resembles an Excel worksheet, and you can type or paste data into one or more fields.

- You do not need to explicitly save your data. Access commits your changes to thetable when you move the cursor to a new field in the same row, or when you move the cursor to another row.
- By default, the fields in an Access database are set to accept a specific type of data, such as text or numbers. You must enter the type of data that the field is set to accept. If you don't, Access displays an error message:

Let us add some data into your tables by opening the Access database we have created.

8									Access	atabase : Databa	ase- C:\Users\Muha	mmad.Waqas\Do	cuments\Access			o ×
	Home C	reate Ex	ternal	Data	Database T	ools	Fields	Table	∎ 🖓 Tell						Muha	mmad Waqa
iew	Paste	/ hat Painter	Filter	⊼↓ De	cending scending move Sort	Adv	anced +	Refrest All •	Save	∑ Totals ☆ Spelling → More →	P ab Replac → Go To Find Select	- B I <u>U</u>	iii) • 11			
Di	atasheet View	G,	Dr-		Sort & Filte				Record	ls	Find		Text Formatting	E		
	and geet them	ts 💌	~		iployee											-
D	esign View	1	۵ *		loyee ID (Net		stName	• La:	stName •	Address1	 Address2 - 	City	- State	• Zip	•	Phone
and a		3	*	S	line	,										
	mployee Projects															
tasheet	View		R	ecord: I4	4 1 of 1	F		No Filter	Search					Num	lock	

Select the **Views > Datasheet** View option in the ribbon and add some data as shown in the following screenshot.

A 8.8		Tools AccessOutabas	se : Database- C/Uses/Muhar	nmad Waqas\Doc	uments\AccessDatabase.accdb	(Access 2007 - 2016 file formal)	
Very Patte	al Data Database Tools Fields 21 Ascending ▼J Selection * 11 Descending □Advanced * Tar 22 Remove Sort ▼ Toogle Film	New Σ	hat segment to do- Totals O the Replac Spelling Find D Select	Cation (Detail	·[···]]		Muhammad Waq
evit Clipboard 15	Sort & Filter	All+ A Deleta * 🛄 Records	Find		Text Formatting	9	
All Access Objects (9) « neron. (20) Tables (8) (1) tables (1) tab	Interneptoyee () Interleptoyee () Employee () FirstName Z Rex S Janell 4 Claudine S Annemarie 6 Cecil 7 Eivis 8 Defores 9 Ruthie 10 Mark	Clay Acco Frank Acco Goff Adm Marks Acco Snyder Acco Manning Offic Townsend Adm Higgins Mark Pollard Mark	sunting Assistant	2556 Mohave S 5433 Morgan Lr 21 Berkley Ln 91 Forest Ln 54 Osage Ln 1753 Green Riv 1215 Cloverdal 1876 Kingsley E 1685 Stanley Ct	Optional Schaumbur Optional Schaumbur Optional Schaumbur Optional Schaumbur Optional Schaumbur Optional Schaumbur Optional Schaumbur Optional Schaumbur	g IL 60193 g IL 60195 g IL 60194 g IL 60194 g IL 60193 g IL 60193	(847) 555-6492 Home (224) 555-6631 Home (224) 555-735 Home (224) 555-735 Home (224) 555-732 Cell (224) 555-732 Cell (224) 555-3366 Cell (224) 555-3366 Cell (224) 555-826 Home
	11 Todd (New)	Watson Mark	keting Coordinator	446 Bode Rd	Apt 129 Schaumbur	g IL 60154	(224)555-3333 Home
	Record: H + 1 of 10 + H +	io Filter Search	4		1		Num Lock

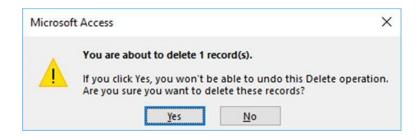
Similarly, add some data in the second table as well as shown in the following screenshot.

File	Home Create External Data	Databa	se Tools Fields	Table	Q Tell me what you want					Muhammad Waqas
View Views	AB 12 Short Number Currency № Yes/No Text Add & Delete	Delete	Name & Caption Default Value Field Size	M		Format: \$ 96 •	Attachment Formatting	Required Unique Indexed Field Valida	alidation	
	tblEmployee tblProjects									>
	ProjectID - ProjectName	• M	anagingEditor •	Author	Project Statu	0	ProjectStart •	ProjectEnd •	Budget -	ProjectNotes
	2 Project Quarterly 1.	1 12			Completed	(0)	11/1/2006	2/15/2007	\$5,000.00	A quarterly literary journal d
	11 Project Quarterly 1.	2 12			Completed	(0)	2/1/2007	5/15/2007	\$5,000.00	A quarterly literary journal d
	12 Project Quarterly 1.	3 12			Completed	(0)	5/1/2007	8/15/2007	\$5,000.00	A quarterly literary journal d
	13 Project Quarterly 1.	4 12			Completed	(0)	8/1/2007	11/15/2007	\$5,000.00	A quarterly literary journal d
	14 Project Quarterly 2.	1 12			Completed	(O)	11/1/2007	2/15/2008	\$6,000.00	A quarterly literary journal of
	15 Project Quarterly 2.	2 12			Completed	(0)	2/1/2008	5/15/2008	\$6,000.00	A quarterly literary journal d
	16 Project Quarterly 2.	3 12			Completed	(O)	5/1/2008	8/15/2008	\$6,000.00	A quarterly literary journal d
	17 Project Quarterly 2.	4 12			Completed	0(0)	8/1/2008	11/15/2008	\$6,000.00	A quarterly literary journal d
	(New)					(O)			\$0.00	
2	5.45338						_			
and normfirm										
2										

You can now see that inserting a new data and updating the existing data is very simple in Datasheet View as working in spreadsheet. But if you want to delete any data you need to select the entire row first as shown in the following screenshot.

E	1 5	or Cole			Table 1	teols A	ccessDatabase : Database	C:\Users\M	luhammad.Waqas\D	ocuments\AccessD	atabase.accdb	? - D X
Fil	e	Home Create	External Data	Database	Tools Fields	Table \$	7 Tell me what you want					Muhammad Waqas
Viev Viev	v	AB 12 Short Number Current Text	Image: Date & Time Image: Ves/No Y Image: Date & Time Y	X	E Name & Caption	Mod	ups Expression Settings -	Format	AstoNumber Formatting	C Required	alidation	
0		tbiEmployee 1 tbiP	rojects									,
		ProjectID · P	rojectName	• Man	agingEditor •	Author	Project Stati +	0	ProjectStart +	ProjectEnd -	Budget +	ProjectNotes
		2 Projec	t Quarterly 1.1	12			Completed	@(0)	11/1/2006	2/15/2007	\$5,000.00	A quarterly literary journal d
		11 Projec	t Quarterly 1.2	12			Completed	@(0)	2/1/2007	5/15/2007	\$5,000.00	A quarterly literary journal de
		12 Project	t Quarterly 1.3	12			Completed	B(0)	5/1/2007	8/15/2007	\$5,000.00	A quarterly literary journal de
		13 Project	t Quarterly 1.4	12			Completed	@(0)	8/1/2007	11/15/2007	\$5,000.00	A quarterly literary journal de
		14 Project	t Quarterly 2.1	12			Completed	8(0)	11/1/2007	2/15/2008	\$6,000.00	A quarterly literary journal de
		15 Projec	t Quarterly 2.2	12			Completed	B(0)	2/1/2008	5/15/2008	\$6,000.00	A quarterly literary journal de
		16 Projec	t Quarterly 2.3	12			Completed	ê(0)	5/1/2008	8/15/2008	\$6,000.00	A quarterly literary journal de
		17 Project	t Quarterly 2.4	12			Completed	8(0)	8/1/2008	11/15/2008	\$6,000.00	A quarterly literary journal de
Navigation Pane		(New)						ළි(0)				
_	Reco		n 🍋 式 Na Filter	Search	•)			Num Lock 🔟 🔽

Now press the delete button. This will display the confirmation message.



Click **Yes** and you will see that the selected record is deleted now.

								AccessDatabase : Database-	C:\Users\M	uhammad.Waqas\D	ocuments\AccessD	atabase.accdb	? – 🗆 🗙
File	Home C	reate	External Data	Databas	e Tools Fiel	ds 1	able						Muhammad Waqa
Views	AB 12 Short Number Text		Date & Time Ves/No	Delete	Name & C			dify fx ab odify Modify Memo okups Expression Settings - ies	Format:	AutoNumber Formatting	Required Required Unique Vigue Indexed Field Valida	Alidation ation	
» 🔳	tblEmployee	tbiPro	ojects						155				
	ProjectID +	Pr	ojectName	• Ma	anagingEditor	-	Author	Project Stati	0	ProjectStart -	ProjectEnd •	Budget -	ProjectNotes
	2	Project	t Quarterly 1.1	12				Completed	(0)	11/1/2006	2/15/2007	\$5,000.00	A quarterly literary journal of
	11	Project	t Quarterly 1.2	12				Completed	(0)	2/1/2007		\$5,000.00	A quarterly literary journal of
	12	Project	t Quarterly 1.3	12				Completed	(0)	5/1/2007		\$5,000.00	A quarterly literary journal of
	13	Project	t Quarterly 1.4	12				Completed	(0)	8/1/2007	11/15/2007	\$5,000.00	A quarterly literary journal of
	14	Project	t Quarterly 2.1	12				Completed	(0)	11/1/2007	2/15/2008	\$6,000.00	A quarterly literary journal of
	15	Project	t Quarterly 2.2	12				Completed	(0)	2/1/2008	5/15/2008	\$6,000.00	A quarterly literary journal of
	16	Project	t Quarterly 2.3	12				Completed	(0)	5/1/2008	8/15/2008	\$6,000.00	A quarterly literary journal of
*	(New)								(0)			\$0.00	
Navigation Pane													
	ecord: 14 4 8 of 8	F	No Filter	Search	n] [4]								Num Lock 🔲 🔛

EXERCISES

MS – WORD

EXERCISE NO.: 1

Create Table with five columns and six rows. Do the following options using that Table:

a) Sorting b) The Sum Function c) Merge cell d) Table Headings

Convert Text to a table, Splitting a Table and Table AutoFormat. Show with example.

CREATING TABLE IN MS WORD

<u>AIM:</u>

- 1) To Create Table with five columns and six rows. Do the following options using that Table:
 - Sorting
 - The Sum Function
 - Merge cell
 - Table Headings
- 2) To Convert Text to a table, Splitting a Table and Table AutoFormat. Show with example.

REQUIRED DEVICE:

Computer with windows 7 or Windows 10 operating system and MS-Office packages.

PROCEDURE:

1) CREATE A TABLE:

- 1. Select 'Table' option from Main Menu.
- 2. Select 'Insert' option from the list.
- 3. Click on 'Table' option.
- 4. Click on 'OK' button.
- A table with 5 columns and 6 rows will be inserted into the document.
- You can change the number of columns or the rows by making the changes in the number of column and number of rows text box respectively.

• The table created above will have column cells of same width, as we have selected the 'Fixed column width' radio button. Select 'AutoFit to contents'

option if you want the column width to variable width depending on what we enter into the cell.

S. No	Name	Commerce	Accountancy	Computer	Total						
1	А	35	40	42							
2	В	89	98	92							
3	С	72	68	75							
4	D	56	65	38							

• The table is appear as shown in Fig.

• Sort a table

- 1. select a table
- 2. Select 'Sort' option from Layout Menu.
- 3. Select 'column' option from the sort by list.
- 4. Click on 'ascending or descending' option.
- 5. Click 'ok' option

• Sum function

- 1. Select the cell in which you want to display the output.
- 2. Select 'Table' option from Main Menu.
- 3. Click on 'Formula' Option.

4. Enter '=Sum(ABOVE)' if the values for which you want the sum are above the cell where you want to display the sum. OR Enter '=Sum(LEFT)' if the values are at the cell where you want to display the sum.

5. Click 'OK' button to get the sum.

• Merge a cell

• To split a cell in table

- 1. Select the cell, which you want to split.
- 2. Select 'Table' option from Main Menu.
- 3. Click 'Split Cell' option.
- 4. Enter '2' in the number of columns text box.
- 5. Click 'OK' button.

• Merge a cell in table

- 1. Select the cells you want to merge together.
- 2. Select 'Layout' option from Main Menu.
- 3. Click 'Merge Cells' option.

The selected cells get merged together.

• Table headings

To add a header row to a table

1. Choose **Insert** > **Table** to insert a table.

- 2. Choose the number of boxes you want across to create columns, and then choose the number of boxes you want down to create rows for your table.
- On the Design tab, choose the Table Styles Options group, and then choose Header row. Other options include Banded Rows or Total Row.

Add column headings

- 1. Place your cursor in the first cell on the top row of your new table.
- 2. Type the name for this column and then press Tab to move from one column to the next. Add additional column names as needed.

2) CONVERT TEXT INTO TABLE

- 1. Type the text as you want
- 2. Select all the text in the document and then choose Insert→Table→Convert Text to Table.
 - ✓ You can press Ctrl+A to select all the text in the document.

The Convert Text to Table dialog box opens,

- 3. Under **Table size**, make sure the numbers match the numbers of columns and rows you want.
- 4. Click OK.

The text converts to a five-column table.

RESULT:

Thus, the table was created with five rows and six columns successfully. The additional operations also were performed.

Exercise: 2

Assuming yourself as the General Manager of a company draft an appointment letter to a candidate short-listed through an interview. (Use Mail Merge)

MAIL MERGE

AIM:

To draft an appointment letter to the shortlist candidates in an interview using mail merge.

REQUIRED DEVICE:

Computer with windows 7 or Windows 10 operating system and MS-Office packages.

PROCEDURE:

Mail Merge – Form letters

- 1. Open Microsoft word
- 2. Type the letter
- 3. Click the mailings tab
- 4. Click start mail merge
- 5. Click step by step mail merge wizard

Step 1:

- 1. Click letters for the document type
- 2. Click Next: Starting document

Step 2:

- 1. Click use the current document under select starting document
- 2. Click Next: Select recipients

Step 3:

1. The recipients can come from either an existing excel file or you can create a new list

If using type, a new list

- 1. Click type a new list under select recipients
- 2. Click create
- 3. Click customize columns to modify the list of fields.
- 4. Delete any unnecessary field names or add new ones

- 5. Click OK
- 6. Type records here hitting TAB to advance to the next field and to continue adding new records.
- 7. Click OK
- 8. Click Save, it is saved in the My Data Sources folder.
- 9. Click Next: Write your letter

Step 4:

- 1. Click the location in your document where the data from the mail merge fields need to be inserted
- 2. Click address book
- 3. Select the address elements you want included
- 4. Click Ok
- 5. Click on the field from the list
- 6. Click insert
- 7. Click close
- 8. Repeat this step until all fields have been inserted
- 9. Click Next: Preview your letters

Step 5:

1. Click Next complete the merge

Step 6:

To Complete the merge:

- 1. Click print to send directly to the printer
- 2. Click edit individual letters to create a new file
- 3. In the merge to new document window, select the records you want to merge.
- 4. Click Ok

The Microsoft word will create new merged document.

RESULT:

Thus, the draft of an appointment letter to the shortlist candidates in an interview using mail merge was done successfully.

EXERCISE NO.: 3

Create at least two pages of text with multicolumn layouts like magazines and newspapers. Add the following options:

- e) Header and Footer
- f) Borders and shading for title
- g) Use WordArt for heading
- h) Use Text Box

CREATING MULTI COLUMN LAYOUTS IN MS WORD

AIM:

To Create at least two pages of text with multicolumn layouts like magazines and newspapers. Add the following options:

- 1. Header and Footer
- 2. Borders and shading for title
- 3. Use WordArt for heading
- 4. Use Text Box

REQUIRED DEVICE:

Computer with windows 7 or Windows 10 operating system and MS-Office packages.

PROCEDURE:

Work 1: WORKING WITH MULTIPLE COLUMNS

1) To use multiple columns, go to Page Layout \rightarrow Page Setup \rightarrow Columns, and then click the options as you want

Work 2 : CREATING A HEADER & FOOTER

1. On the next page of our document, place the insertion point in front of the word Services.

2. On the Insert tab,

3. locate the Header & Footer group and click Header.

4. Scroll down the alphabetical list of Built-in styles until you see Integral. 5. Click the Integral style.

6. On the Header & Footer Tools ribbon,

7. find the Footer button and click it.

8. Click the Integral style. Similar to the title in the header, it auto-populated the footer with the contents of the author field.

9. Close the Header & Footer ribbon.

Work 3: TEXT BOXES

A text box is a freestanding object that can contain words. Let's insert a text box.

1. Deselect the star object.

2. Click on the Insert tab. In the Text group, click Text Box. A menu of Built-in text box styles will appear. However, to have more control over format, placement and size, we will draw our own text box. Click Draw Text Box.

3. Click into your document where you want the text box to start and drag diagonally and to the right to where you want it to end.

4. The insertion point within the text box indicates that what you type will be inserted there. Type your name.

5. Resize the text box to just fit around your name.

6. To move your text box, make sure it is selected, then move your pointer to the edge of the box until a move cursor appears. Then click and drag your text box to the centre of the star shape.

7. Note that the text box has a black border and it is also filled with white colour.

8. You can change formatting of the text box by using tools on the Drawing Tools contextual ribbon.

Work 4: BORDERS AND SHADING FOR TITLE

- 1) Put the insertion pointer on the page you want to border.
- 2) Summon the Borders and Shading dialog box.
- 3) Click the Page Border tab.
- 4) Set the border style. Choose a preset style, line style, colour, thickness
- 5) Click the Apply To menu button to select which pages you want bordered.
- 6) Click the Options button. The Border and Shading Options dialog box appears.
- 7) In the Measure From drop-down list, choose the Text option.
- 8) Click OK.

Work 5: USE WORDART FOR HEADING

- 1) Click **Insert** > **WordArt**, and pick the WordArt style you want.
- 2) In the WordArt gallery, the letter A represents the different designs that are applied to all text you type.
- 3) The placeholder text "Your text here" appears, with the text highlighted.
- 4) Enter your own text to replace the placeholder text.

Work 6: USE TEXT BOX

- 1. Click the **Insert** tab.
- 2. Expand the **Text** group, if necessary.
- 3. Click the **Text Box** button.

A gallery of text box styles appears. The styles range from simple text boxes to stylized sidebars.

- 4. Select the text box you'd like to use.
- 5. Click the text box and type to replace the placeholder text.
- 6. The placeholder text disappears as soon as you start typing.

7.

RESULT:

Thus, the text with multicolumn layouts like magazines and newspapers was created successfully.

MS - EXCEL

EXERCISE:4

Prepare a Mark Sheet of a School for 10 Students with 6 Subjects details and Calculate how many students pass and fail by including one column as result in the mark sheet.

STUDENT'S MARK SHEET PREPARATION

<u>AIM:</u>

 \checkmark To prepare a marksheet of a college student and publish a result in separate column.

REQUIRED DEVICE:

Computer with windows 7 or Windows 10 operating system and MS-Office packages.

PROCEDURE:

STEP : 1. First go to file menu and choose new sub menu and select work sheet option and click ok.

STEP: 2. Enter the fields Reg No, students name, subject-Financial A/C,

Organisational behaviour, Business Law, Computer Application, Business

environment, Banking and insurance, Total, Average, Result and grade.

STEP : 3. Enter the Register number, names, and marks and grade.

STEP : 4. To find the total, Enter the Formula = sum (C3:H3) this will give the total at the marks.

STEP : 5. Enter the formula in the formula bar finding average. =Average (F5:L5).

STEP: 6. In the result column type the formula in the formula menu as =

IF(AND(Financial accounting >=40, Organisational behaviour >=40, Business Law >=40, Computer applications >=40, Business environment >=40, Banking and insurance >=40)," pass"," fail") the result of the student will be displayed.

STEP: 7. In the grade column the formula in the formula bar IF(cell No>=80,

"Distinction", IF(cell No>=60,"First",IF(cell No>=50,"Second",IF(cell

No>=40,"NIL"). This will give the grade of the student.

STEP: 8. save the file.

RESULT:

Thus, the mark sheet of college students was prepared by ms excel and published a result.

EXERCISE:5

Prepare an EMPLOYEE Database of an Organization with the following details: (Atleast 10 Details) Name, Emp Id, Gender, Address, Phone No, E-Mail Id Qualification, Designation, Department, Salary, Year Of Joining And Working Station

> Draw Chart to Find Out The % Of Male & Female Working (Pie Chart)

> ➢ Find Out How Many Employees Drawn Salary Above 10000.

Draw a Chart For Emp Id And Salary Drawn.

EMPLOYEE'S DATABASE PREPARATION

<u>AIM:</u>

- ✓ To prepare an employee database of an organization
- \checkmark create a pie chart for Gender classification
- \checkmark find out how many employees drawn salary above 10000.
- ✓ Draw a chart for employee ID and salary drawn.

REQUIRED DEVICE:

Computer with windows 7 or Windows 10 operating system and MS-Office packages.

PROCEDURE:

Step 1: Insert Basic Details to Create an Employee Database

✓ type the **names** of each employee, Employee ID, Gender, address, mobile no, E-mail Id, Qualification, designation, department, salary, year of joining and working station.

Step 2: Use TODAY Function to Count Experience

✓ To count the **experience** in years, subtract the joining date from today's date with the following formula. =INT((TODAY()-E5)/365)

Step 3: Draw chart to find out the percentage of male and female working in an organization (Pie chart)

- ✓ Firstly, to count how many males and females there are by using following formula. =COUNTIF(c3:c14,"M/F").
- ✓ Select the entire dataset of the table you just made (**D4:E6**).
- ✓ Switch to the **Insert** tab.
- ✓ Choose Insert Pie or Doughnut Chart.
- \checkmark Pick the chart you want.

Step 4: find out how many employees drawn salary above 10000.

✓ To find out how many employees drawn salary above 10000 by using following formula. =COUNTIF(j3:j14,"Yes/No")..

Step 5: Draw a chart for Employee Id and salary drawn.

Select the range A1:D7.

On the Insert tab, click **Charts** group and choose chart type.

RESULT:

Thus, the employee database was prepared and appropriate charts were drawn.

EXERCISE:6

Create Balance Sheet and Profit & Loss Statement by your own data for an organization and use at least 10 Different Formulas in Different Cells.

BALANCE SHEET AND PROFIT & LOSS STATEMENT

AIM:

 \checkmark To create a Balance sheet and Profit & loss statement of an organization and use at least 10 different formulas in different cells.

REQUIRED DEVICE:

Computer with windows 7 or Windows 10 operating system and MS-Office packages.

PROCEDURE:

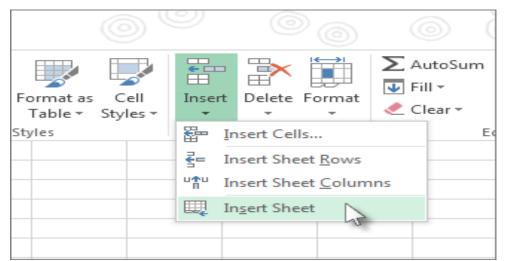
Step 1: Insert Basic Details to Create a Balance sheet

 \checkmark type the information as following as in MS-Excel:

	BUSINESS CONSULTING COMPANY BALANCE SHEET As at December 31, 2015											
	Assets		\$	Liabilities & Stockhol	ders' equity	\$						
Curre	nt assets:			Liabilities:								
Cash			85,550	Notes payable		5,000						
Acco	unts receivable		4,700	Accounts payable		1,600						
Prepa	aid building rent		1,500	Salaries payable		2,000						
Unex	pired insurance		3,600	Income tax payable		3,000						
Supp	lies		250	Unearned service revenue	e	4,400						
Total	current assets		95,600	Total liabilities		16,000						
Non-o	current assets:			Stockholders' equity:								
Equip	oment	9,000		Capital stock	50,000							
Acc.	dep Equipment	<u>3,600</u>	5,400	Retained earnings	<u>35,000</u>	85,000						
Total	assets		101,000	Total liabilities & stockho	olders' equity	101,000						

Step 2: insert a new work sheet for create a profit and loss statement

- \checkmark Select the **New Sheet** plus icon $\textcircled{\oplus}$ at the bottom of the workbook.
- ✓ Or, select **Home** > **Insert** > **Insert Sheet**.



Step 3: Insert Basic Details to Create a profit and loss statement

 \checkmark type the information as following as in MS-Excel:

Company ABC Ltd.

Profit and Loss Statement

For the year ended December 31, 2018

Particulars	4	١r	nount (\$)	Am	ount (\$)
Sales	Ş	51	,000,000		
Cost of goods Sold	10	5	600,000		
Gross Profit				\$4	400,000
Operating Expenses					
Advertisement expenses	\$	5	60,000		
Depreciation expense	\$	5	80,000		
Rent expense	\$	5	15,000		
Payroll taxes	\$	5	5,000		
salaries and wages	\$	5	51,000		
Commission expense	\$	5	5,000		
Other Operating Expenses	\$	5	7,000		
Total operating Expenses				\$2	223,000
Operating Income				\$ 1	177,000
Non-operating Income					
Revenue from Interest	\$	5	10,500		
Interest Expenses	\$	5	(9,100)		
Total Non- operating Income				\$	1,400
Net Income				\$ 1	178,400

RESULT:

Thus, the balance sheet and profit and loss statement of an organization was created.

EXERCISE:7

Graphically present the following sales data from ABC Corporation Limited

Zone		Sales in	n Lakhs	
	1 st quarter	2 nd quarter	3 rd quarter	4 th quarter
North	23	26	32	30
South	21	25	30	30
East	24	26	29	27
West	21	26	28	29

Use the following chart types: a. Bar Chart b. 3-D Column

GRAPHICAL PRESENTATION OF SALES DATA

<u>AIM:</u>

 \checkmark To present an ABC corporation limited sales data graphically by using Bar chart and 3D column.

Zone	Sales in Lakhs								
Zonc	1st quarter	2nd quarter	3rd quarter	4th quarter					
North	23	26	32	30					
South	21	25	30	30					
East	24	26	29	27					
West	21	26	28	29					

REQUIRED DEVICE:

Computer with windows 7 or Windows 10 operating system and MS-Office packages.

PROCEDURE:

Step – 1: Enter data in a worksheet with proper column and row titles.

Step – 2: Create a basic chart using the pattern from the panel available on top

of worksheet in Chart groups' option.

Step – 3: Change the layout or style of chart.

- ✓ Apply a predefined chart layout.
- \checkmark Apply a predefined chart style.
- ✓ Change the layout of chart elements.
- \checkmark Change the format of chart elements.
- Step 4: Add or remove titles or data labels.
- Step 5: Show or hide a legend.
- Step 6: Display or hide chart axes or gridlines.
- Step 7: Move (resize) a chart

Step – 8: Save a chart

RESULT:

Thus, the sales data of an ABC corporation limited was presented graphically with various chart.

POWER POINT PRESENTATION

EXERCISE:8

Present the agenda of the Annual General Meeting of a company using PowerPoint.

- a) Set a suitable timing between two slides.
- b) Use appropriate templates, fonts and styles.
- c) Store a copy of the presentation as a PowerPoint show (ie., with a pps extension)
- d) The timing between slides is 30 seconds.
- e) Use different animation effects for each slide.Prepare at least seven slides.

PRESENT A GENERAL ANNUAL MEETING AGENDA

<u>AIM:</u>

 \checkmark To present a company general annual meeting agenda with suitable slide transition and transition timings by using MS-Power point presentation.

REQUIRED DEVICE:

Computer with windows 7 or Windows 10 operating system and MS-Office packages.

PROCEDURE:

WORK 1: SET A SUITABLE TIMING BETWEEN TWO SLIDES.

- 1. Open the presentation.
- 2. Select all of the slides in the left column.
- 3. Choose the **Transitions** tab.
- 4. Remove the **On Mouse Click** checkmark.
- 5. Check the **After** box and enter a time.

WORK 2: USE APPROPRIATE TEMPLATES, FONTS AND STYLES.

- 1. Open your presentation.
- 2. Click the Design tab on the ribbon.
- 3. Click the design you want the design is applied to the presentation.

WORK 3: USE APPROPRIATE FONTS AND STYLES.

- 1. Click View > Slide Master.
- 2. On the Slide Master tab, click the Fonts drop-down menu. Select the font you want to use for all the slides in the presentation. ...

3. Click Close Master View. The text throughout your presentation is automatically updated to the new font.

WORK 4: STORE A COPY OF THE PRESENTATION

- 1. Launch the old PowerPoint presentation. Click the "View" tab and choose "Slide Sorter."
- 2. Click the first slide you want to copy, press "Shift" and click on the last slide. All the slides in between will be selected. Press "Ctrl-C" to copy the slides.
- 3. Click "File" and choose "New." Double-click "Blank Presentation."
- 4. Switch to the Slide Sorter view and press "Ctrl-V" to paste in the slides.
- 5. Select "Use Destination Theme"

WORK 5: USE DIFFERENT ANIMATION EFFECTS FOR EACH SLIDE.

- 1. Select the object or text you want to animate.
- 2. Select Animations and choose an animation.
- 3. Select Effect Options and choose an effect.

RESULT:

Thus, the company general annual meeting agenda with suitable slide transition and transition timings by using MS-Power point presentation was presented successfully.

EXERCISE:9

Design presentation slides for a products of your choice the slides must include name, brand name, type of product, characteristics, special offers, price etc.

- a) Changing background colour, font colour using wordart.
- b) Use manual mode for the slide show.
- c) Use Top-down, Bottom-up, Zoom in and Zoom out effects.

PRESENT A PRODUCT DETAILS

<u>AIM:</u>

 \checkmark To design a presentation slide for a particular product detail by using MS-Power point presentation. Do the following activities in that slide:

- Changing background colour, font colour using word art.
- Use manual mode for the slide show.
- Use Top-down, Bottom-up, zoom in and zoom out effects.

REQUIRED DEVICE:

Computer with windows 7 or Windows 10 operating system and MS-Office packages.

PROCEDURE:

WORK 1: CREATE A TITLE SLIDE

- 1. Open PowerPoint. You are presented with a title slide.
- 2. type the product Name

WORK 2: CREATE NEW SLIDES

- 1. Choose the Home tab.
- 2. Click the New Slide button in the Slides group.
- 3. The Office Theme dialog box appears and displays several layout templates.
- 4. Click the layout you want.
- 5. The layout appears in the Slide pane of the PowerPoint window.
- 6. To add text, click inside the placeholder and type.
- 7. If u need, to add an additional slide to your presentation,

WORK 3: CHANGING BACKGROUND IN SLIDES

- 1. On the **Design** tab, select **Format Background**.
- 2. Select **Solid Fill**, and pick a colour from the gallery.

- 3. If you want to have all slides have this same background colour, on the **Design** tab, select **Format Background** > **Apply to All**.
- 4. If you want to display background with picture,
 - On the **Design** tab, select **Format Background**.
 - Select **Picture from File**.
 - To make all slides have this same background picture, on the **Design** tab, select **Format Background**, and then select **Apply to All**.

WORK 4: USE MANUAL MODE FOR SLIDE SHOW

- 1. On the **Slide Show** tab, click **Set Up Slide Show**.
- 2. Under **Show type**, pick one of the following:
 - To allow the people watching your slide show to have control over when they advance the slides, select **Presented by a speaker (full screen)**.
 - To present your slide show in a window, where control over advancing the slides is not available to the people watching, select **Browsed by an individual (window)**.

WORK 5: ANIMATION EFFECTS – TOP-DOWN, BOTTOM-UP,ZOOM IN & ZOOM OUT

- 1. Select the object you want to animate.
- 2. On the Animations tab, click the More drop-down arrow in the Animation group.
- 3. A drop-down menu of animation effects will appear. Select the desired effect.
- 4. The effect will apply to the object.
- 5. with the Fly In effect, you can control which direction the object comes from.

RESULT:

Thus, the presentation slide for a particular product detail by using MS-Power point presentation was designed.

MS - ACCESS

EXERCISE: 10

- i. Create a table, form and report for the database: "Patient details"
- ii. Fields are: patient, Patient name, Patient age, Patient Gender, Patient address, Patient phone, Patient mobile, Patient email, Doctor detail, Patients reports (At least 10 records should be included).

PRESENT A PRODUCT DETAILS

AIM:

 \checkmark To create a table, form and report for the database: "Patient details"

REQUIRED DEVICE:

Computer with windows 7 or Windows 10 operating system and MS-Office packages.

PROCEDURE:

Work 1: CREATE A TABLE

1. Determine the fields you would like to include in the table

- 2. Select the Tables option and click on the New button
- 3. Select Design view

4. Tables are created when you want to store information that is not stored in an already existing table e.g. when you want to customers and you only have a 'Products' table.

5. Click on the 'OK' Button

Work 2: CREATE A FORM

- 1. In the Database window, click the Form button, and then choose the New button. The new form dialog box appears.
- 2. In the Select A Table/Query box, type the name of the form's source table or query, or select one from the list. (To create an Unbound form, leave this box empty).



3. Click 'Ok'. A new blank form is shown as indicated below.

-8	Form1 : Form	
	Image: State of the state	×
: : -		

4. Drag the fields that you would like to see in the form arrange and edit them as appropriate using the properties window which is activated/deactivated by clicking on the icon as shown.

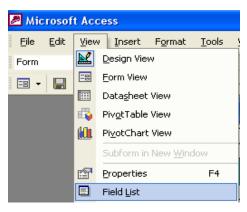
📓 Label: Label0	
Label0	•
Format Data Event C)ther All
Name	Label0
Caption	Company Name:
Visible	Yes
Display When	Always
Vertical	No
Left	0.375"
Тор	0.5"
Width	0.875"
Height	0.1667"
Back Style	Transparent
Back Color	16777215
Special Effect	Flat
Border Style	Transparent
Border Color	0
Border Width	Hairline
Fore Color	0 💌

- 5. To adjust the size of a control, click on it and use the fill handles to adjust it. This is done by achieving the double headed arrow by positioning the mouse over any one of the 'Fill Handles', clicking and holding the left mouse button then dragging inwards or outwards as required.
- 6. Save the form using an appropriate name

Work 3: CREATING A CONTROL

As you design a form or a report, you place controls on it. The controls you create in design view are the title, fields and pictures you see in form view.

1. From the menu bar select 'View' option, then 'field list' (in case it is not active)



Compa	any Info Personal Info		
-	Employee ID: EmployeeID	■ Emp 🗙 –	
-	First Name: FirstName	EmployeeID	4
-	Last Name: LastName	FirstName Title	Field
-	Title: Title	TitleOfCourtes BirthDate	
	Reports To: ReportsTo	HireDate	

2. Drag the required fields from the list to the form, where they appear both the label and the control field. By clicking inside the label, the user can delete and type a label of choice.

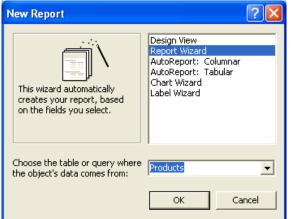
Work 4: CREATE A REPORT FOR THE DATABASE

1. In the Database window, select the Reports tab.



2. The New Report dialog box appears. From the options in the "new report" dialog box, select Report Wizard.

3. Choose the table that contains the data you want to base your report on and then click **OK**.



The table below describes what each option in the New Report dialog box does.

Option	Description
Design View	Used to create a report without
	using a wizard.
Report Wizard	Automatically creates a report
	based on the fields selected.
AutoReport:Columnar	Creates a single column report i.e.
	the records are displayed in a single
	column.
AutoReport : Tabular	Creates a tabular report i.e. each
	record is displayed from left to right
	across a report (as a row of fields).
Chart Wizard	Creates a report with a chart.
Label Wizard	Creates a report that has been
	formatted for printing on mailing
	labels.

4. Select the fields to appear on your report from the list of available fields. This allows you to choose only the fields that you require in the report. Click on "Next".

Report Wizard	
	Which fields do you want on your report? You can choose from more than one table or query.
Tables/Queries Table: Products Available Fields:	
ProductID SupplierID QuantityPerUnit UnitSOnOrder ReorderLevel Discontinued	CategoryID ProductName UnitInStock UnitPrice
a	ancel < Back Next > Finish

5. Select the fields for grouping if required. Grouping data within a report means arranging the data by a certain field so that all the records related to that field are displayed in one group. In the example below, the data is to be grouped by the CategoryID field.

Report Wizard	
Do you want to add any grouping levels? ProductName UnitSInStock UnitPrice Priority Priority	CategoryID ProductName, UnitsInStock, UnitPrice
Grouping Options Cancel	< Back Next > Finish

6. Select the fields to sort by and specify the sort order i.e. ascending or descending. You can sort on up to four fields (levels) in the report.

Report Wizard		
What sort order and summary inform	ation	n do you want for detail records?
		'ou can sort records by up to four fields, in either sscending or descending order.
	1	ProductName Ascending
1 2 3 4 REAL AREAS AREAS AREAS AREAS A BASIS AREAS AREAS AREAS AREAS A BASIS AREAS AREAS A BASIS AREAS AREAS AREAS A BASIS AREAS AREAS AREAS A BASIS AREAS AREAS AREAS A BASIS AREAS AREAS AREAS AREAS AREAS AREAS A BASIS AREAS AREAS AREAS AREAS AREAS AREAS AREAS A BASIS AREAS AREAS AREAS AREAS AREAS AREAS AREAS AREAS A BASIS AREAS A	2	Ascending
	3	✓ Ascending
	4	- Ascending
		Summary Options
Car	ncel	< <u>B</u> ack Next > Einish

7. You may choose to summarise your report by adding other options by clicking on the "Summary Options" button

Summary Options	
Summary Options What summary values would you like calculated? Field Sum Avg Min Max UnitsInStock Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Colspan="2">Min UnitsInStock Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Colspan="2">Image: Colspan="2">Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Summary values would you like calculated? UnitsInStock Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2" Image: Co	OK Cancel Show © Detail and Summary © Summary Only Calculate percent of total for sums

8. Choose a layout for your report. You can also change the page orientation for the report to landscape if you have many fields.

					Layo			Portrait
2000	0000	[tepped		-
	XXXX	XXXX	XXXX	XXXX	Ов	loc <u>k</u>		○ <u>L</u> andsca
200000	xxxxx				0	utline 1		
		xxxxx	xxxxx	XXXXX		utline 2		A
		XXXXX	XXXXX	XXXXX		unie z		
	XXXXXX	*****	xxxxx		I C e	lign Left 1		
			XXXXX		0	lign Left 2		
	XXXXXX	00000	*****			night contra		
			XXXXXX	XXXXX XXXXX				
			XXXXX					
					🔽 Adi	ust the field	Lusidth	n so all fields
L						age.	muu	r so air fields

9. Select the look or style you would like for the report. There are different looks to choose from like corporate, formal or soft gray.

XXXXXXXX		Bold Casual Compact Corporate	
		Formal Soft Gray	
Title	XXX XXXXX XXX XXXXX XXX XXXXX XXX XXXXX XXX XXXXX		
Label above Detail	XXX XXXXX XXX XXXXX		
Control from Detail	XXX XXXXX XXX XXXXX		

10. Type in the title for the report and then click on Finish.

Report Wizard	
	What title do you want for your report? Products That's all the information the wizard needs to create your report. Do you want to preview the report or modify the report's design? Preview the report.
	Cancel < <u>B</u> ack <u>M</u> ext.> <u>F</u> inish

11. After a few seconds, the Report is generated in Print Preview.

Product	S				
	Products				
	CategoryID	Product Nam e	Unit: In Stock	Unit Price	
		1			
		Chai	39	\$18.00	
		Chang	17	\$19.00	
		Chartreuse verte	69	\$18.00	
		Côte de Blaye	17	\$263.50	
		Guaraná Fantástica	20	\$4.50	
		Ipoh Coffee	17	\$46.00	
		Lakkalikööri	57	\$18.00	
		Laughing Lumberjack Lager	52	\$14.00	
		Outback Lager	15	\$15.00	
		Rhönhräu Klosterhier	125	\$7.75	
Page: 🔢		<u> </u>			

RESULT:

Thus, the table, form and report for the database "Patient details" was created in MS-Access successfully.

SHORT CUT KEYS

SHORTCUT DESCRIPTION		
Ctrl + A	Select entire Document	
Ctrl + B	Bold text	
Ctrl + C	Copy Selected Text	
Ctrl + D	Open the Font Dialog Box	
Ctrl + E	Centres Text on the Screen	
Ctrl + F	Opens the Find Box	
Ctrl + G	Go To Command	
Ctrl + H	Find and Replace Command	
Ctrl + I	Italics	
Ctrl + J	Justify text	
Ctrl + K	Insert a Hyperlink	
Ctrl + L	Left Alignment	
Ctrl + M	Indents a paragraph or selected text	
Ctrl + N	Goes to a New Blank Document	
Ctrl + O	Open and existing Document	
Ctrl + P	Opens the Print Window	
Ctrl + Q	Clears the formatting from the ruler	
Ctrl + R	Right aligns text	
Ctrl + S	Saves the document	
Ctrl + T	Creates a Handing Indent	
Ctrl + U	Underline text	
Ctrl + V	Paste	
Ctrl + W	Closes the document	
Ctrl + X	Cut text	
Ctrl + Y	Redo the last action	
Ctrl + Z	Undo the last action	

Serial No.	Shortcut Keys	Function
1.	Ctrl + C	Copies the content of a selected cell.
2.	Ctrl + V	Pastes contents from the clipboard.
3.	Ctrl + X	Cuts and copies the contents of a selected cell.
4.	Ctrl + A	Selects all the cells in a workbook.
5.	Ctrl + F	Opens the Find dialog box.
6.	Ctrl + G	Opens the Go To dialog box.
7.	Ctrl + H	Opens the Find and Replace dialog box.
8.	Ctrl + K	Inserts a hyperlink in a selected text.
9.	Ctrl + L	Opens the Create Table dialog box.
10.	Ctrl + P	Avails the Print window to print a worksheet.
11.	Ctrl + W	Closes the current workbook.
12.	Ctrl + Z	Reverses the last action.
13.	Ctrl + 1	Opens the Format Cells dialog box.
14.	Ctrl + -	Deletes the selected columns or rows.
15.	Ctrl + Space	Selects an entire column.
15.	Shift + Space	Selects an entire row.
16.	Ctrl + Home	Redirects to cell A1.
17.	Alt	Displays the access keys.
18.	Tab	Moves to the next cell.
19.	F2	Enables editing a cell.
20.	Esc	Cancels out an entry.
21.	Enter	Executes an entry in a cell and moves to the next cell.
22.	Alt + Enter	Starts a new line in the current cell.

Common Excel Shortcut Keys

23.	F1	Opens the Microsoft Excel help.
24.	Ctrl + F4	Closes Microsoft Excel.
25.	Alt +F8	Opens the Macro window.

Basic Shortcut Keys in Excel [Chart]

Serial No.	Shortcut Keys	Function
Containto.	onontout Royo	
1.	Ctrl + N	Creates a new Excel Workbook.
2.	Ctrl + O	Opens an existing workbook.
3.	Ctrl + S	Saves a workbook.
4.	Ctrl + A	Selects all the cells in the opened workbook.
5.	Ctrl + B	Makes the contents bold of a selected cell.
6.	Ctrl + C	Copies the contents of a selected cell.
7.	Ctrl + D	Fills up a selected cell with the contents of its upper cell.
8.	Ctrl + F	Opens up the Find dialog box to search for anything inside the current workbook.
9.	Ctrl + G	Opens up the Go To dialog box.
10.	Ctrl + H	Opens up the Find and Replace dialog box.
11.	Ctrl + I	Italicizes your text.
12.	Ctrl + K	Inserts hyperlink within a text.
13.	Ctrl + L	Opens up the Create Table dialog box.
14.	Ctrl + P	Brings up the Print window to print a workbook.
15.	Ctrl + R	Fills up the selected cells with the contents of the left cell.
15.	Ctrl + U	Adds up an underline to the selected text.
16.	Ctrl + V	Pastes your copied data from the clipboard.
17.	Ctrl + W	Closes down a running workbook.
18.	Ctrl + -	Deletes a selected row or column.

19.	Ctrl + Z	Reverses the last action.
20.	Ctrl + 1	Opens up the Format Cells dialog box.

Advanced Excel Shortcuts

Serial No.	Shortcut Keys	Function
1.	Ctrl + Shift + :	Inserts the current time into a cell.
2.	Ctrl +;	Inserts the current date into a cell.
3.	Ctrl + `	Displays the formula used in a cell.
4.	Ctrl + Shift + =	Inserts extra columns or rows.
5.	Ctrl + Shift + ~	Switches between displaying formulas used in a cell and the cell value.
6.	Ctrl + Shift + @	Applies time formatting.
7.	Ctrl + Shift + #	Applies date formatting.
8.	Ctrl + Shift + %	Applies percentage formatting.
9.	Ctrl + Shift + &	Applies borders around the selected cell.
10.	Ctrl + Shift + _	Removes the border from the selected cell.
11.	Ctrl + Spacebar	Highlights an entire column.
12.	Ctrl + Shift + Spacebar	Selects an entire workbook.
13.	Ctrl + Home	Navigates back to cell A1.
14.	Ctrl + Shift + Tab	Navigates to the previous workbook.
15.	Ctrl + Up arrow	Navigates to the top-most cell in a selected column.
15.	Ctrl + Down arrow	Navigates to the last cell in a selected column.
16.	Ctrl + Right arrow	Navigates to the last cell in a selected row.
17.	Ctrl + Left arrow	Navigates to the first cell in a selected row.
18.	Ctrl + End	Navigates to the last cell in a workbook.
19.	Ctrl + F1	Expands and collapses the main ribbon.
20.	Shift + Space	Selects an entire row.

Keyboard Shortcuts in Powerpoint

Insert a new slide	CTRL+M
Switch to the next pane (clockwise)	F6
Switch to the previous pane (counterclockwise)	SHIFT+F6
Make a duplicate of the current slide	CTRL+D
Start a slide show	F5
Promote a paragraph	ALT+SHIFT+LEFT ARROW
Demote a paragraph	ALT+SHIFT+RIGHT ARROW
Apply subscript formatting	CTRL+EQUAL SIGN (=)
Apply superscript formatting	CTRL+PLUS SIGN (+)
Open the Font dialog box	CTRL+T
Repeat your last action	F4 or CTRL+Y
Find	CTRL+F
View guides	CTRL+G
Delete a word	CTRL+BACKSPACE
Capitalize	SHIFT+F3
Bold	CTRL+B
Italicize	CTRL+I
Insert a hyperlink	CTRL+K
Select all	CTRL+A
Сару	CTRL+C
Paste	CTRL+V
Undo	CTRL+Z
Save	CTRL+S
Print	CTRL+P
Open	CTRL+O

Prepared by

DR. A. JAFAR SATHIC ASSISTANT PROFESSOR DEPARTMENT OF BUSINESS ADMINISTRATION MANONAMANIAM SUNDARANAR UNIVERSITY COLLEGE NADUVAKURICHI, SANKARANKOVIL

Mr. A. DAVID ASSISTANT PROFESSOR DEPARTMENT OF BUSINESS ADMINISTRATION CSI JEYARAJ ANNAPACKIAM COLLEGE NALLUR, TENKASI DISTRICT