

B.C.A. - I YEAR

DJA1B: OFFICE AUTOMATION

SYLLABUS

Unit I - Microsoft Word 2010

Introducing the Microsoft Office 2010 User interface – Microsoft Office 2010 features. New features in Word 2010 – Starting Microsoft Word 2010 – Creating a new blank word document – Applying Basic formatting: - changing the font and font size – applying the Bold, Italic and Underline styles – changing the text color – Aligning the text – Applying Bulleted and Numbered lists – Using Cut, Copy and Paste Commands – Using Find, Replace and Go To Commands – Printing a Word document – Opening an existing word document – Closing a word document – Exiting Microsoft Word.

Unit II – Working with Tables

Working with Tables: – Adding a table to a document – Adding Columns and Rows – Merging the Cells in a table – Adding a table Border – Inserting Headers and Footers – Inserting Footnotes and Endnotes – Performing Spelling and Grammar check – Marking a document as Final

Unit III – Microsoft Excel 2010

New features in Excel 2010 – Creating a New Blank Excel Workbook – Saving an Excel Workbook – Adding Data to Cells – Inserting and deleting Cells, Rows, Columns and Worksheet – Renaming a Worksheet – Opening an existing Excel Workbook – Printing a Worksheet – Closing an Excel Worksheet – Exiting Microsoft Excel – Working with Chart – Working with Formula and Functions.

Unit IV – Microsoft PowerPoint 2010

New features in PowerPoint 2010 – Creating a Blank Presentation – Saving Presentation – Adding and Removing Slides – Opening an Existing Presentation – Closing Presentation – Exiting Microsoft PowerPoint.

Unit V – Microsoft Access

Introduction to tables in Microsoft Access 2010:- creating a table – Saving a table – Working with fields in a table – Entering records in a table – Introducing query types – Creating a Query – Saving a Query.

Reference Books:

- 1. Kogent Learning Solutions inc., Office 2010 in Simple Steps, Dreamtech Press, Edition 2011. (For Unit I to IV)
- 2. Kogent Learning Solutions inc., Access 2010 in Simle Steps, Dreamtech Press, Edition 2011. (For Unit V)



UNIT I - MICROSOFT WORD 2010

Introducing the Microsoft Office 2010 User interface – Microsoft Office 2010 features.

New features in Word 2010 – Starting Microsoft Word 2010 – Creating a new blank word document – Applying Basic formatting: - changing the font and font size – applying the Bold, Italic and Underline styles – changing the text color – Aligning the text – Applying Bulleted and Numbered lists – Using Cut, Copy and Paste Commands – Using Find, Replace and Go To Commands – Printing a Word document – Opening an existing word document – Closing a word document – Exiting Microsoft Word.

Microsoft Word

Microsoft Office suite is a collection of applications, which can be used to create, edit, and review documents, spreadsheets, and presentations. The most popular applications included in MS Office suite are Word, Excel, PowerPoint, and Outlook. Using the applications in MS Office suite, you can easily create documents and compose letters, create spreadsheets and manipulate the numerical data stored in them; create and deliver presentations; and compose, send, or receive emails.

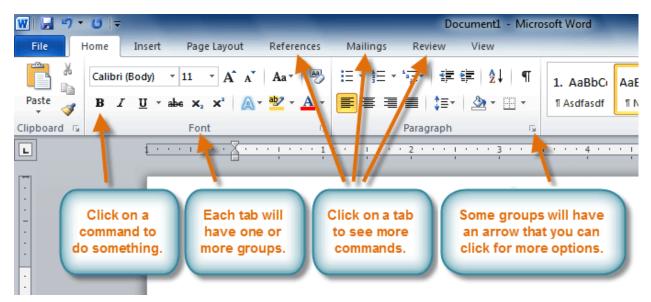
Introducting the Microsoft Office 2010 User interface

Word 2010 is a bit different from earlier versions, so even if you've used Word before you should take some time to familiarize yourself with the interface. The toolbars are similar to those in Word 2007, and they include the **Ribbon** and the **Quick Access toolbar**. Unlike Word 2007, commands such as **Open** and **Print** are housed in **Backstage view**, which replaces the **Microsoft Office button**.

The Ribbon

The new **tabbed Ribbon system** was introduced in Word 2007 to replace traditional menus. The **Ribbon** contains all of the commands you'll need in order to perform common tasks. It contains multiple **tabs**, each with several **groups** of commands, and you can add your own tabs that contain your favorite commands. Some groups have an arrow in the bottom-right corner that you can click to see even more commands.



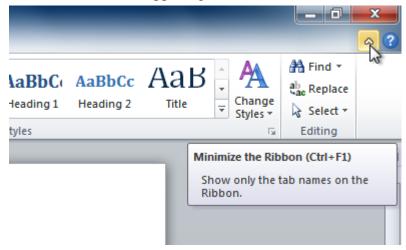


Word 2010 is a **word processor** that allows you to create various types of documents such as letters, papers, flyers, and faxes.

To minimize and maximize the Ribbon:

The Ribbon is designed to be easy to use and responsive to your current task; however, you can choose to **minimize** it if it's taking up too much screen space.

1. Click the **arrow** in the upper-right corner of the Ribbon to minimize it.



2. To maximize the Ribbon, click the arrow again.

When the Ribbon is minimized, you can make it reappear by clicking on a tab. However, the Ribbon will disappear again when you're not using it.

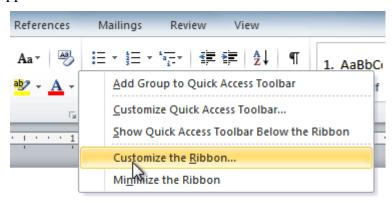
To customize the Ribbon:

You can customize the Ribbon by creating your own **tabs** with the commands you want. Commands are always housed within a **group**, and you can create as many groups as you



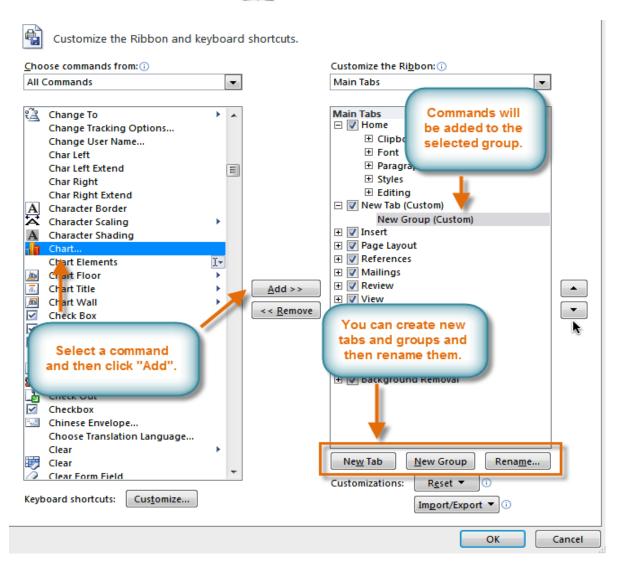
want in order to keep your tab organized. If you want, you can even add commands to any of the default tabs, as long as you create a custom group in the tab.

 Right-click the **Ribbon** and select **Customize the Ribbon**. A dialog box will appear.

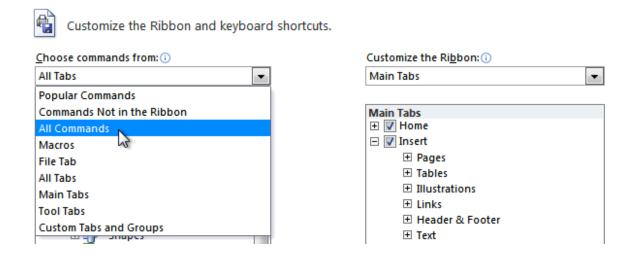


- 2. Click **New Tab**. A new tab will be created with a new group inside it.
- 3. Make sure the new group is selected.
- 4. Select a command from the list on the left, then click **Add**. You can also drag commands directly into a group.
- 5. When you are done adding commands, click **OK**.





If you don't see the command you want, click the **Choose commands from:** drop-down box, then select **All Commands**.



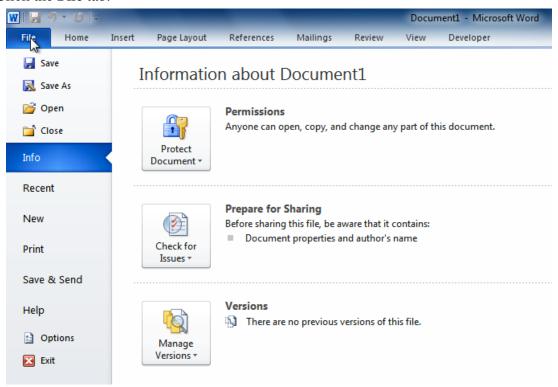


BACKSTAGE VIEW

Backstage view gives you various options for saving, opening, printing, and sharing your files. It's similar to the **Microsoft Office button menu** from Word 2007 and the **File menu** from earlier versions of Word. However, instead of just a menu it's a full-page view, which makes it easier to work with.

To get to Backstage view:

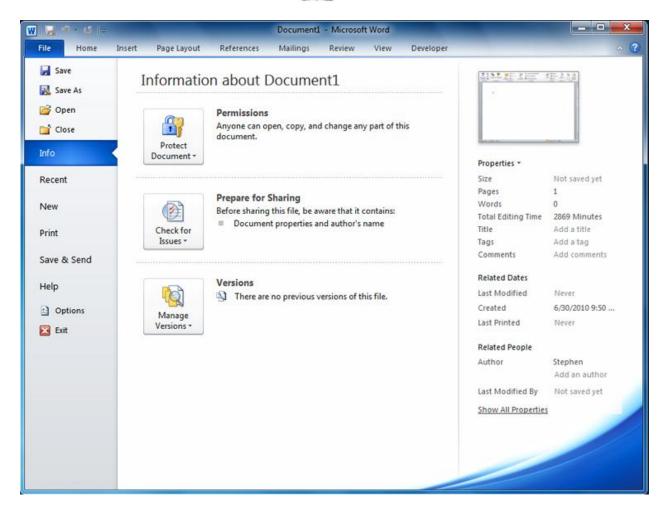
1. Click the **File** tab.



- 2. You can choose an option on the left side of the page.
- 3. To get back to your document, click any tab on the Ribbon.

Click the buttons in the interactive below to learn about the different things you can do in Backstage view.





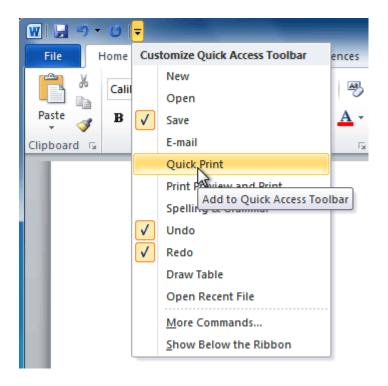
The Quick Access toolbar

The **Quick Access toolbar**, located above the Ribbon, lets you access common commands no matter which tab you're on. By default, it shows the **Save**, **Undo**, and **Repeat** commands. You can add other commands to make it more convenient for you.

To add commands to the Quick Access toolbar:

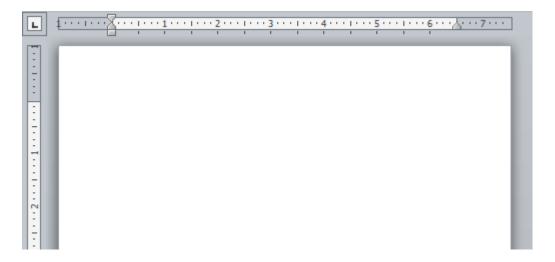
- 1. Click the **drop-down arrow** to the right of the **Quick Access toolbar**.
- 2. Select the command you want to add from the drop-down menu. It will appear in the Quick Access toolbar.





The Ruler

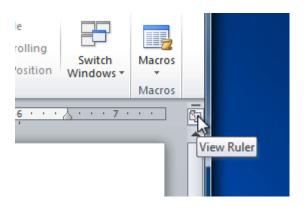
The **Ruler** is located at the top and to the left of your document. It makes it easier to adjust your document with precision. If you want, you can hide the Ruler to free up more screen space.



To hide or view the Ruler:

- 1. Click the **View Ruler** icon over the scrollbar to hide the ruler.
- 2. To show the ruler, click the **View Ruler** icon again.





New Features in Word 2010

Word 2010 has introduced several features:

- Image compression and cropping
- Plenty of new text effects
- New Navigation pane
- Mark as Final command

Image compression and cropping:

Compress an image to save disk space and crop the unwanted portions of an image, respectively.

New text effects:

Word 2010 has introduced several new text effects, such as Shadow, Reflection, and Glow that allow you to enhance the appreance of the text.

The New Navigation pane:

In a word document, you can use the Navigation pane to navigate from one heading to another. In addition, you can use the navigation ane to drag and drop or move headings, along with their contents, to new locations within a document.

The Mark as Final command:

In a word document, you may not want anybody to make any sort of unintended changes to that document. In such a cases, you can use the Mark as Final command.

Creating and opening documents

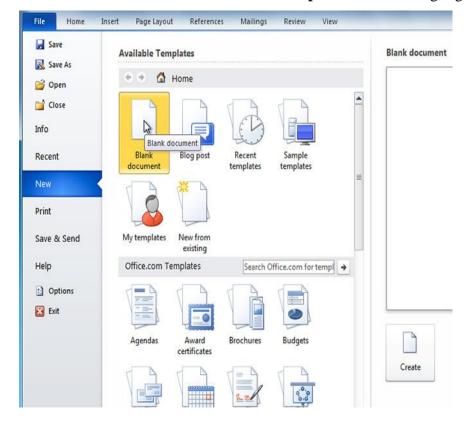
Word files are called **documents**. When you start a new project in Word, you'll need to **create a new document**, which can either be blank or from a template.

To create a new blank document:

- 1. Click the **File** tab. This takes you to **Backstage view**.
- 2. Select **New**.



3. Select **Blank document** under **Available Templates**. It will be highlighted by default.



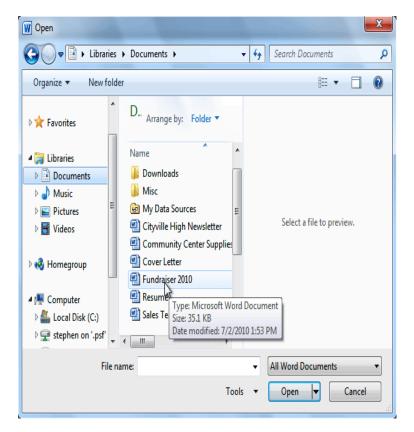
4. Click **Create**. A new blank document appears in the Word window.

To save time, you can create your document from a **template**, which you can select from the New Document pane.

To open an existing document:

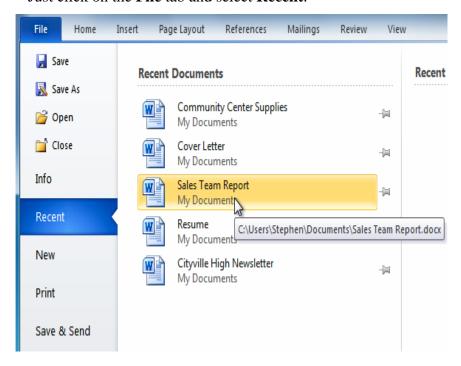
- 1. Click the **File** tab. This takes you to **Backstage view**.
- 2. Select **Open**. The Open dialog box appears.





3. Select your document, and then click **Open**.

If you've opened a file recently, you can also access it from the **Recent Documents** list. Just click on the **File** tab and select **Recent**.



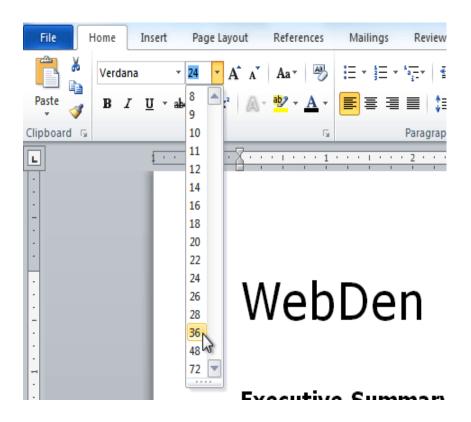
Applying Basic Formatting



Formatted text can emphasize important information and help organize your document. In Word, you have several options for adjusting the **font** of your text, including **size**, **color**, and inserting special **symbols**. You can also adjust the **alignment** of the text to change how it is displayed on the page.

To change the font size:

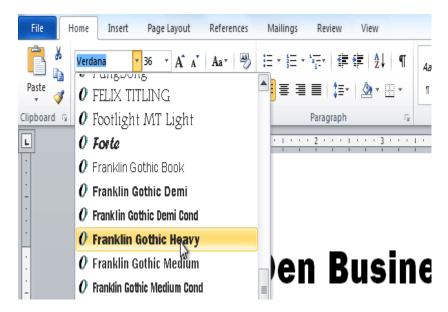
- 1. Select the text you want to modify.
- 2. Click the **drop-down arrow** next to the **Font Size** box on the **Home** tab. A drop-down menu appears.
- 3. Select the desired font size from the menu. Alternatively, you can type the value you want and then press **Enter**on your keyboard.



To change the font:

- 1. Select the text you want to modify.
- 2. Click the **drop-down arrow** next to the **Font** box on the **Home** tab. The **Font** drop-down menu appears.
- 3. Move the mouse pointer over the various fonts. A live preview of the font will appear in the document.

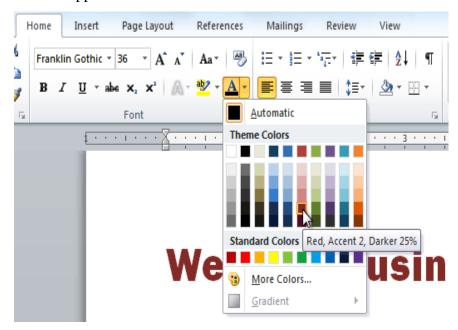




4. Select the font you want to use. The font will change in the document.

To change the font color:

- 1. Select the text you want to modify.
- Click the Font Color drop-down arrow on the Home tab. The Font Color menu appears.
- 3. Move the mouse pointer over the various font colors. A live preview of the color will appear in the document.



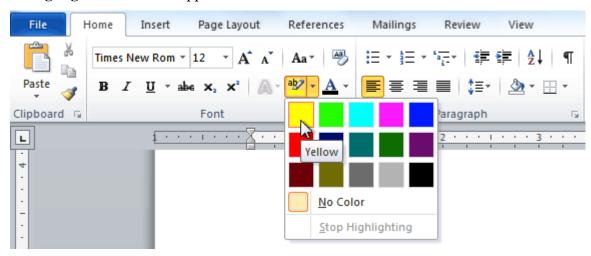
4. Select the font color you want to use. The font color will change in the document.



To highlight text:

1. From the **Home** tab, click the **Text Highlight Color** drop-down arrow.

The **Highlight Color** menu appears.



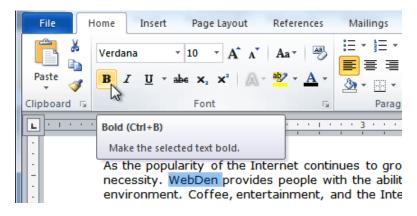
- 2. Select the desired highlight color.
- 3. Select the text you want to modify. It will then be highlighted.

unication and entertainment, rather than a creasing public demand for Internet access ironment. WebDen's goal is to provide the atmosphere for accessing the Internet.

To switch back to the normal cursor, click the **Text Highlight** Color command.

To use the bold, italic, and underline commands:

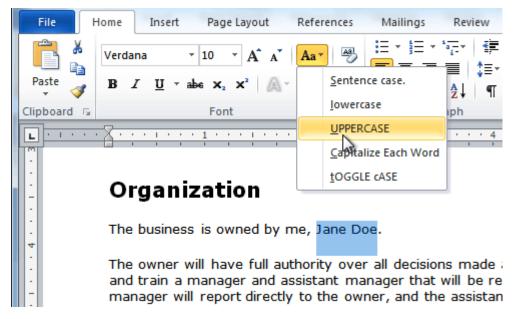
- 1. Select the text you want to modify.
- 2. Click the **Bold**, *Italic*, or <u>Underline</u> command in the **Font** group on the Home tab.





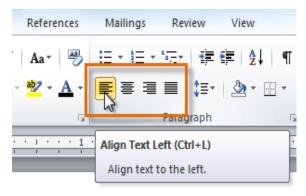
To change text case:

- 1. Select the text you want to modify.
- 2. Click the **Change Case** command in the **Font** group on the Home tab.
- 3. Select the desired case option from the list.



To change text alignment:

- 1. Select the text you want to modify.
- 2. Select one of the four **alignment options** from the **Paragraph** group on the **Home** tab.
 - o **Align Text Left:** Aligns all selected text to the left margin
 - o **Center:** Aligns text an equal distance from the left and right margins
 - o **Align Text Right:** Aligns all selected text to the right margin
 - Justify: Aligns text equally on both sides and lines up equally to the right and left margins; used by many newspapers and magazines





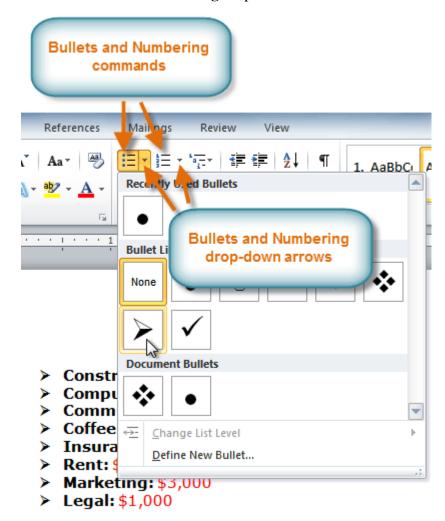
Using bulleted and numbered lists

Bulleted and numbered lists can be used in your documents to **format**, **arrange**, and **emphasize text**. In this lesson, you will learn how to **modify existing bullets**, insert new **bulleted** and **numbered lists**, select **symbols** as bullets, and format **multilevel lists**.

When you want to organize lists in Word, you can format them as either **bulleted** or **numbered** lists. Word offers a variety of bullet options that allow you to customize your lists to suit your needs.

To create a list:

- 1. Select the text you want to format as a list.
- 2. Click the **Bullets** or **Numbering** drop-down arrow on the **Home** tab.



3. Select the bullet or numbering style you want to use, and it will appear in the document.



4. To remove numbers or bullets from a list, select the list, then click the **Bullets** or **Numbering** commands.

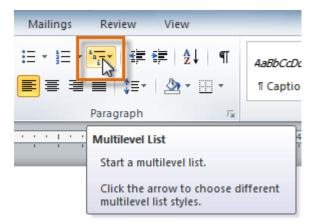
Multilevel lists

Multilevel lists allow you to create an **outline** with **multiple levels**. In fact, you can turn any bulleted or numbered list into a multilevel list by placing the insertion point at the beginning of a line and pressing the **Tab** key to change the level for that line. You can then use the **Multilevel List** command to choose the types of bullets or numbering that are used.

- Sporting Equipment
 - Baseball
 - Baseball glove
 - Baseballs
 - Bats
 - Basketball
 - Basketballs
 - Golf
 - Golf clubs
 - Golf balls
- Miscellaneous Equipment
 - Pool
 - Pool float (small)
 - Pool float (medium)
 - Water volleyball kit
 - Other
 - Hula hoops
 - Horseshoes
 - Sidewalk chalk

To create a multilevel list:

- 1. Select the text you want to format as a multilevel list.
- 2. Click the **Multilevel List** command on the **Home** tab.



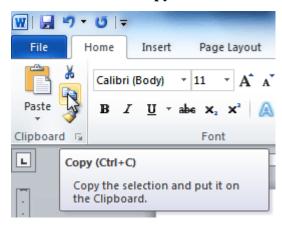


- 3. Click the bullet or numbering style you want to use. It will appear in the document.
- 4. Position your cursor at the end of a list item, then press the **Enter** key to add an item to the list.

To remove numbers or bullets from a list, select the list, then click the **Bullets** or **Numbering** commands.

To copy and paste text:

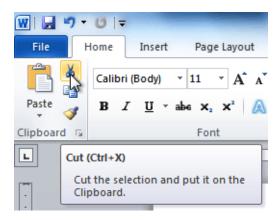
- 1. Select the text you want to copy.
- 2. Click the **Copy** command on the **Home** tab. You can also right-click your document and select **Copy**.



- 3. Place your insertion point where you want the text to appear.
- 4. Click the **Paste** command on the Home tab. The text will appear.

To cut and paste text:

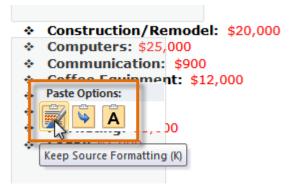
- 1. Select the text you want to copy.
- 2. Click the **Cut** command on the **Home** tab. You can also right-click the document and select **Cut**.





- 3. Place your insertion point where you want the text to appear.
- 4. Click the **Paste** command on the **Home** tab. The text will appear.

You can also cut, copy, and paste by right-clicking the document and choosing the desired action from the drop-down menu. When you use this method to paste, you can choose from three options that determine how text will be formatted: **Keep Source Formatting**, **Merge Formatting**, and **Keep Text Only**. You can move the mouse over each icon to see what it will look like before clicking it.



To drag and drop text:

- 1. Select the text you want to copy.
- 2. **Click and drag the text** to the location where you want it to appear. The cursor will have a rectangle under it to indicate that you are moving text.

As the popularity of the Internet continues to grow, affordable access is becoming a necessity. WebDen provides people with the ability to access the Internet in a social environment. People of all ages and backgrounds are welcome to enjoy the quirky, upscale, and innovative environment that only WebDen provides. Coffee, entertainment, and the Internet together form an engaging social scene.

3. Release the mouse button, and the text will appear.

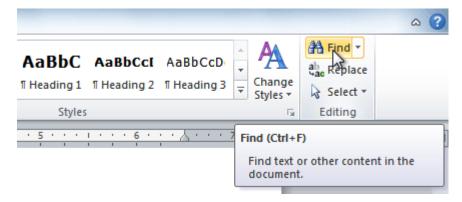
Finding and replacing text

When you're working with longer documents, it can be difficult and time consuming to locate a specific word or phrase. Word can automatically search your document using the **Find** feature, and it even allows you to change words or phrases using **Replace**.

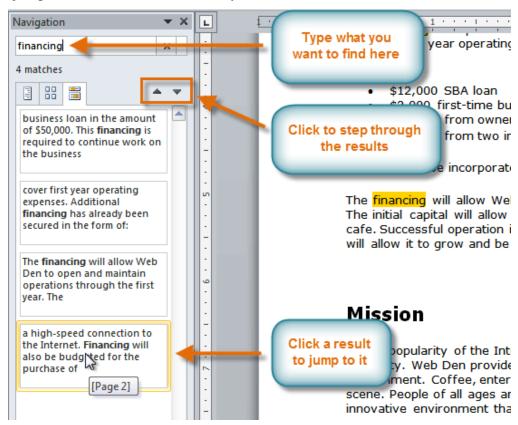


To find text:

1. From the **Home** tab, click the **Find** command. The **navigation** pane will appear on the left side of the screen.



- 2. Type the text you want to find in the field at the top of the navigation pane.
- 3. If the text is found in the document, it will be highlighted in yellow, and a preview will appear in the navigation pane.
- 4. If the text appears more than once, you can click the **arrows** on the navigation pane to step through the results. You can also click the **result previews** on the navigation pane to jump to the location of a result in your document.



5. When you close the navigation pane, the highlighting will disappear.

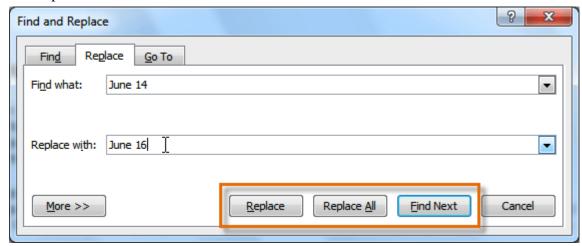


To replace text:

1. From the **Home** tab, click the **Replace** command. The **Find and Replace** dialog box will appear.



- 2. Type the text you want to find in the **Find what** field.
- 3. Type the text you want to replace it with in the **Replace with** field.
- 4. Click **Find Next** and then **Replace** to replace text. You can also click **Replace All** to replace all instances within the document.

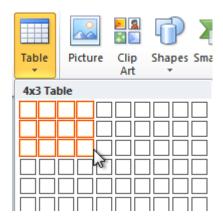




UNIT II - WORKING WITH TABLES

Working with Tables: – Adding a table to a document – Adding Columns and Rows – Merging the Cells in a table – Adding a table Border – Inserting Headers and Footers – Inserting Footnotes and Endnotes – Performing Spelling and Grammar check – Marking a document as Final

Introduction



A **table** is a grid of cells arranged in **rows** and **columns**. Tables can be customized and are useful for various tasks such as presenting text information and numerical data.

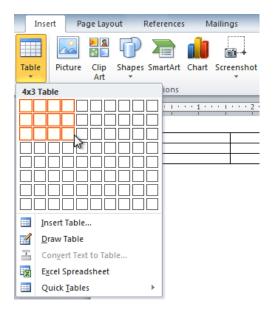
Inserting and modifying tables

In Word, tables are useful for organizing and presenting data. You can create a **blank** table, **convert text** to a table, and apply a variety of **styles** and **formats** to existing tables.

To insert a blank table:

- 1. Place your insertion point in the document where you want the table to appear.
- 2. Select the **Insert** tab.
- 3. Click the **Table** command.
- 4. Hover your mouse over the diagram squares to select the number of **columns** and **rows** in the table.

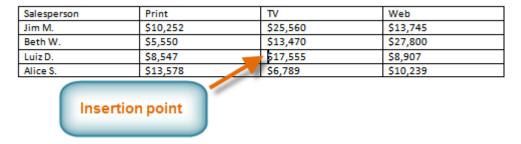




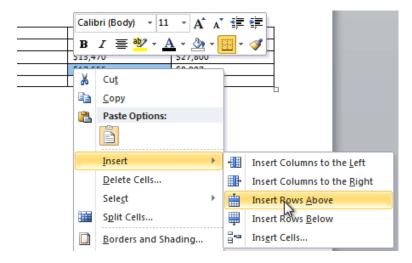
- 5. Click your mouse, and the table appears in the document.
- 6. You can now place the insertion point anywhere in the table to add text.

To add a row above an existing row:

1. Place the insertion point in a row **below** the location where you want to add a row.



- 2. Right-click the mouse. A menu appears.
- 3. Select **Insert** → **Insert Rows Above**.





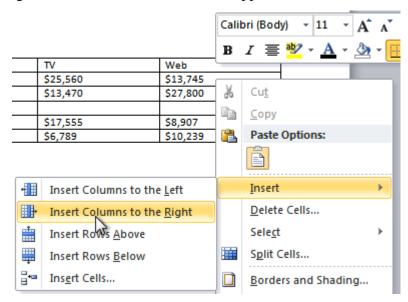
4. A new row appears **above** the insertion point.

Salesperson	Print	TV	Web
Jim M.	\$10,252	\$25,560	\$13,745
Beth W.	\$5,550	\$13,470	\$27,800
Luiz D.	\$8,547	\$17,555	\$8,907
Alice S.	\$13,578	\$6,789	\$10,239

You can also add rows below the insertion point. Follow the same steps, but select **Insert Rows Below** from the menu.

To add a column:

- 1. Place the **insertion point** in a **column adjacent** to the location where you want the new column to appear.
- 2. Right-click the mouse. A menu will appear.



3. Select Insert → Insert Columns to the Left or Insert Columns to the Right.

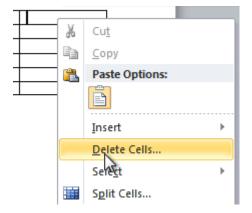
A new column appears.

Salesperson	Print	TV	Web	
Jim M.	\$10,252	\$25,560	\$13,745	
Beth W.	\$5,550	\$13,470	\$27,800	
Luiz D.	\$8,547	\$17,555	\$8,907	
Alice S.	\$13,578	\$6,789	\$10,239	

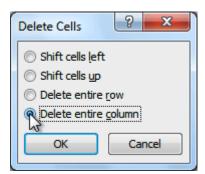
To delete a row or column:

- 1. Select the row or column.
- 2. Right-click your mouse. A menu will appear.
- 3. Select **Delete Cells**.





4. Select **Delete entire row** or **Delete entire column**, then click **OK**.



Working with Headers and Footers

Introduction



You can make your document look **professional and polished** by utilizing the header and footer sections. The **header** is a section of the document that appears in the **top margin**, while the **footer** is a section of the document that appears in the **bottom margin**. Headers and footers generally contain information such as the page number, date, and document name.

In this lesson, you will learn how to insert and edit headers and footers.

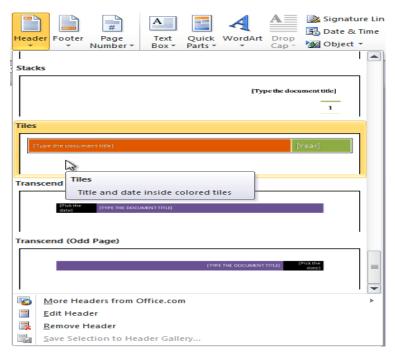
Headers and footers



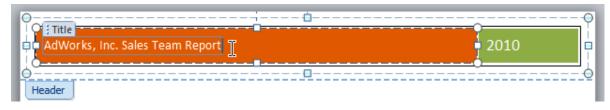
Headers and footers can help keep longer documents organized and make them easier to read. Text entered in the header or footer will appear on **each page** of the document.

To insert a header or footer:

- 1. Select the **Insert** tab.
- 2. Click either the **Header** or **Footer** command. A drop-down menu will appear.
- 3. From the drop-down menu, select **Blank** to insert a blank header or footer, or choose one of the **built-in options**.



- 4. The **Design** tab will appear on the Ribbon, and the header or footer will appear in the document.
- 5. Type the desired information into the header or footer.



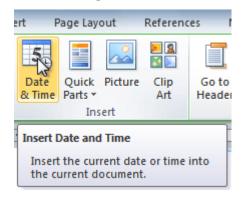
6. When you're finished, click **Close Header and Footer** in the **Design** tab, or hit the **Esc** key.

After you close the header or footer, it will still be visible, but it will be **locked**. To edit it again, just double-click anywhere on the header or footer, and it will become unlocked.

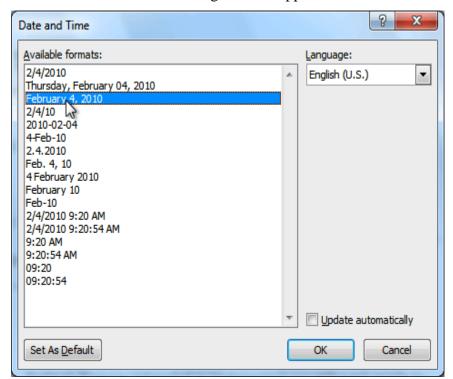
To insert the date or time into a header or footer:



- Double-click anywhere on the header or footer to unlock it. The Design tab will appear.
- 2. From the **Design** tab, click the **Date & Time** command.



3. Select a **date format** in the dialog box that appears.



- 4. Place a check mark in the **Update Automatically** box if you would like it to always reflect the current date. Otherwise, it will not change when the document is opened at a later date.
- 5. Click **OK**. The date and time now appears in the document.

Checking spelling and grammar

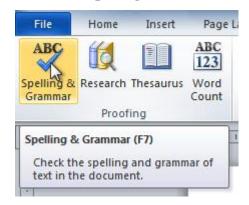
To make your document appear professional, you'll want to make sure it is free from **spelling and grammar** errors. Word has several options for checking your



spelling. You can run a spelling and grammar **check**, or you can allow Word to check your spelling **automatically** as you type.

To run a spelling and grammar check:

- 1. Go to the **Review** tab.
- 2. Click on the **Spelling & Grammar** command.

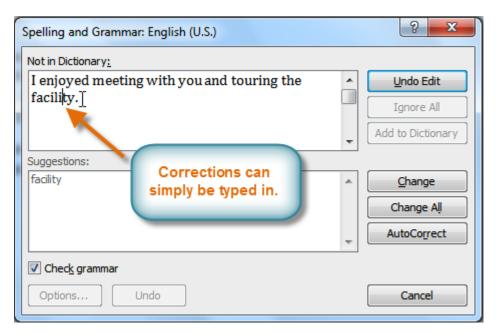


3. The **Spelling and Grammar** dialog box will open. For each error in your document, Word will try to offer one or more **suggestions**. You can select a suggestion and click **Change** to correct the error.



4. If no suggestions are given, you can manually type the correct spelling.





Ignoring "errors"

The spelling and grammar check is **not always correct**. Particularly with grammar, there are many errors Word will not notice. There are also times when the spelling and grammar check will say something's an error when it's actually not. This often happens with people's names, which may not be in the dictionary.

If Word says something is an error, you can choose not to change it. Depending on whether it's a spelling or grammar error, you can choose from several options:

For spelling "errors"

- **Ignore Once:** This will skip the word without changing it.
- **Ignore All:** This will skip the word without changing it, and it will also skip all other instances of this word in the document.
- Add to Dictionary: This adds the word to the dictionary so it will never come
 up as an error. Make sure the word is spelled correctly before choosing this
 option.

For grammar "errors"

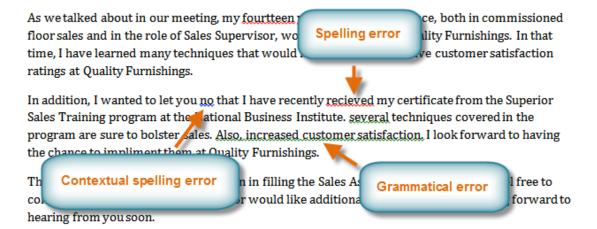
- **Ignore Once:** This will skip the "error" without changing it.
- **Ignore Rule:** This will skip this "error" and all other instances that relate to this grammar rule.
- Next Sentence: This skips the sentence without changing it and leaves it marked as an error. This means it will still show up if you do another spelling and grammar check later on.

Automatic spelling and grammar checking



By default, Word automatically checks your document for **spelling and grammar** errors, so you may not even need to run a separate spelling and grammar check. These errors are indicated by **colored wavy lines**.

- The **red line** indicates a misspelled word.
- The **green line** indicates a grammatical error.
- The blue line indicates a contextual spelling error. This feature is turned off by default.

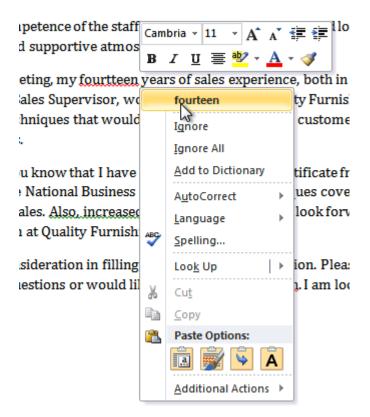


A **contextual spelling** error occurs when the wrong word is used but the word is spelled correctly. For example, if you write **Deer Mr. Theodore** at the beginning of a letter, **deer** is a contextual spelling error because **dear** should have been used. **Deer** is spelled correctly, but it is used incorrectly in this letter.

To use the spelling check feature:

- 1. Right-click the **underlined word**. A menu will appear.
- 2. Click the **correct spelling** of the word from the **listed suggestions**.
- 3. The corrected word will appear in the document.





You can choose to **Ignore** an underlined word, add it to the **dictionary**, or go to the **Spelling** dialog box for more options.

To use the grammar check feature:

- 1. Right-click the **underlined word or phrase**. A menu will appear.
- 2. Click the **correct phrase** from the **listed suggestions**.
- 3. The corrected phrase will appear in the document.

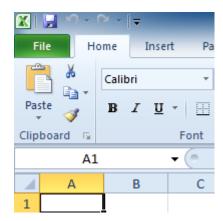




UNIT III – MICROSOFT EXCEL 2010

New features in Excel 2010 – Creating a New Blank Excel Workbook – Saving an Excel Workbook – Adding Data to Cells – Inserting and deleting Cells, Rows, Columns and Worksheet – Renaming a Worksheet – Opening an existing Excel Workbook – Printing a Worksheet – Closing an Excel Worksheet – Exiting Microsoft Excel – Working with Chart – Working with Formula and Functions.

Introduction



Excel is a **spreadsheet program** that allows you to store, organize, and analyze information. In this lesson, you will learn your way around the Excel 2010 environment, including the new **Backstage view**, which replaces the Microsoft Office button menu from Excel 2007.

We will show you how to use and modify the **Ribbon** and the **Quick Access toolbar**, as well as how to **create new workbooks** and **open** existing ones. After this lesson, you will be ready to get started on your first workbook.

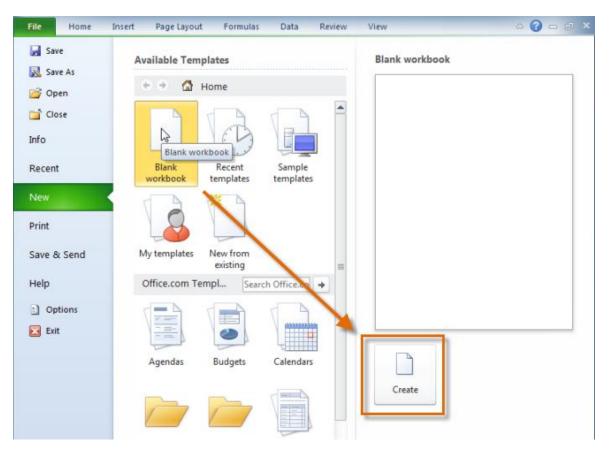
Creating and opening workbooks

Excel files are called **workbooks**. Each workbook holds one or more**worksheets** (also known as spreadsheets).

To create a new blank workbook:

- 1. Click the **File** tab. This takes you to **Backstage view**.
- 2. Select **New**.
- 3. Select **Blank workbook** under **Available Templates**. It will be highlighted by default.
- 4. Click **Create**. A new blank workbook appears in the Excel window.

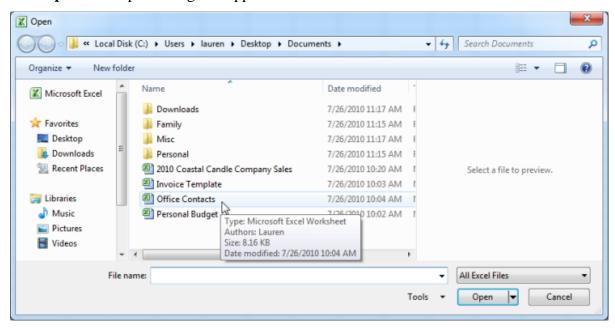




To save time, you can create your document from a **template**, which you can select under Available Templates. We'll talk more about this in a later lesson.

To open an existing workbook:

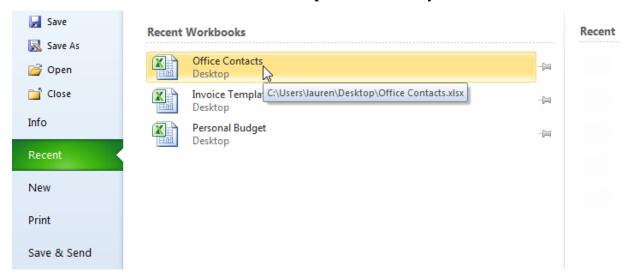
- 1. Click the **File** tab. This takes you to **Backstage view**.
- 2. Select **Open**. The Open dialog box appears.





3. Select your desired workbook, then click **Open**.

If you have opened the existing workbook recently, it may be easier to choose **Recent** from the **File tab**instead of **Open** to search for your workbook.



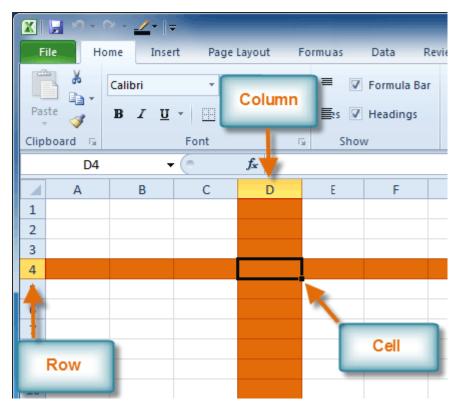
Introduction to cells and cell content

Cells are the basic building blocks of a worksheet. They can contain a variety of content such as **text**, **formatting attributes**, **formulas**, and **functions**. To work with cells, you'll need to know how to **select** them, **insert content**, and **delete cells** and **cell content**.

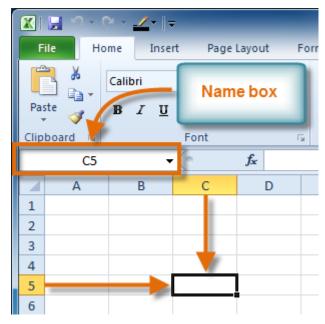
The cell

Each rectangle in a worksheet is called a **cell**. A cell is the intersection of a **row** and a **column**.





Each cell has a name, or a **cell address** based on which **column and row** it intersects. The **cell address** of a selected cell appears in the **name box**. Here, you can see that **C5** is selected.



You can also select **multiple cells** at the same time. A group of cells is known as a **cell range**. Rather than a single cell address, you will refer to a cell range using the cell addresses of the **first** and **last** cells in the cell range, separated by a**colon**. For example, a cell range that included cells A1, A2, A3, A4, and A5 would be written as **A1:A5**.



If the columns in your spreadsheet are labeled with numbers instead of letters, you'll need to change the default reference style for Excel.

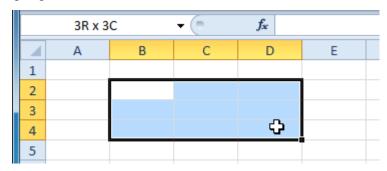
To select a cell:

- 1. Click a cell to select it. When a cell is selected, you will notice that the borders of the cell appear bold _____and the column heading and row heading of the cell are highlighted.
- 2. Release your mouse. The cell will stay selected until you click another cell in the worksheet.

You can also navigate your worksheet and select a cell by using the **arrow keys** on your keyboard.

To select multiple cells:

 Click and drag your mouse until all of the adjoining cells you want are highlighted.



2. Release your mouse. The cells will stay selected until you click another cell in the worksheet.

Cell content

Each cell can contain its own text, formatting, comments, formulas, and functions.

• Text

Cells can contain letters, numbers, and dates.

• Formatting attributes

Cells can contain formatting attributes that change the way letters, numbers, and dates are displayed. For example, dates can be formatted as MM/DD/YYYY or M/D/YYYY.

Comments

Cells can contain comments from multiple reviewers.

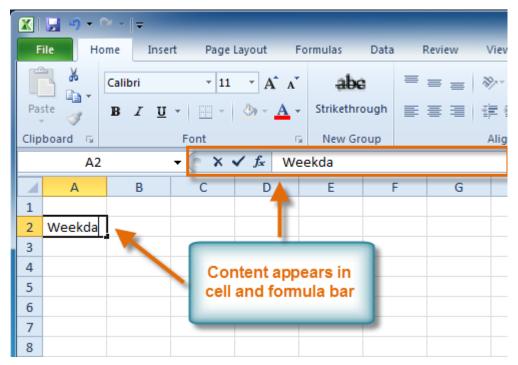


Formulas and functions

Cells can contain formulas and functions that calculate cell values. For example, **SUM(cell 1, cell 2...)** is a formula that can add the values in multiple cells.

To insert content:

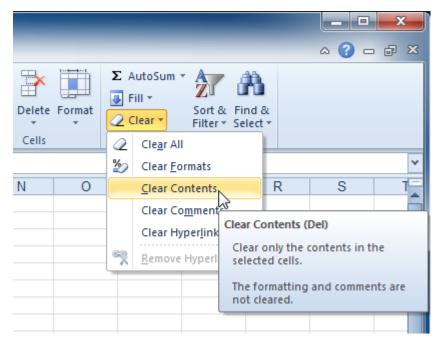
- 1. Click a cell to select it.
- 2. Enter content into the selected cell using your keyboard. The content appears in the **cell** and in the **formula bar**. You can also enter or edit cell content from the formula bar.



To delete content within cells:

- 1. Select the cells containing content you want to delete.
- 2. Click the **Clear** command on the Ribbon. A **dialog box** will appear.
- 3. Select Clear Contents.

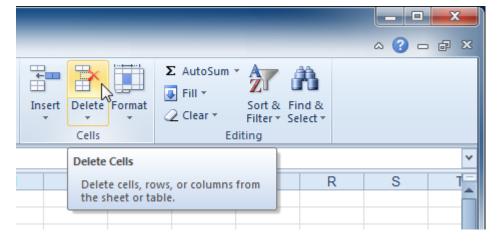




You can also use your keyboard's **Backspace** key to delete content from a **single cell** or the **Delete** key to delete content from **multiple cells**.

To delete cells:

- 1. Select the cells you want to delete.
- 2. Choose the **Delete** command from the Ribbon.

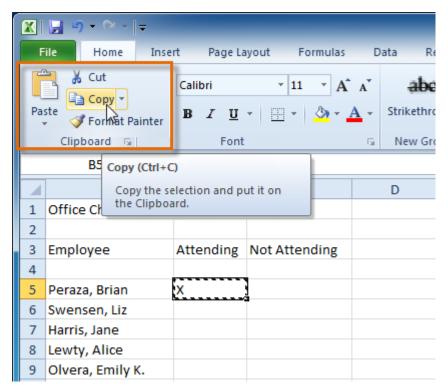


There's an important difference between **deleting the content of a cell** and **deleting the cell itself**. If you delete the cell, by default the cells underneath it will shift up and replace the deleted cell.

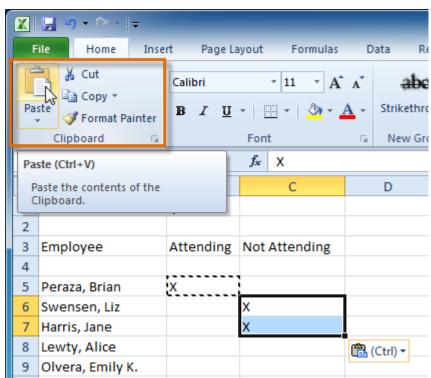
To copy and paste cell content:

- 1. Select the cells you want to copy.
- 2. Click the **Copy** command. The border of the selected cells will change appearance.





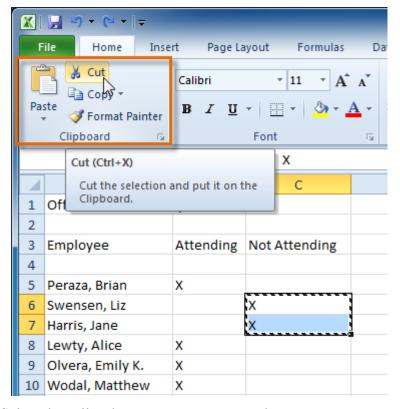
- 3. Select the cell or cells where you want to paste the content.
- 4. Click the **Paste** command. The copied content will be entered into the highlighted cells.





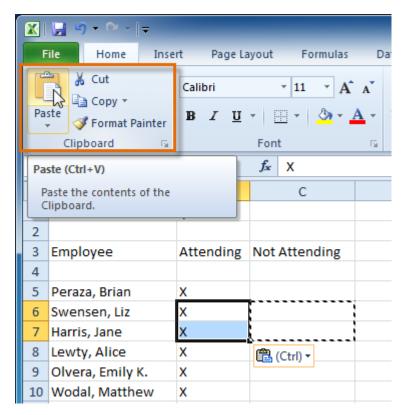
To cut and paste cell content:

- 1. Select the cells you want to cut.
- 2. Click the **Cut** command. The border of the selected cells will change appearance.



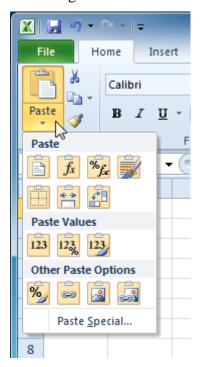
- 3. Select the cells where you want to paste the content.
- 4. Click the **Paste** command. The cut content will be removed from the original cells and entered into the highlighted cells.





To access more paste options:

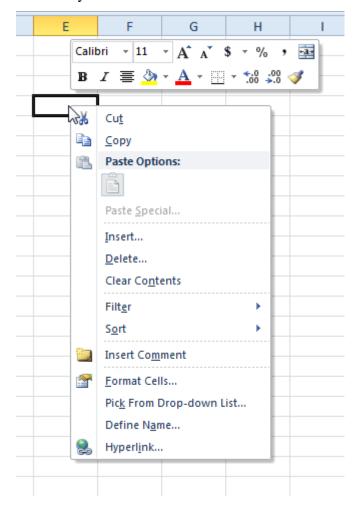
There are more Paste options you can access from the drop-down menu on the **Paste** command. These options may be convenient to advanced users who are working with **cells that contain formulas or formatting**.





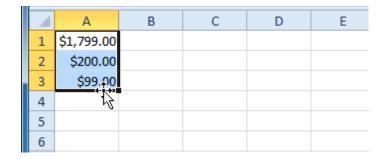
To access formatting commands by right-clicking:

- 1. Select the cells you want to format.
- 2. **Right-click** the selected cells. A **dialog box** will appear where you can easily access many commands on the Ribbon.



To drag and drop cells:

- 1. Select the cells you want to move.
- Position your mouse on one of the outside edges of the selected cells. The mouse changes from a white cross ♀ to a black cross with 4 arrows.



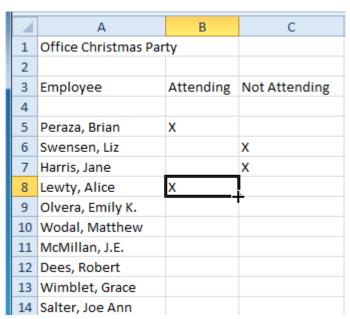


- 3. Click and drag the cells to the new location.
- 4. Release your mouse, and the cells will be dropped there.

	4	А	В	С	D	Е
1	L			\$1,799.00		
2	2			\$1,799.00 \$200.00		
3	3			\$99.00		
4	ļ					
5	5					
6	5					

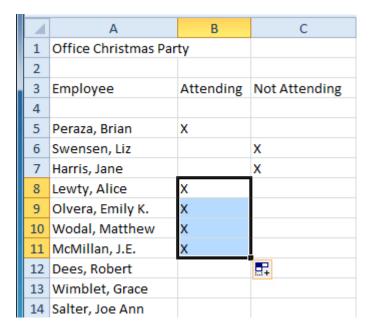
To use the fill handle to fill cells:

- 1. Select the cell or cells containing the content you want to use. You can fill cell content either vertically or horizontally.
- 2. Position your mouse over the **fill handle** so the **white cross** ♣ becomes a **black cross** +.



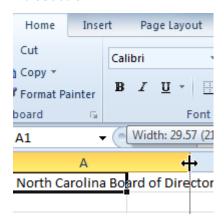
- 3. **Click and drag the fill handle** until all of the cells you want to fill are **highlighted**.
- 4. Release the mouse, and your cells will be filled.





Modifying Columns, Rows, and Cells

Introduction



When you open a new blank workbook, the cells are set to a **default size**. You have the ability to modify cells, as well as to insert and delete columns, rows, and cells as needed. In this lesson, you will learn how to **change row height and column width, insert** and **delete rows** and **columns**, **wrap text** in a cell, and **merge cells**.

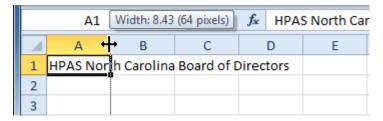
Working with columns, rows, and cells

By default, every row and column of a new workbook is set to the same**height** and **width**. Excel allows you to modify column width and row height in different ways.

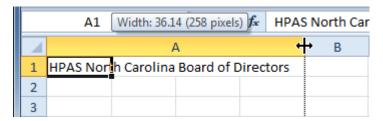
To modify column width:

1. Position your mouse over the **column line** in the **column heading** so the **white cross** ♀ becomes a **double arrow** ↔.

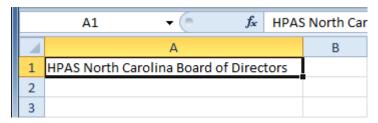




2. **Click and drag the column** to the right to increase column width or to the left to decrease column width.



3. Release the mouse. The column width will be changed in your spreadsheet.

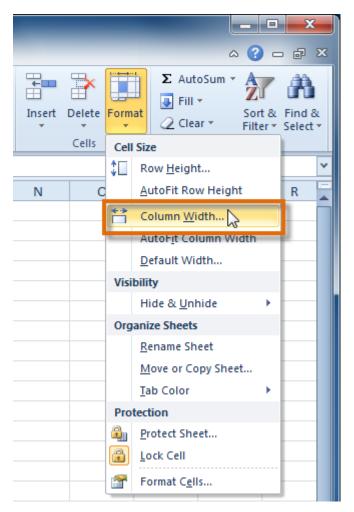


If you see **pound signs** (######) in a cell, it means the column is not wide enough to display the cell content. Simply **increase the column width** to show the cell content.

To set column width with a specific measurement:

- 1. Select the columns you want to modify.
- 2. Click the **Format** command on the **Home** tab. The format drop-down menu appears.
- 3. Select Column Width.





4. The **Column Width** dialog box appears. Enter a specific measurement.



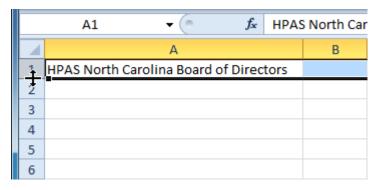
5. Click **OK**. The width of each selected column will be changed in your worksheet.

Select **AutoFit Column Width** from the format drop-down menu, and Excel will automatically adjust each selected column so all of the text will fit.

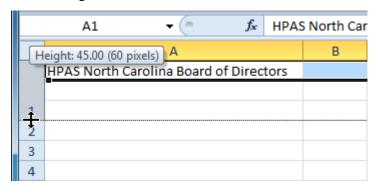
To modify row height:

1. Position the **cursor** over the **row line** so the **white cross** \Box becomes a **double** arrow \Box .

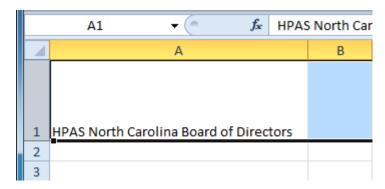




2. **Click and drag the row** downward to increase row height or upward to decrease height.



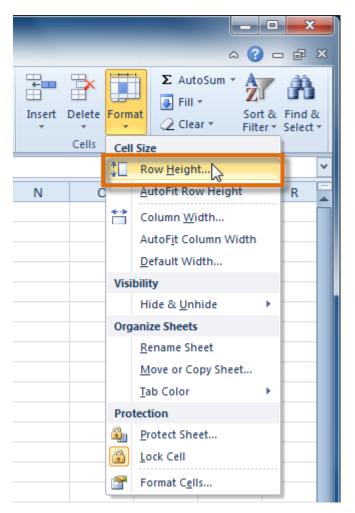
3. Release the mouse. The height of each selected row will be changed in your worksheet.



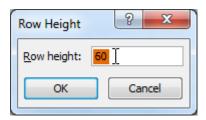
To set row height with a specific measurement:

- 1. Select the rows you want to modify.
- 2. Click the **Format** command on the **Home** tab. The format drop-down menu appears.
- 3. Select **Row Height**.





4. The **Row Height** dialog box appears. Enter a specific measurement.



5. Click **OK**. The selected rows heights will be changed in your spreadsheet. Select **AutoFit Row Height** from the format drop-down menu, and Excel will automatically adjust each selected row so all of the text will fit.

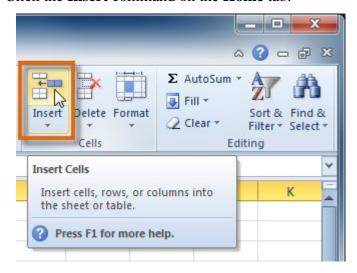
To insert rows:

1. Select the row **below** where you want the new row to appear.

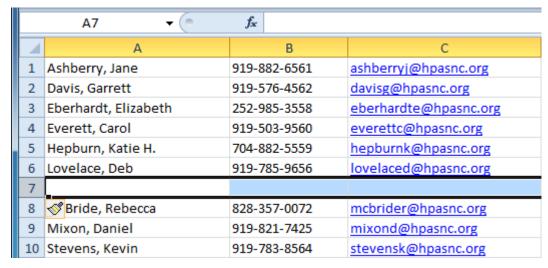


A7 ▼ McBride, Rebecca						
	А	В	С			
1	Ashberry, Jane	919-882-6561	ashberryj@hpasnc.org			
2	Davis, Garrett	919-576-4562	davisg@hpasnc.org			
3	Eberhardt, Elizabeth	252-985-3558	eberhardte@hpasnc.org			
4	Everett, Carol	919-503-9560	everettc@hpasnc.org			
5	Hepburn, Katie H.	704-882-5559	hepburnk@hpasnc.org			
6	Lovelace, Deb	919-785-9656	lovelaced@hpasnc.org			
→ 7	McBride, Rebecca	828-357-0072	mcbrider@hpasnc.org			
8	Mixon, Daniel	919-821-7425	mixond@hpasnc.org			
9	Stevens, Kevin	919-783-8564	stevensk@hpasnc.org			

2. Click the **Insert** command on the **Home** tab.



3. The new row appears in your worksheet.

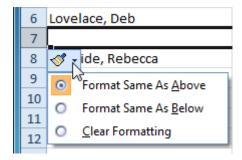


When inserting new rows, columns, or cells, you will see the **Insert**

Options button by the inserted cells. This button allows you to choose how Excel formats them. By default, Excel formats inserted rows with the same

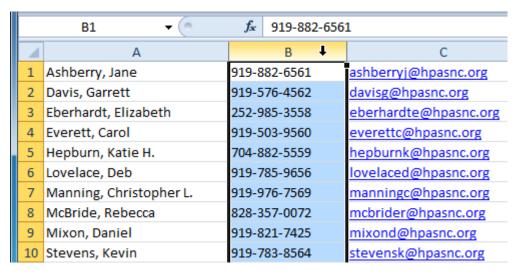


formatting as the cells in the row above them. To access more options, hover your mouse over the Insert Options button and click the drop-down arrow that appears.

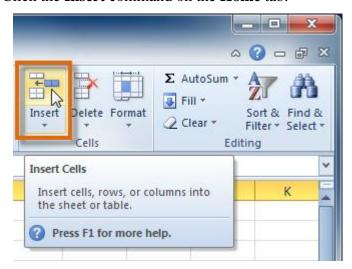


To insert columns:

Select the column to the **right** of where you want the new column to appear.
 For example, if you want to insert a column between A and B, select column B.

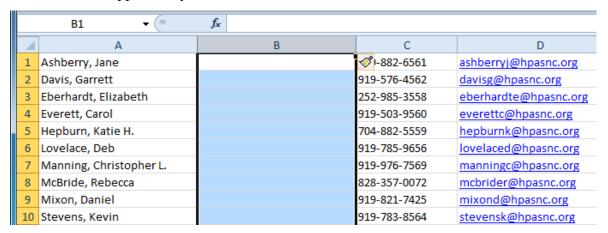


2. Click the **Insert** command on the **Home** tab.

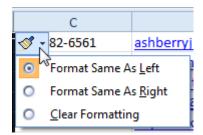




3. The new column appears in your worksheet.



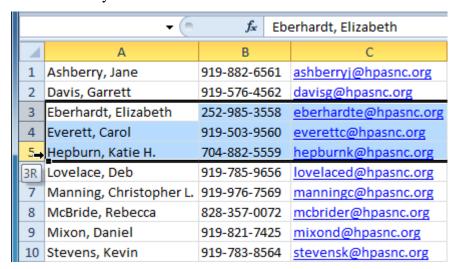
By default, Excel formats inserted columns with the same formatting as the column to the left of them. To access more options, hover your mouse over the **Insert Options** button and click the drop-down arrow that appears.



When inserting rows and columns, make sure to select the row or column by clicking its heading so all of the cells in that row or column are selected. If you select just a cell in the row or column, only a new cell will be inserted.

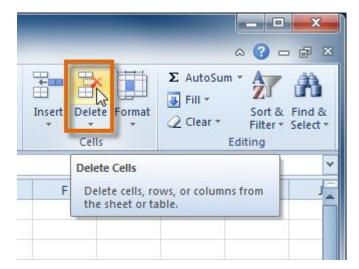
To delete rows:

1. Select the rows you want to delete.

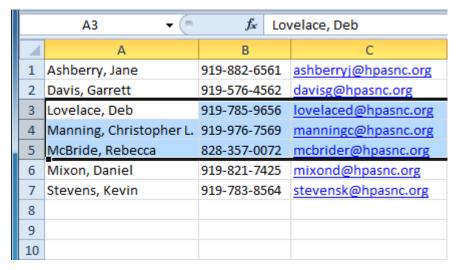




2. Click the **Delete** command on the **Home** tab.

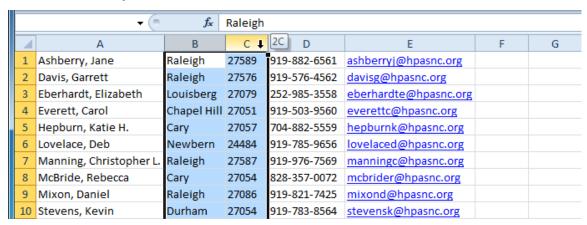


3. The rows are deleted from your worksheet.



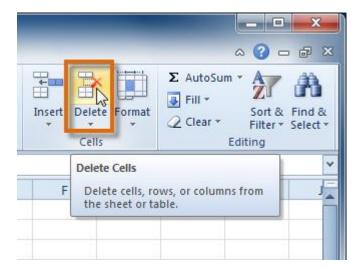
To delete columns:

1. Select the columns you want to delete.

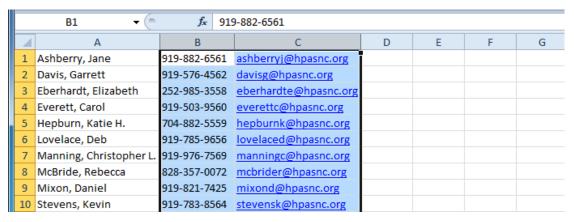




2. Click the **Delete** command on the **Home** tab.



3. The columns are deleted from your worksheet.



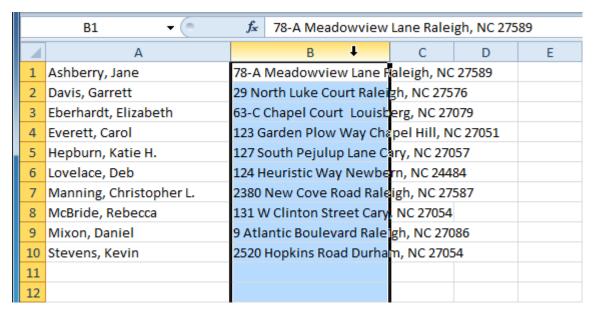
Wrapping text and merging cells

If a cell contains more text than can be displayed, you can choose to wrap the text within the cell or merge the cell with empty adjoining cells. **Wrap text** to make it display on multiple lines of the cell. **Merge cells** to combine adjoining cells into one larger cell.

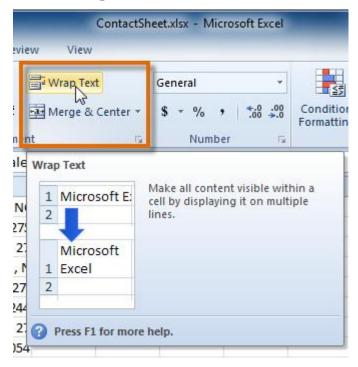
To wrap text:

1. Select the cells with text that you want to wrap.



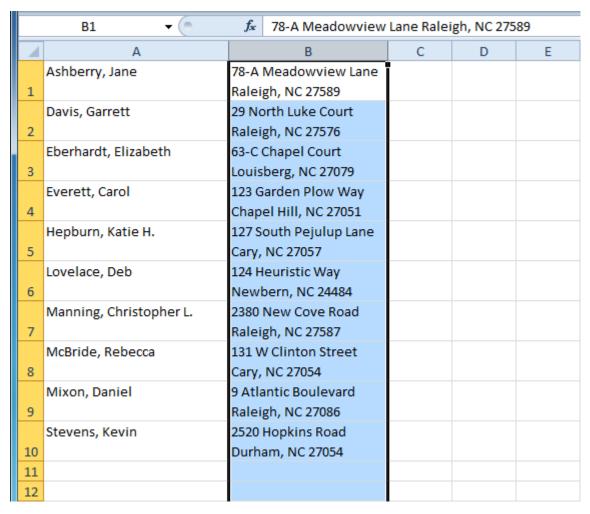


2. Select the **Wrap Text** command on the **Home** tab.



3. The text in the selected cells will be wrapped in your worksheet.

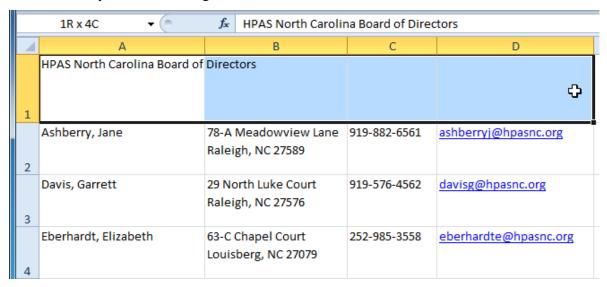




If you change your mind, reclick the **Wrap Text** command to unwrap the text.

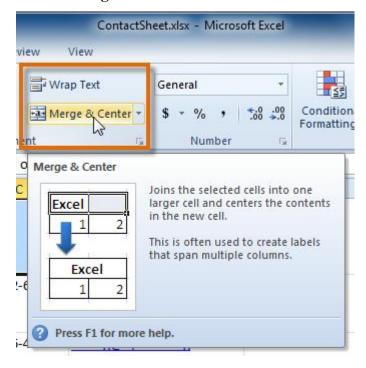
To merge cells using the Merge & Center command:

1. Select the cells you want to merge.

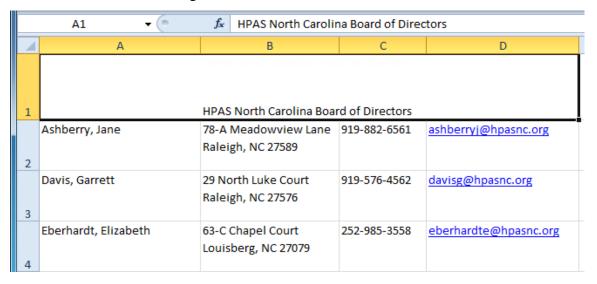




2. Select the **Merge & Center** command on the **Home** tab.



3. The selected cells will be merged, and the text will be centered.



Saving workbooks

When you create a new workbook in Excel, you'll need to know how to**save** it to access and edit it later. Excel allows you to save your documents in several ways.

To use the Save As command:

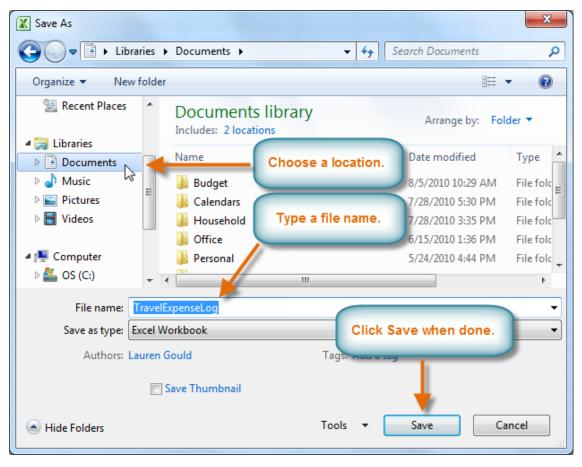
Save As allows you to choose a name and location for your workbook. Use it if you are saving a workbook for the first time or if you want to save a different version of a workbook while keeping the original.



- 1. Click the **File** tab.
- 2. Select Save As.



- 3. The **Save As** dialog box will appear. Select the location where you want to save the workbook.
- 4. Enter a name for the workbook, then click **Save**.



If you are using **Windows 7**, you will most likely want to save files to your **Documents library**. For other versions of Windows, you will most likely



want to save files to the **My Documents folder**. For more information, check out our lessons on **Windows 7** and **Windows XP**.

To use the Save command:

1. Click the Save command on the Quick Access toolbar.



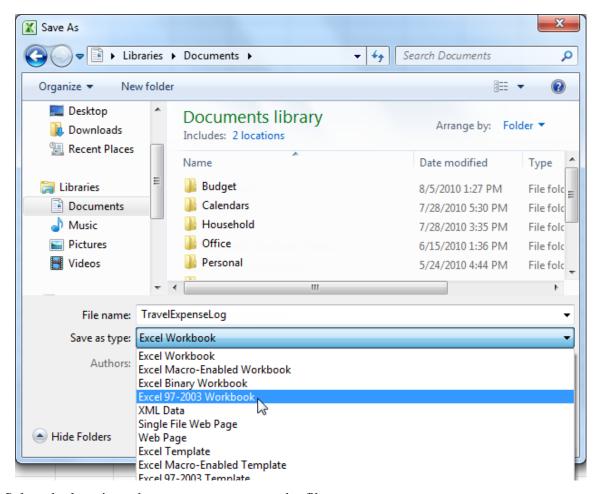
2. The workbook will be saved in its current location with the same file name.

To save as an Excel 97-2003 workbook:

You can share your workbooks with anyone using **Excel 2010 or 2007** because they use the same **file format**. However, earlier versions of Excel use a different file format, so if you want to share your workbook with someone using an earlier version of Excel you will need to save it as an **Excel 97-2003 workbook**.

- 1. Click the **File** tab.
- 2. Select Save As.
- 3. In the **Save as type** drop-down menu, select **Excel 97-2003 Workbook**.





- 4. Select the location where you want to save the file.
- 5. Enter a name for the file, then click **Save**.

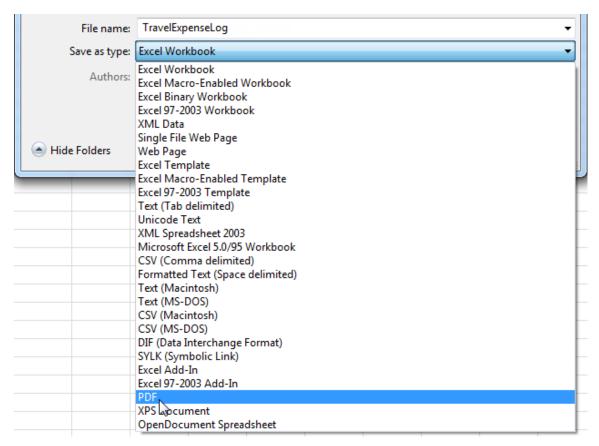
To save as a PDF:

Saving your workbook as an **Adobe Acrobat Document**—which is called a **PDF file**—can be especially useful when your recipients do not have Excel. A PDF will make it possible for recipients to view the content from your workbook, but they will not be able to edit anything.

Click the **File** tab.

- 1. Select Save As.
- 2. In the **Save as type** drop-down menu, select **PDF**.





- 3. Select the location where you want to save the file.
- 4. Enter a name for the file, then click **Save**.

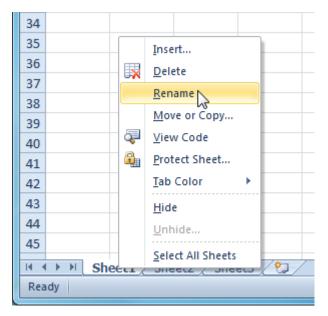
Introduction to worksheets

When you open an Excel workbook, there are **three worksheets** by default. The default names on the worksheet tabs are **Sheet1**, **Sheet2**, and **Sheet3**. To organize your workbook and make it easier to navigate, you can rename and even color code the worksheet tabs. Additionally, you can insert, delete, move, and copy worksheets.

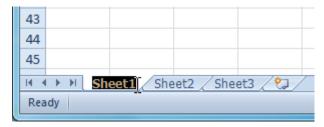
To rename worksheets:

- 1. Right-click the **worksheet tab** you want to rename. The **worksheet** menu appears.
- 2. Select Rename.

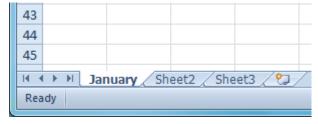




3. The text is now highlighted by a black box. Type the name of your worksheet.

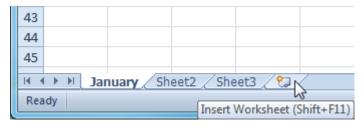


4. Click anywhere outside the tab. The worksheet is renamed.



To insert new worksheets:

Click the **Insert Worksheet** icon. A new worksheet will appear.



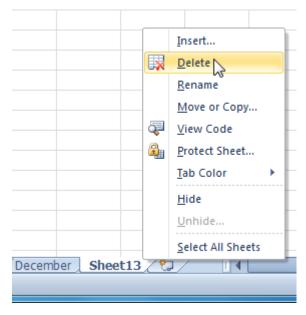
You can change the setting for the default number of worksheets that appear in Excel workbooks. To access this setting, go into **Backstage view** and click **Options**.

To delete worksheets:

Worksheets can be deleted from a workbook, including those containing data.

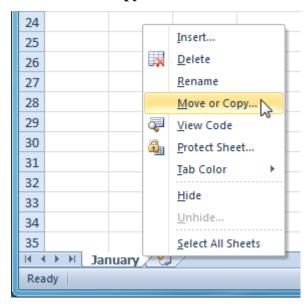


- 1. Select the worksheets you want to delete.
- 2. Right-click one of the selected worksheets. The **worksheet** menu appears.
- 3. Select **Delete**. The selected worksheets will be deleted from your workbook.



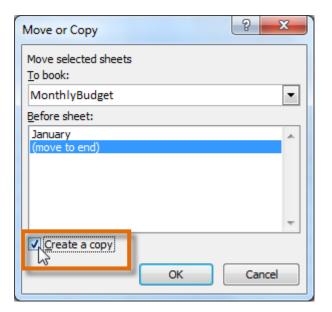
To copy a worksheet:

- 1. Right-click the worksheet you want to copy. The worksheet menu appears.
- 2. Select **Move or Copy**.



3. The **Move or Copy** dialog box appears. Check the **Create a copy** box.





4. Click **OK**. Your worksheet is copied. It will have the same title as your original worksheet, but the title will include a version number, such as **January (2)**.





UNIT IV – MICROSOFT POWERPOINT 2010

New features in PowerPoint 2010 – Creating a Blank Presentation – Saving Presentation – Adding and Removing Slides – Opening an Existing Presentation - Closing Presentation – Exiting Microsoft PowerPoint.

Introduction



PowerPoint 2010 is a **presentation software** that allows you to create dynamic slide presentations that can include animation, narration, images, and videos. In this lesson, you will learn your way around the **PowerPoint 2010 environment**, including getting to know the new **Backstage view**.

We will also show you how to use and modify the **Ribbon** and the **Quick Access toolbar**, in addition to learning how to **create new presentations** and **open existing files**.

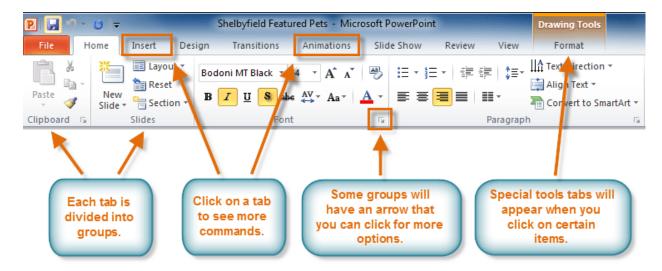
Working with your PowerPoint environment

The **Ribbon** and **Quick Access toolbar** are where you will find the commands you need to perform common tasks in PowerPoint. If you are familiar with PowerPoint 2007, you will find that the main difference in the PowerPoint 2010 Ribbon is that commands such as Open and Print are now housed in **Backstage view**.

The Ribbon

The Ribbon contains multiple **tabs**, each with several **groups** of commands. Some tabs, like **Drawing Tools** or **Table Tools**, may appear only when you are working with certain items like images or tables. In addition, you can add your own customized tabs that contain your favorite commands.



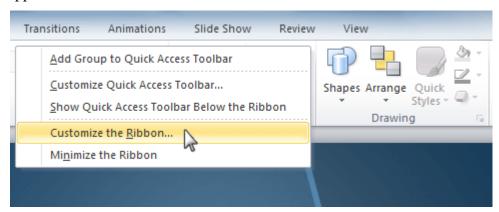


Certain programs, such as **Adobe Acrobat Reader**, may install additional tabs to the Ribbon. These tabs are called **add-ins**.

To customize the Ribbon:

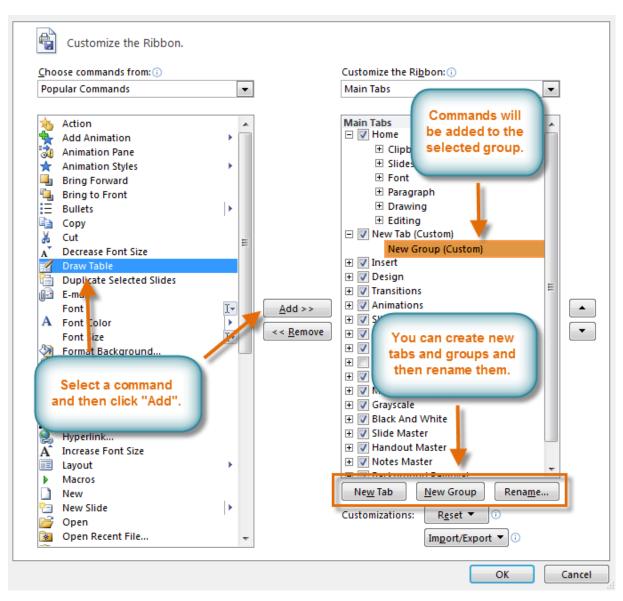
You can customize the Ribbon by creating your own **tabs** that house your desired commands. Commands are always housed within a **group**, and you can create as many groups as you need to keep your tabs organized. You can even add commands to any of the default tabs, as long as you create a custom group within the tab.

1. Right-click the Ribbon, and select **Customize the Ribbon**. A **dialog box** will appear.

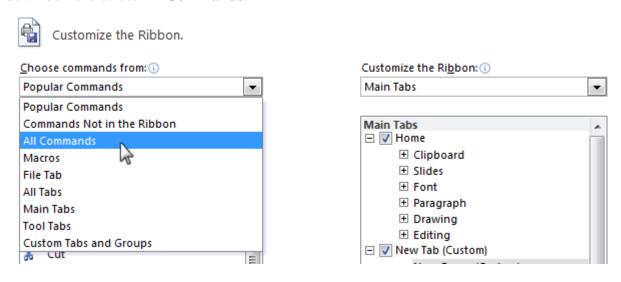


- 2. Click **New Tab**. A new tab will be created with a new group inside it.
- 3. Make sure the new group is selected.
- 4. Select a command from the list on the left, then click **Add**. You can also drag commands directly into a group.
- 5. When you are done adding commands, click **OK**.





If you do not see the command you want, click on the **Choose commands** drop-down box and select **All Commands**.

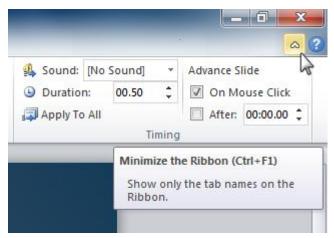




To minimize and maximize the Ribbon:

The Ribbon is designed to be easy to use and responsive to your current task; however, if you find it is taking up too much of your screen space, you can **minimize** it.

1. Click the **arrow** in the upper-right corner of the Ribbon to minimize it.



2. To maximize the Ribbon, click the arrow again.

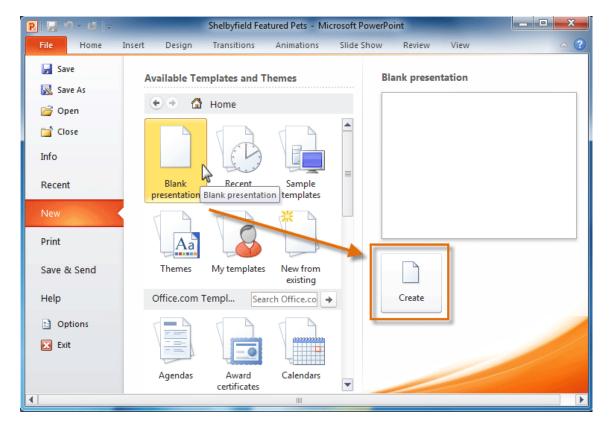
Creating and opening presentations

PowerPoint files are called **presentations**. When you start a new project in PowerPoint, you'll need to **create a new presentation**. You'll also need to know how to **open an existing presentation**.

To create a new blank presentation:

- 1. Click the **File** tab. This takes you to **Backstage view**.
- 2. Select New.
- 3. Select **Blank presentation** under **Available Templates and Themes**. It will be highlighted by default.
- 4. Click **Create**. A new blank presentation appears in the PowerPoint window.

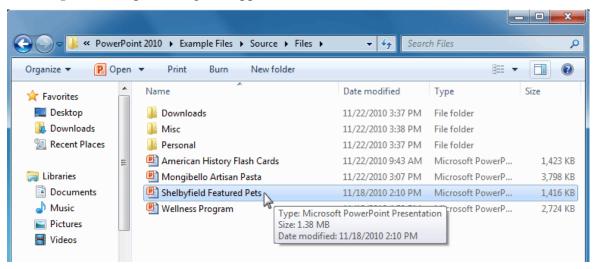




To save time, you can create your presentation from an **Office.com template**, which you can also select under **Available Templates and Themes**.

To open an existing presentation:

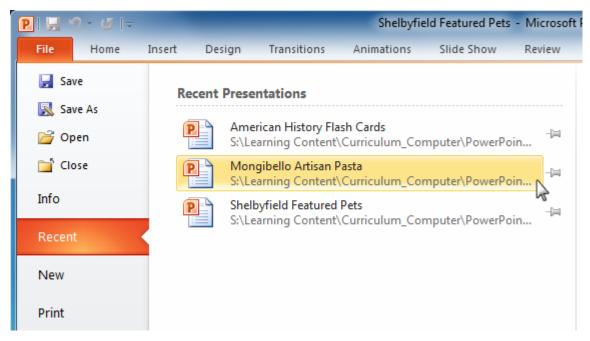
- 1. Click the **File** tab. This takes you to **Backstage view**.
- 2. Select **Open**. The Open dialog box appears.



3. Select your desired presentation, then click **Open**.

If you have opened the existing presentation recently, it may be easier to choose **Recent** from the **File tab**instead of **Open** to search for your presentation.

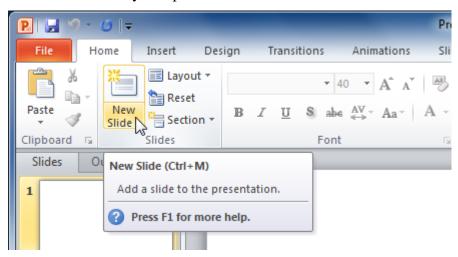




Working with slides

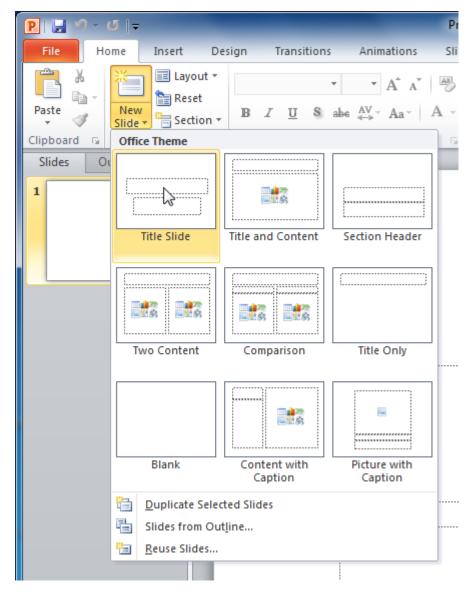
To insert a new slide:

1. From the **Home** tab, click the bottom half of the **New Slide** command to open the menu of slide layout options.



2. Select the slide you want to insert.





3. A new slide will be added your presentation.

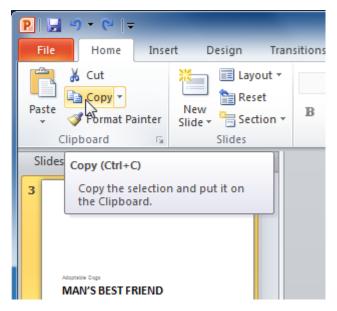
To instantly add a slide that uses the same layout as the one you have selected, click the top half of the **New Slide** command.



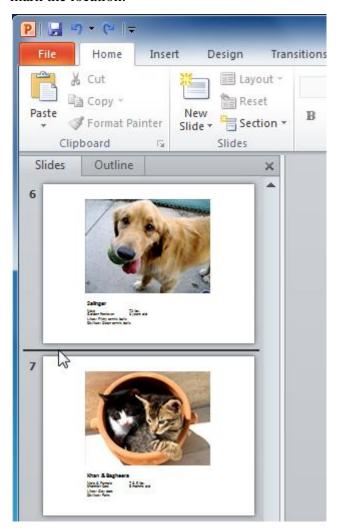
To copy and paste a slide:

- 1. On the **Slides** tab in the left pane, select the slide you want to copy.
- 2. Click the **Copy** command on the **Home** tab. You can also right-click your selection and choose **Copy**.



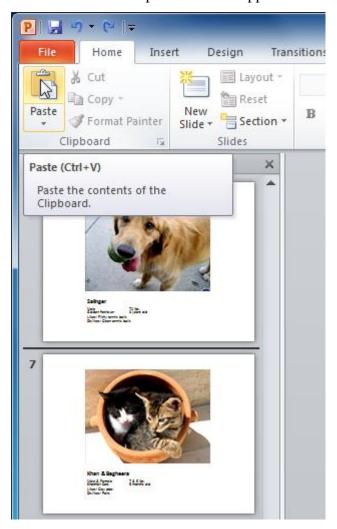


3. In the left pane, click just below a slide—or between two slides—to choose the location where you want the copy to appear. A **horizontal insertion point** will mark the location.





4. Click the **Paste** command on the Home tab. You can also right-click and choose **Paste**. The copied slide will appear.



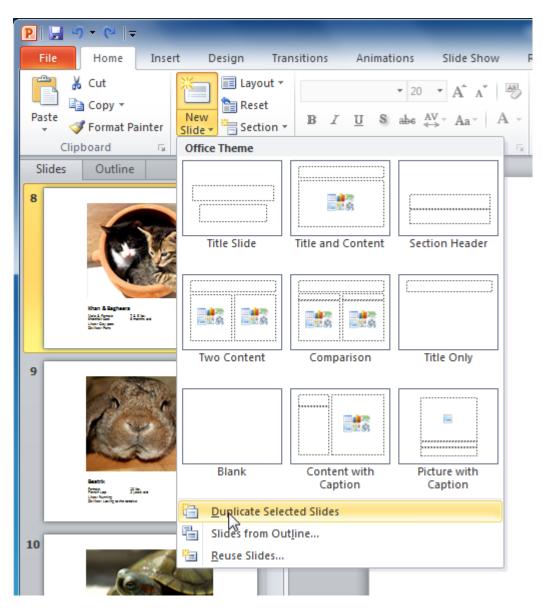
To select multiple slides, press and hold **Ctrl** on your keyboard and click the slides you want to select.

To duplicate a slide:

An alternative to copying and pasting, **duplicating slides** copies the selected slide and—in one step—pastes it directly underneath. This feature does not allow you to choose the location of the copied slide, nor does it offer Paste Options for advanced users, so it's more convenient for quickly inserting similar slides.

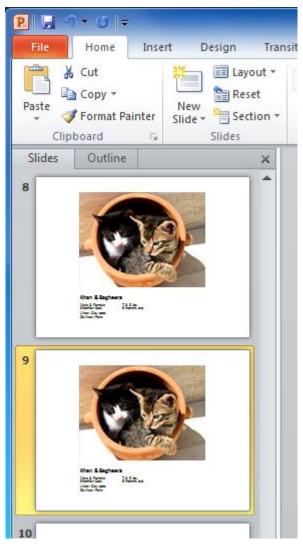
- 1. Select the slide you want to duplicate.
- 2. Click the **New Slide** command.
- 3. Choose **Duplicate Selected Slides** from the drop-down menu.





4. A copy of the selected slide appears underneath the original.





To delete a slide:

- 1. Select the slide you want to delete.
- 2. Press the **Delete** or **Backspace** key on your keyboard.

To move a slide:

- 1. Select the slide you want to move.
- 2. Click, hold, and **drag** your mouse to a new location. A horizontal insertion point will mark the location.





3. **Release** the mouse button. The slide will appear in the new location.

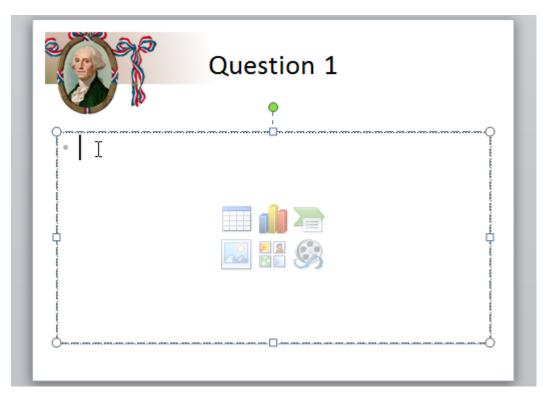
Text basics

If you're new to PowerPoint, you'll need to learn the **basics of working with text** so you can add and arrange text on your slides. You'll need to know how to **insert**, **delete**, **move**, and **format** text, as well as how to use **text boxes**.

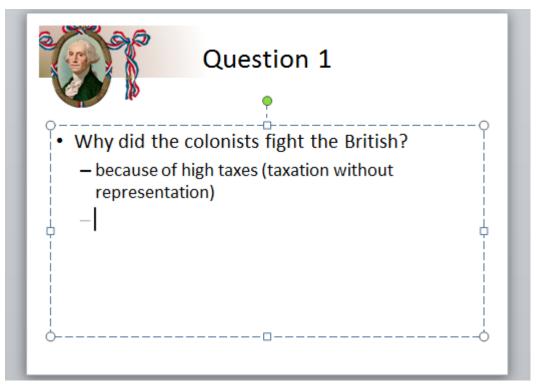
To insert text:

- 1. Click the placeholder or text box where you want to insert text.
- 2. The **insertion point** appears.





3. Type directly into the placeholder or text box.



To delete text:

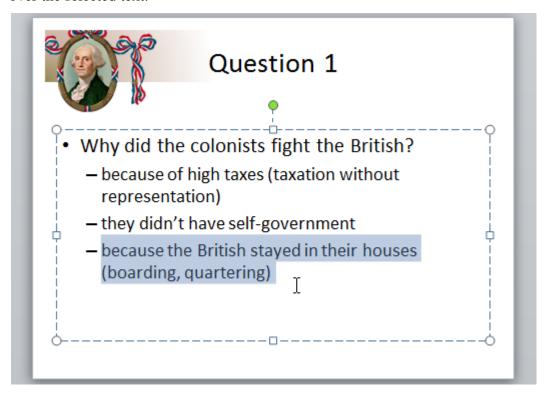
- 1. Place the **insertion point** next to the text you want to delete.
- 2. Press the **Backspace** key on your keyboard to delete text to the **left** of the insertion point.



3. Press the **Delete** key on your keyboard to delete text to the **right** of the insertion point.

To select text:

- 1. Place the **insertion point** next to the text you want to select.
- 2. Click the mouse button. While holding it down, drag the mouse over the text.
- 3. Release the mouse. The text will be selected. A **highlighted box** will appear over the selected text.



To copy and paste text:

- 1. Select the text you want to copy.
- 2. Click the **Copy** command on the Home tab. You can also right-click your selection and choose **Copy**.



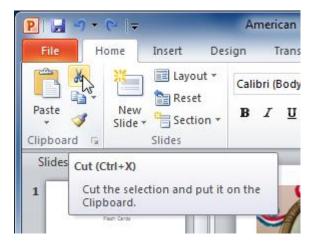


- 3. Place your insertion point where you want the text to appear.
- 4. Click the **Paste** command on the Home tab. The text will appear.



To cut and paste text:

- 1. Select the text you want to cut.
- 2. Click the **Cut** command on the **Home** tab. You can also right-click your selection and choose **Cut**.



- 3. Place your insertion point where you want the text to appear.
- 4. Click the **Paste** command on the Home tab. The text will reappear.

Presenting Slide Show

Once your slide show is completed, you will need to learn how to present it to an audience. PowerPoint offers several tools and features that can help make your presentation smooth, engaging, and professional.

To present your slide show, you'll need to know how to start it. PowerPoint allows you to start your slide show from the first slide or from any slide within the slide show. Once your slide show has started, you'll need to know how to advance through the slides.



To start a slide show:

- 1. Select the **Slide Show** tab.
- 2. Click the **From Beginning** command in the **Start Slide Show** group to start the slide show with the first slide.



You can also start the slide show from the slide you prefer by selecting the slide and clicking on **From Current Slide** from the Start Slide Show group. This option is convenient if you only want to view or present certain slides.

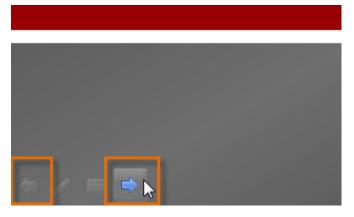
Another option for starting the slide show is to select **Slide Show** view at the bottom of the window.



To advance and reverse slides:

- 1. Hover your mouse over the bottom-left of the screen. A menu will appear.
- 2. Click the **right arrow** to advance slides and the **left arrow** to reverse slides.

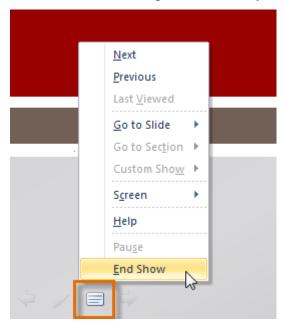




You can also use the **arrow keys** on your keyboard to advance and reverse slides.

To stop or end a slide show:

To end a slide show, hover and select the **menu box options** command and click **End Show**. You can also press the **Esc**key at the top left of your keyboard to end the show.



Saving presentations

When you create a new presentation in PowerPoint, you'll need to know how to **save** it in order to access and edit it later. PowerPoint allows you to save your presentations in several ways.

To use the Save As command:

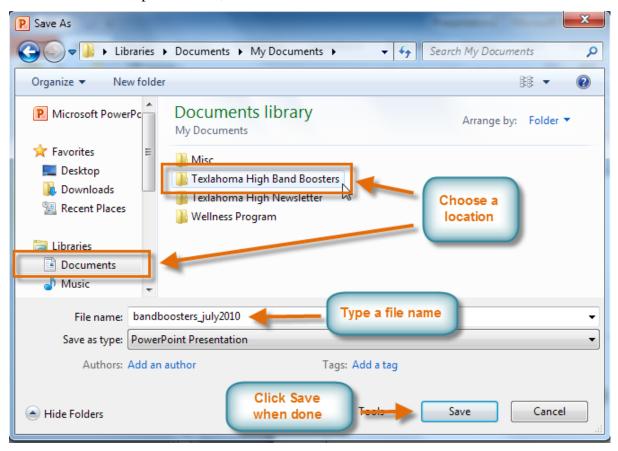
Save As allows you to choose a name and location for your presentation. It's useful if you've first created a presentation or if you want to save a different version of a presentation while keeping the original.

- 1. Click the **File** tab.
- 2. Select **Save As**.





- 3. The **Save As** dialog box will appear. Select the location where you want to save the presentation.
- 4. Enter a name for the presentation, then click **Save**.



To use the Save command:

1. Click the Save command on the Quick Access toolbar.









UNIT V – MICROSOFT ACCESS 2010

Introduction to tables in Microsoft Access 2010:- creating a table – Saving a table – Working with fields in a table – Entering records in a table – Introducing query types – Creating a Query – Saving a Query.

Introduction to Databases

Access 2010 is a **database creation and management** program. To understand Access, you must first understand **databases**.

What is a database?

A database is a collection of data that is stored in a computer system. Databases allow their users to enter, access, and analyze their data quickly and easily. They're such a useful tool that you see them all the time. Ever waited while a doctor's receptionist entered your personal information into a computer, or watched a store employee use a computer to see whether an item was in stock? Then you've seen a database in action.

The easiest way to understand a database is to think of it as a **collection of lists**. Think about one of the databases we mentioned above: the database of patient information at a doctor's office. What lists are contained in a database like this? Well, to start with, there's a list of patient names. Then there's a list of past appointments, a list with medical history for each patient, a list of contact information, and so on.

This is true of all databases, from the simplest to the most complex. For instance, if you like to bake you might decide to keep a database containing the types of cookies you know how to make and the friends you give these cookies to. This is one of the simplest databases imaginable. It contains two lists: a list of your friends, and a list of cookies.





However, if you were a professional baker you would have many more lists to keep track of: a list of customers, a list of products sold, a list of prices, a list of orders ... it goes on and on. The more lists you add, the more **complex** the database will be.

Why use a database?

If a database is essentially a collection of lists stored in tables and you can build tables in Excel, why do you need a real database in the first place? While Excel is great at storing and organizing numbers, Access is far stronger at handling non-numerical data, like names and descriptions. Non-numerical data plays a significant role in almost any database, and it's important to be able to sort and analyze it.

However, the thing that really sets databases apart from any other way of storing data is **connectivity**. We call a database like the ones you'll work with in Access a **relational database**. A relational database is able to understand how lists and the objects within them **relate** to one another. To explore this idea, let's go back to the simple database with two lists: names of your friends, and the types of cookies you know how to make. You decide to create a third list to keep track of the batches of cookies you make and who they're for. Because you're only making cookies you know the recipe for and you're only going to give them to your friends, this new list will get all of its information from the lists you made earlier.





See how the third list uses words that appeared in the first two lists? A database is capable of understanding that the **Dad** and **Oatmeal** cookies in the **Batches** list are the same things as the **Dad** and **Oatmeal** in the first two lists. This relationship seems obvious, and a person would understand it right away. However, an Excel workbook wouldn't.

Excel would treat all of these things as distinct and unrelated pieces of information. In Excel, you'd have to enter every single piece of information about a person or type of cookie each time you mentioned it because that database wouldn't be **relational** like an Access database. Simply put, relational databases can recognize what a human can: If the same words appear in multiple lists, they **refer** to the same thing.

The fact that relational databases can handle information this way allows you to **enter**, **search**, and **analyze** data in more than one table at a time. All of these things would be difficult to do in Excel, but in Access even complicated tasks can be simplified and made fairly user friendly.





In Access, lists are a little more complex than the ones you write on paper. Access stores its lists of data in **tables**, which allow you to store even more detailed information. In the table below, the **People** list in the amateur baker's database has been expanded to include other relevant information about the baker's friends.

ID +	Name +	Cell Phone 🕝	Birthday 🔻	Nut Allergy?
:	1 Dad	555-0404	June 3	Yes
:	2 Aunt Aida	555-9890	July 8	No
:	3 Joakim	555-0462	September 19	No
4	4 Dwane	555-9975	January 5	No
	5 Allegra	555-0099	January 14	Yes

If you are familiar with other programs in the Microsoft Office suite, this might remind you a lot of Excel, which allows you to organize data in a similar way. In fact, you could build a similar table in Excel.

Databases in Access 2010 are composed of four objects: **tables**, **queries**, **forms**, and **reports**. Together, these objects allow you to enter, store, analyze, and compile your data however you want.

The Access objects

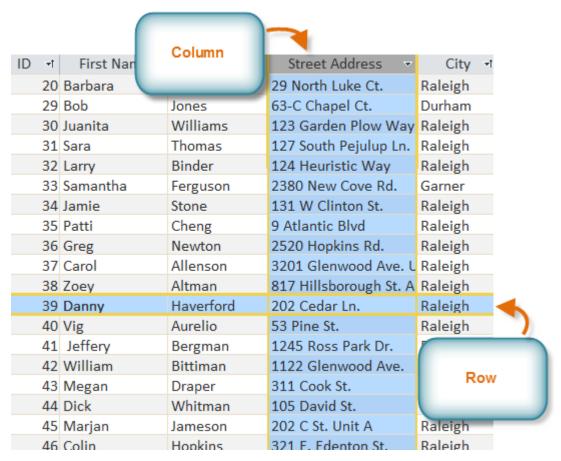
Tables, queries, forms, and reports are the framework for any database you create in Access. Understanding how each of these objects works will help you create a database that will be useful and help you retrieve the information you need.



Tables

By this point, you should already understand that a database is a collection of data organized into many connected **lists**. In Access, all data is stored in **tables**, which put tables at the heart of any database.

You might already know that tables are organized into vertical **columns** and horizontal **rows**.

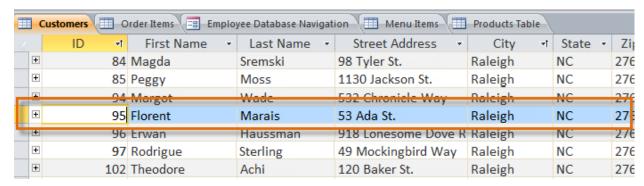


In Access, rows and columns are referred to as **records** and **fields**. A **field** is more than just a column; it's a way of organizing information by the **type** of data it is. Every piece of information within a field is of the same **type**. For example, every entry in a field called **First Name** would be a name, and every entry in field called **Street Address** would be an address.

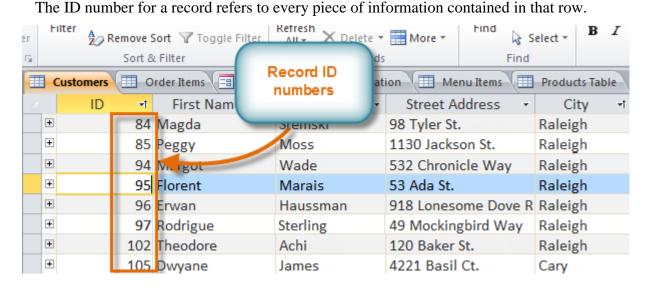




Likewise, a **record** is more than just a row; it's a unit of information. Every cell in a given row is part of that row's record.



Notice how each record spans several fields. Even though the information in each record is organized into fields, it belongs with the other information in that record. See the **number** at the left of each row? That's the **ID number** that identifies each record.





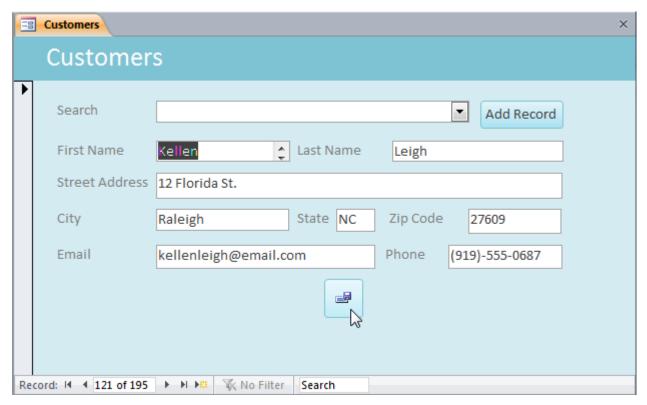
Tables are good for storing **closely related information**. Let's say you own a bakery and have a database that includes a table with your customers' names and information—their phone numbers, home addresses, and email addresses. Because these pieces of information are all details about your customers, you'd include them in the same **table**. Each customer would be represented by a unique **record**, and each type of information about customers would be stored in its own field. If you decided to add any more information—say, a customer's birthday—you would simply create a new field within the same table.

Forms, queries, and reports

Although **tables** store all of your data, the other three objects—**forms**, **queries**, and **reports**—offer you ways to work with it. Each of these objects interacts with the **records** stored in your database's tables.

Forms

Forms are used for **entering**, **modifying**, and **viewing** records. You probably have had to fill out forms on many occasions, like when visiting a doctor's office, applying for a job, or registering for school. The reason forms are used so often is that they're an easy way to guide people into entering data correctly. When you enter information into a form in Access, the data goes exactly where the database designer wants it to go: into one or more related tables.



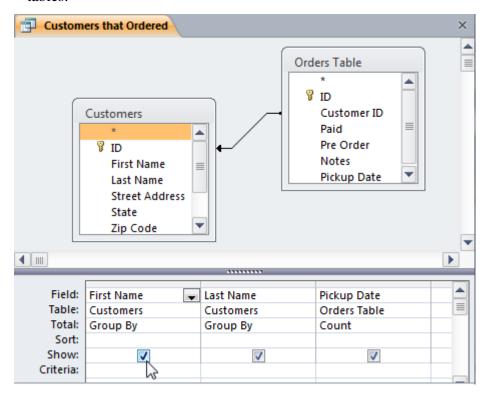


Forms make entering data easier. Working with extensive tables can be confusing, and when you have connected tables you might need to work with more than one at a time to enter a set of data. However, with forms it's possible to enter data into multiple tables at once, all in one place. Database designers can even set restrictions on individual form components to ensure all of the needed data is entered in the correct format. All in all, forms help keep data consistent and organized, which is essential for an accurate and powerful database.

Queries

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.

Queries are far more powerful than the simple searches you might carry out within a table. While a **search** would be able to help you find the name of one customer at your business, you could run a **query** to find the name and phone number of every customer who's made a purchase within the past week. A well-designed query can give information you might not be able to find out just by looking through the data in your tables.





Reports

Reports offer you the ability to **present** your data **in print**. If you've ever received a computer printout of a class schedule or a printed invoice of a purchase, you've seen a database report. 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**.



Getting Started in Access

Whenever you're learning a new program, it's important to familiarize yourself with the program window and the tools within it. Working with Access is no different. Knowing your way around the Access environment will make learning and using Access much easier.

In this lesson, you will familiarize yourself with the Access environment, including the Ribbon, Backstage view, Navigation pane, Document Tabs bar, and Record Navigation bar. You will also learn how to navigate with a navigation form, if your database includes one.



Getting to know Access 2010

If you are familiar with Access 2007, you'll notice that there are not too many changes to the 2010 interface other than the addition of **Backstage view**.

However, if you are new to Access, you will first need to take some time to familiarize yourself with the Access environment.

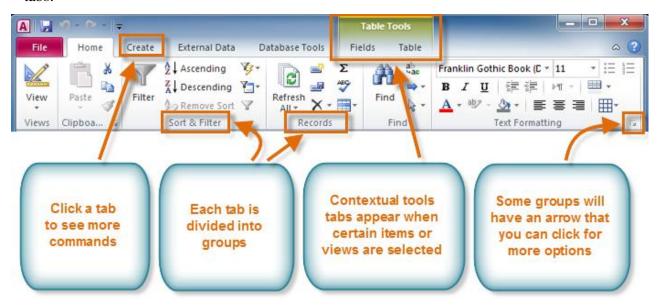
Click the buttons in the interactive below to learn how to navigate the Access window.

Working with your Access environment

The **Ribbon** and **Quick Access toolbar** are where you will find the commands you will use to perform common tasks in Access. If you are familiar with Access 2007, you will find that the main difference in the Access 2010 Ribbon is that commands such as **Open** and **Print** are now housed in **Backstage view**.

The Ribbon

The Ribbon contains multiple **tabs**, each with several **groups** of commands. Some tabs, like **Form Layout Tools** and **Table Tools**, may appear only when you are working with certain objects like forms and tables. These tabs are called**contextual tabs**, and they are highlighted in a contrasting color to distinguish them from normal tabs.

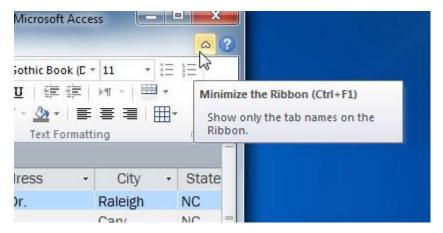


To minimize and maximize the Ribbon:

The Ribbon is designed to be easy to use and responsive to your current task; however, if you feel that it's taking up too much of your screen space you can **minimize** it.

1. Click the **arrow** in the upper-right corner of the Ribbon to minimize it.





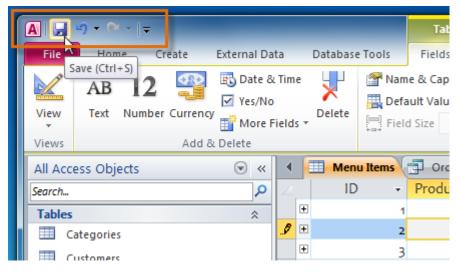
2. To maximize the Ribbon, click the arrow again.

When the Ribbon is minimized, you can make it reappear by clicking a tab.

However, the Ribbon will disappear again when you are not using it.

The Quick Access toolbar

The **Quick Access toolbar** is located above the Ribbon, and it lets you access common commands no matter which tab you are on. By default, it shows the **Save**, **Undo**, and **Repeat** commands. If you'd like, you can **customize** it by**adding additional commands**.



Note that the **Save** command only saves the current open object. In addition, the **Undo** command will not undo certain actions, like adding a record. Pay close attention to your information when using the **Undo**command to make sure it has the desired effect.

Backstage view

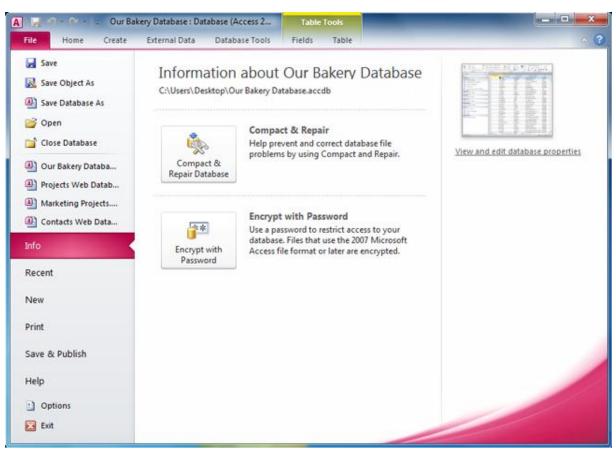
Backstage view gives you various options for opening, saving, printing, and viewing more information about your database. It is similar to the **Office Button Menu** from



Access 2007 and the **File Menu** from earlier versions of Access. However, unlike these menus, it is a full-page view, which makes it easier to work with.

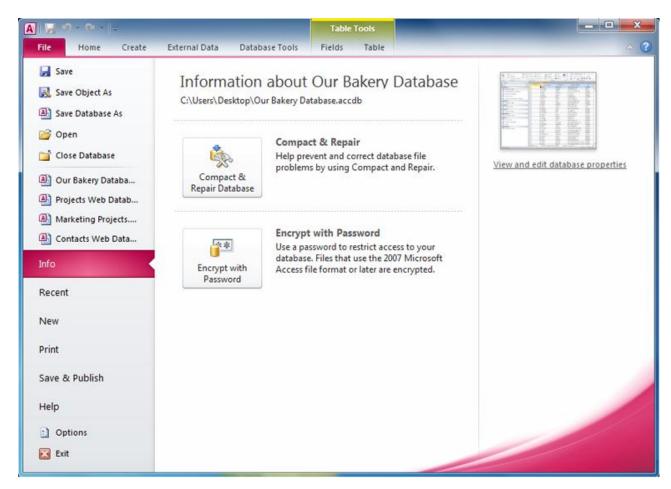
To get to Backstage view:

1. Click the **File** tab.



- 2. You can choose an option on the left side of the page.
- 3. To get back to your database objects, click any tab on the Ribbon. Click the buttons in the interactive below to learn about the different things you can do in Backstage view.

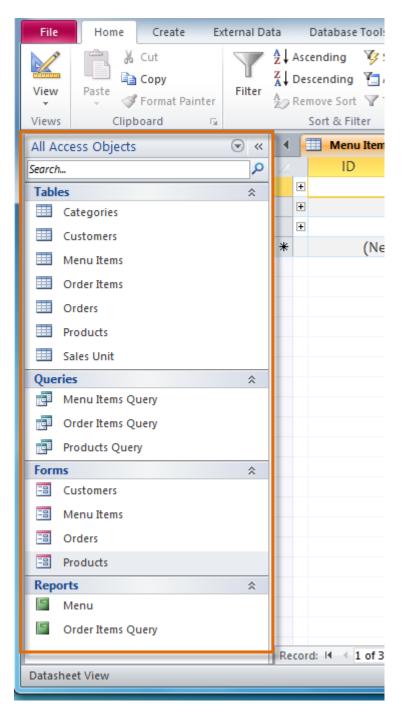




The Navigation pane

The **Navigation pane** is a list containing every object in your database. For easier viewing, the objects are organized into groups by type. You can **open**, **rename**, and **delete** objects using the Navigation pane.



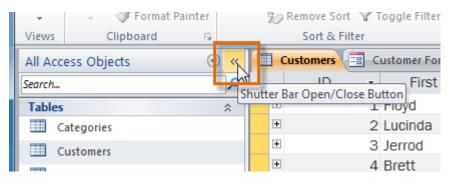


To minimize and Maximize the Navigation pane:

The Navigation pane is designed to help you manage all of your objects, but if you feel that it takes up too much of your screen space you can **minimize** it.

1. Click the **double arrow** in the upper-right corner of the Navigation pane to minimize it.





2. To make the Navigation pane visible again, click the **double arrow** >>> to maximize it.

If you would like to make the Navigation pane smaller without fully minimizing it, you can **resize** it. Simply**click** and **drag** the right border of the Navigation pane. When it is the desired size, release your mouse.

Working with Tables

While there are four types of database objects in Access 2010, **tables** are arguably the most important. Even when you're using forms, queries, and reports, you're still working with tables because that's where your **data** is stored. Tables are at the heart of any database, so it's important to understand how to use them.

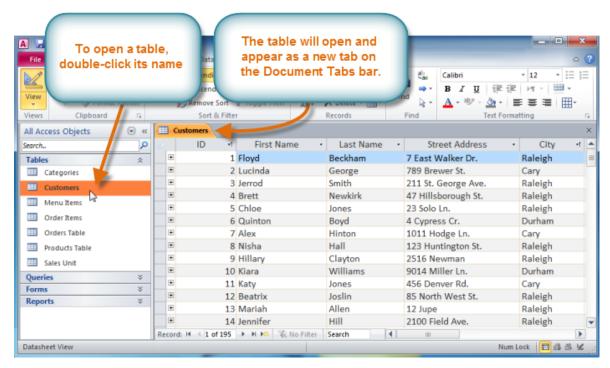
Table basics

If you're new to Microsoft Access, you'll need to learn the basics of working with tables so you can open, navigate, add information, and edit them.

To open an existing table:

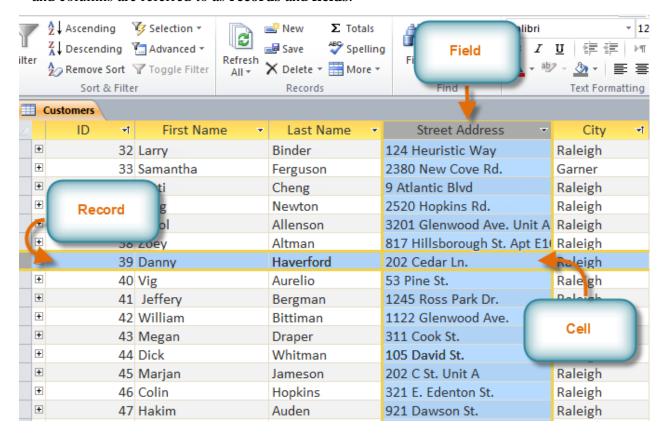
- 1. **Open** your database, and locate the **Navigation pane**.
- 2. In the **Navigation pane**, locate the table you want to open. Tables are marked with the icon.
- 3. **Double-click** the name of the table. It will open and appear as a **tab** in the **Document Tabs bar**.





Understanding tables

All tables are composed of horizontal **rows** and vertical **columns**, with small rectangles called **cells** in the places where rows and columns intersect. In Access, rows and columns are referred to as **records** and **fields**.

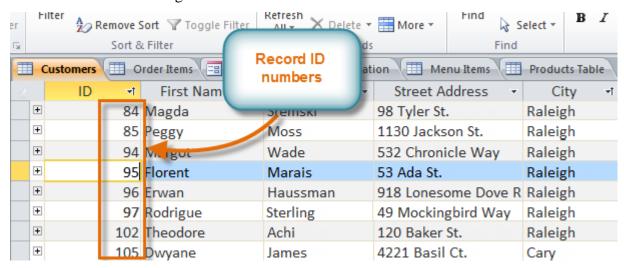




A **field** is a way of organizing information by type. Think of the **field name** as a question, and every cell within that field as a response to that question.

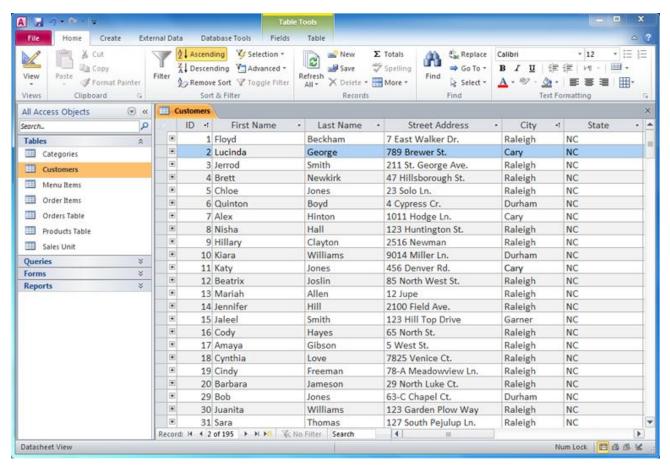


A **record** is one unit of information. Every cell on a given row is part of that row's record. Each record has its own **ID number**. Within a table, each ID number is unique to its record and refers to all of the information within that record. The ID number for a record cannot be changed.



Each cell of data in your table is part of both a **field** and a **record**. For instance, if you had a table of names and contact information, each person would be represented by a record, and each piece of information about each person—name, phone number, address, and so on—would be contained within a distinct field on that record's row. Click the buttons in the interactive below to learn how to navigate a table.

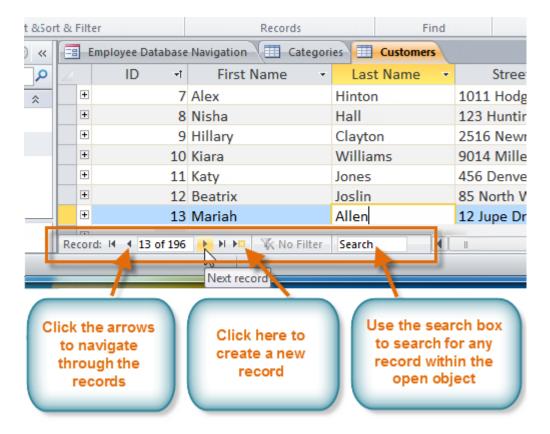




Navigating within tables

To navigate records in a table, you can use the up and down arrow keys, scroll up and down, or use the arrows in the record navigation bar located at the bottom of your table. You can also find any record in the currently open table by searching for it using the record search box. Simply place your cursor in the search box, type any word that appears in the record you want to find, and press Enter. To view additional records that match your search, press Enter again.





To navigate between fields, you can use the left and right arrow keys or scroll left and right.

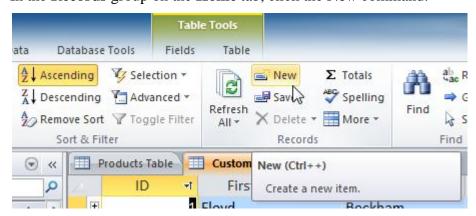
Adding records and entering data

Entering data into tables in Access is similar to entering data in Excel. To work with records, you'll have to enter data into **cells**.

To add a new record:

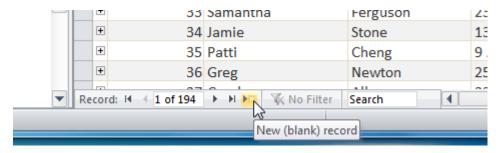
There are three ways to add a new record to a table:

• In the **Records** group on the **Home** tab, click the **New** command.

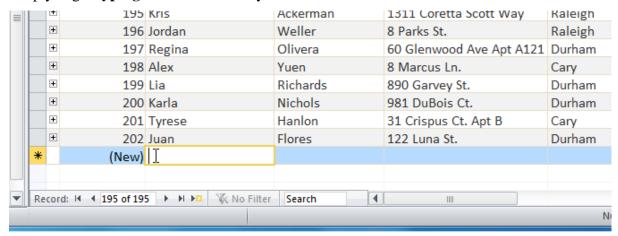


 On the Record Navigation bar at the bottom of the window, click the New Record button.

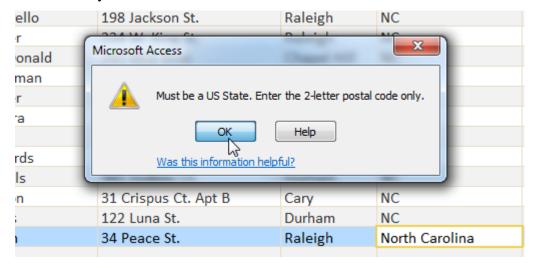




• Simply begin **typing** in the row below your last added record.



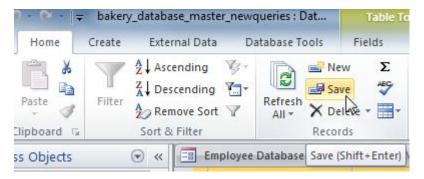
Occasionally when you enter information into a record, a window will pop up to tell you the information you've entered is invalid. This means the field you're working with has a **validation rule**, which is a rule about the type of data that can appear in that field. Click **OK**, then follow the instructions in the pop-up window to**re-enter** your data.



To save a record:

- 1. Select the **Home** tab, and locate the **Records** group.
- 2. Click the **Save** command.





Editing records

To quickly edit any record within a table, simply click it and type your changes. However, Access also offers you the ability to **find and replace** a word within multiple records, as well as to **delete** records entirely.

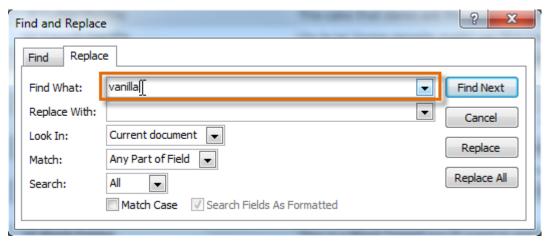
To replace a word within a record:

You can edit multiple occurrences of the same word by using **Find and Replace**, which searches for a term and replaces it with another term.

- 1. Select the **Home** tab, and locate the **Find** group.
- 2. Select the **Replace** command. The **Find and Replace** dialog box will appear.

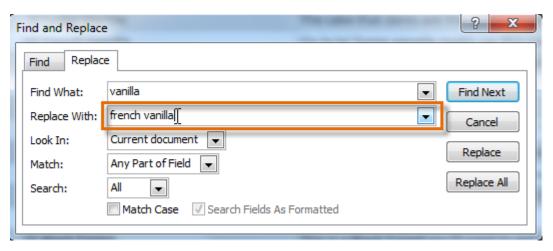


3. Click the **Find What:** box, and type the word you want to find.

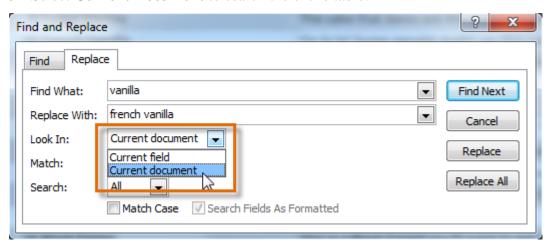


4. Click the **Replace With**: box, and type the word you want to replace the original word.



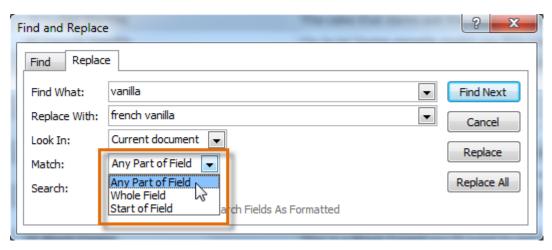


- 5. Click the **Look In:** drop-down arrow to select the area you want to search.
 - o Select **Current Field** to limit your search to the currently selected field.
 - Select Current Document to search the entire table.

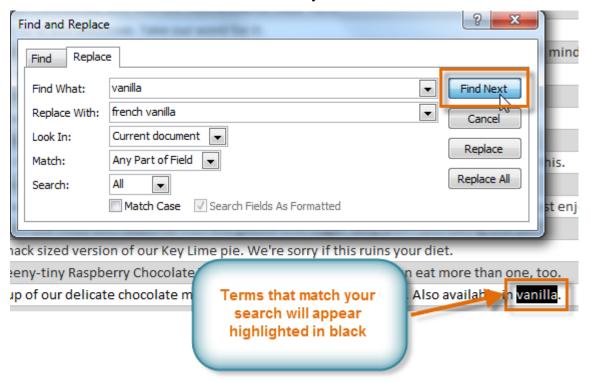


- 6. Click the **Match:** drop-down arrow to select how closely you'd like results to match your search.
 - Select Any Part of Field to search for your search term in any part of a cell.
 - Select Whole Field to search only for cells that match your search term exactly.
 - Select **Beginning of Field** to search only for cells that start with your search term.



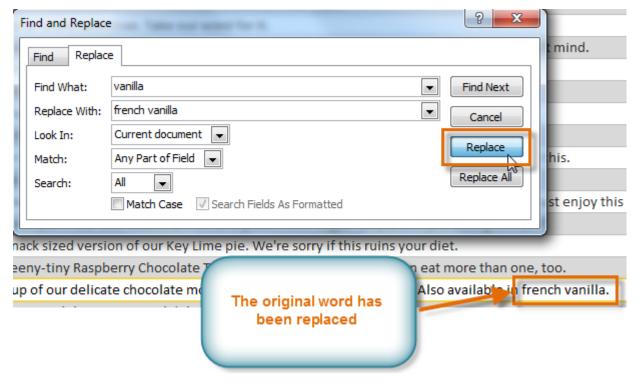


7. Click **Find Next** to find the next occurrence of your search term.

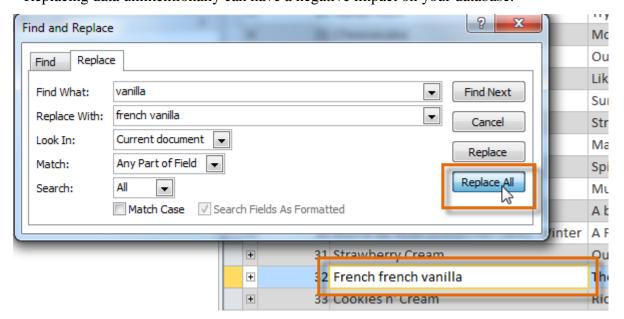


8. Click **Replace** to replace the original word with the new one.





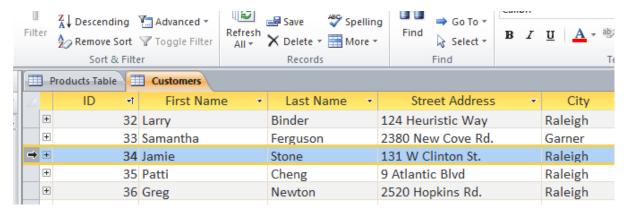
While you can use **Replace All** to replace every instance of a term, replacing them one at a time allows you to be absolutely certain you edit only the data you want. Replacing data unintentionally can have a negative impact on your database.



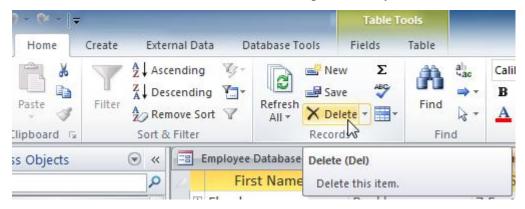
To delete a record:

1. Select the entire record by clicking the **gray border** at the left side of the record.

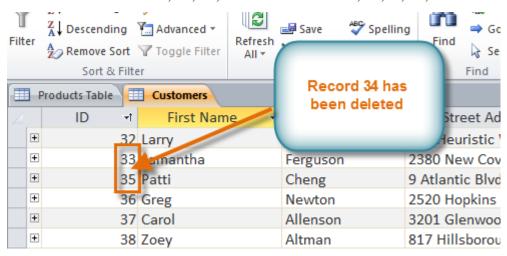




- 2. Select the **Home** tab, and locate the **Records** group.
- 3. Click the **Delete** command. The record will be permanently deleted.



The ID numbers assigned to records stay the same even after you delete a record. For example, if you delete the 34th record in a table, the sequence of record ID numbers will read ...32, 33, 35, 36... rather than ...32, 33,34, 35, 36...



Designing a Query

What are queries?

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.

How are queries used?

Queries are far more powerful than the simple searches or filters you might use to find data within a table. This is because queries can draw their information from **multiple** tables. For example, while you could use a **search** in the customers table to find the name of one customer at your business or a **filter** on the orders table to view only orders placed within the past week, neither would let you view both customers and orders at once. However, you could easily run a **query** to find the name and phone number of every customer who's made a purchase within the past week. A well-designed query can give information you might not be able to find out simply by examining the data in your tables.

When you run a query, the results are presented to you in a table, but when you design one you use a different view. This is called **Query Design view**, and it lets you see how your query is put together.

Click the buttons in the interactive below to learn how to navigate the **Query Design view**.

One-table queries

Let's familiarize ourselves with the query-building process by building the **simplest** query possible: a one-table query.

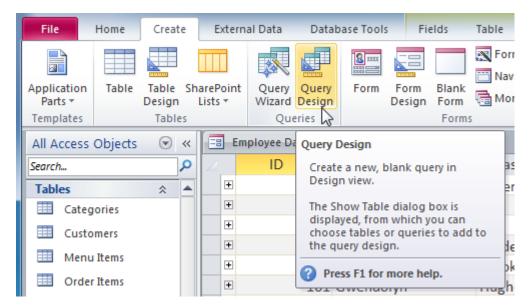
We'll run a query on the **Customers** table of our bakery database. Let's say our bakery is having a special event, and we want to invite our customers who live nearby because they are the most likely to come. This means we need to see a list of all of the customers who live close by — and **only** those customers.

If you think this sounds a little like applying a filter, you're right. A one-table query is actually just an **advanced filter**applied to a table.

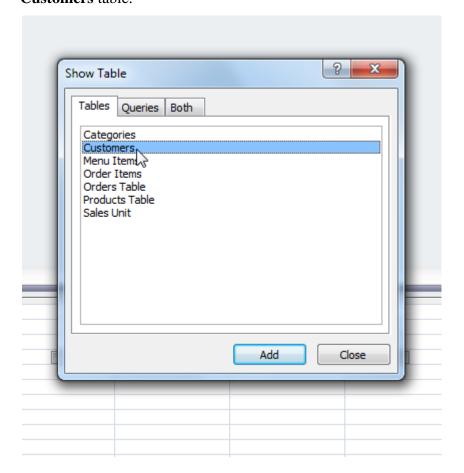
To apply a simple one-table query:

- 1. Select the **Create** tab on the Ribbon, and locate the **Queries** group.
- 2. Select the **Query Design** command.





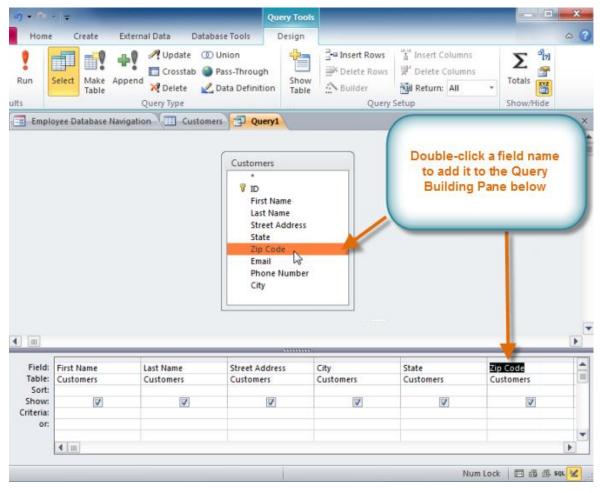
3. Access will switch to Query Design view. In the Show Table dialog box that appears, select the table you want to run a query on. Click Add, then click Close. We are running a query about our customers, so we'll add the Customers table.





4. The selected table will appear as a small window in the **Object Relationship pane**. In the table window, double-click the **field names** you want to include in your query. They will be added to the **design grid** in the bottom part of the screen.

In our example, we want to mail invitations to customers who live in a certain area, so we'll include the **First Name**, **Last Name**, **Street Address**, **City**, **State**, and **Zip Code** fields. We aren't planning on calling or emailing our customers, so we don't have to include the **Phone Number** or **Email** fields.

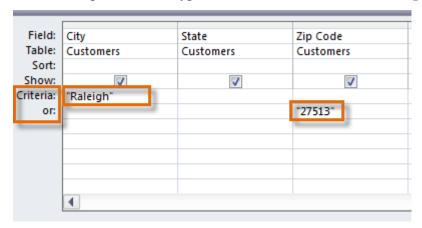


5. Set the **search criteria** by clicking the cell in the **Criteria: row** of each **field** you want to filter. Typing criteria into more than one field in the Criteria: row will set your query to include only results that meet all of the criteria. If you want to set multiple criteria but don't need the records shown in your results to meet them all, type the first criteria in the Criteria: row and additional criteria in the **Or: row** and the rows beneath it.

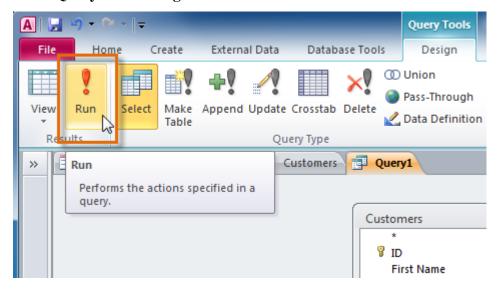


For this one-table query, we'll use very simple search criteria.

- We want to find our customers who live in a city called Raleigh, so in our City field, we'll type "Raleigh". Typing "Raleigh" in quotation marks will retrieve all records with an exact match for Raleigh in the City field.
- Some customers who live in the suburbs live fairly close, and we'd like to invite them as well. We'll add their zip code, 27513, as another criteria. Because we want to find customers who either live in Raleigh or in the 27513 zip code, we'll type "27513" in the or: row of the Zip Code field.



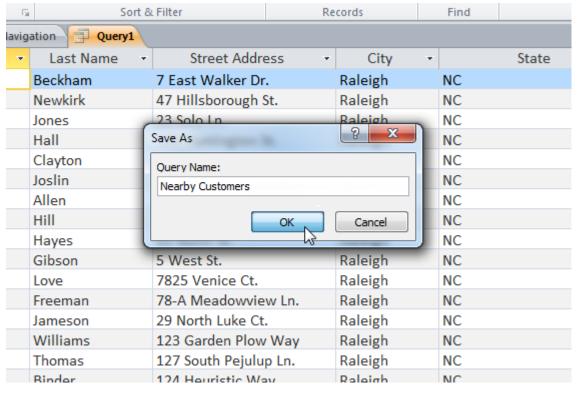
6. After you have set your criteria, **run** the query by clicking the **Run** command on the **Query Tools Design** tab.



7. The query results will be displayed in the query's **Datasheet view**, which looks like a table. If you want, **save** your query by clicking the **Save** command in the



Quick Access toolbar. When prompted to name it, type the desired name, then click **OK**.

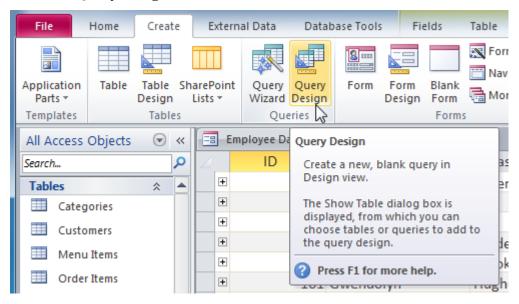


Creating a multi-table query

Now that we've planned our query, we're ready to design and run it. If you have created written plans for your query, be sure to reference them often throughout the query design process.

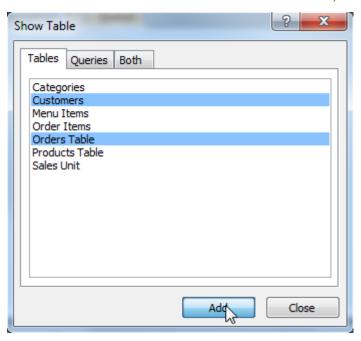
To create a multi-table query:

1. Select the **Query Design Command** from the **Create** tab on the Ribbon.

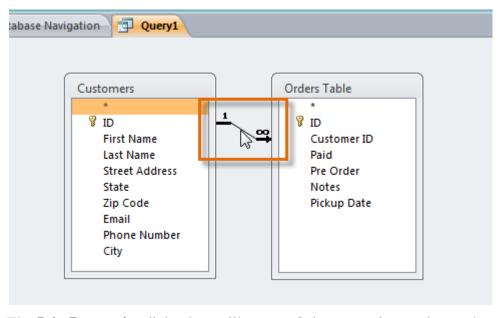




2. In the Show Table dialog box that appears, select each table you want to include in your query, then click Add. After you've added all of the tables you want, click Close. When we planned our query, we decided we needed information from the Customers and Orders table, so we'll add them.



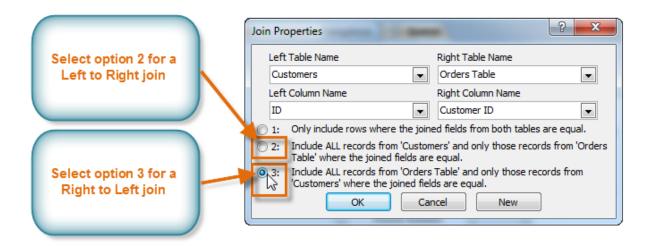
3. The tables will appear in the **Object Relationship pane**, which is linked by a **join line**. Double-click the thin section of the join line between two tables to edit its **join direction**.



4. The **Join Properties** dialog box will appear. Select an option to choose the direction of your join.



- Choose option 2: for a left-to-right join. In our query, the left table is the Customers table, so choosing this would mean all of the customers who met our location criteria—whether or not they had placed an order would be included in our results. We don't want to choose this option for our query.
- Choose option 3: for a right-to-left query. Because our right table is our Orders table, selecting this option will let us work with records for all of the orders and only the customers who've placed orders. We'll choose this option for our query because this is exactly the data we want to see.



5. In the table windows, double-click the **field names** you want to include in your query. They will be added to the **design grid** in the bottom part of the screen.

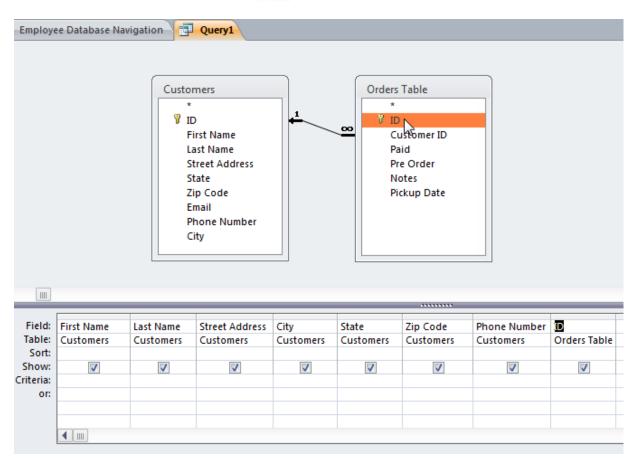
In our example, we'll include most of the fields from

the Customers table: First Name, Last Name,

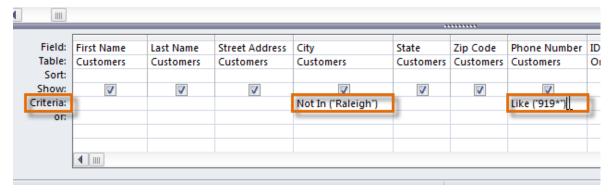
Address, City, State, Zip Code, and Phone Number. We'll also

include the **ID number** from the **Orders** table.



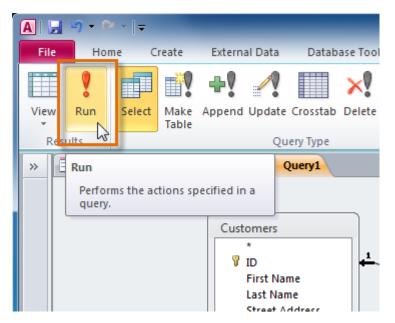


- 6. Set field **criteria** by entering the desired criteria in the criteria row of each field. We want to set two criteria:
 - First, to find customers who do **not** live in Raleigh, we'll type **Not In** ("Raleigh") in the City field.
 - Second, to find customers who have a phone number beginning with the area code **919**, we'll type **Like** (**''919*''**) in the **Phone Number** field.

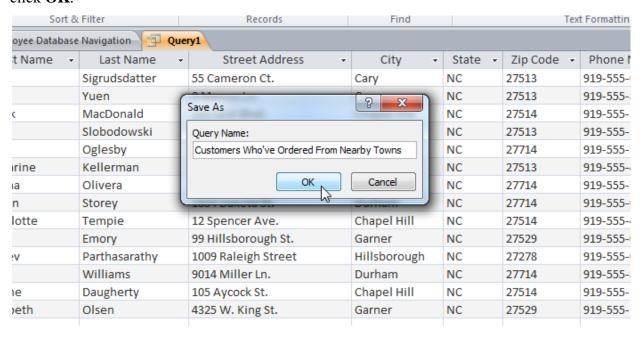


7. After you have set your criteria, **run** the query by clicking the **Run** command on the **Query Tools Design** tab.

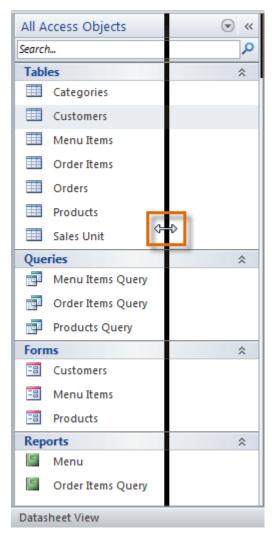




8. The query results will be displayed in the query's **Datasheet view**, which looks like a table. If you want, **save** your query by clicking the **Save** command on the Quick Access toolbar. When prompted to name it, type the desired name, then click **OK**.



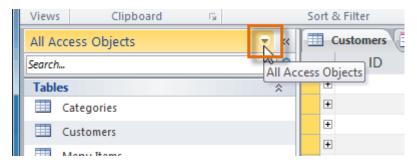




To sort objects in the Navigation pane:

By default, your objects are sorted by type, with the tables in one group, the forms in another, and so on. However, if you want you can sort the objects in the Navigation pane into groups of your choosing.

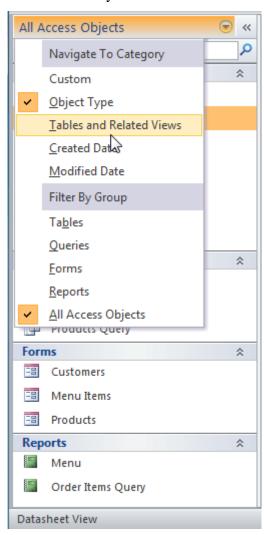
1. Click the **drop-down arrow** to the right of the words **All Access Objects**.



- 2. In the drop-down menu, select the desired sort.
 - Select **Custom** to create a custom group for sorting the objects. After applying the sort, drag the desired objects to the new group.
 - o Select **Object Type** to group the objects by type. This is the default setting.

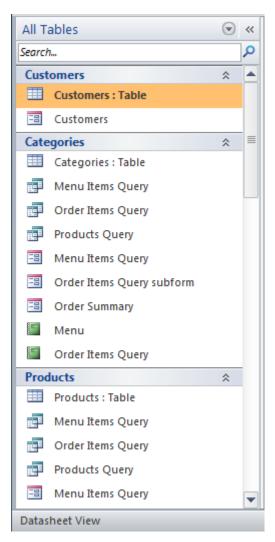


- Select **Tables and Related Views** to group forms, queries, and reports together with the tables they refer to.
- Select Created Date or Modified Date to sort the objects from most to least recently created or modified.



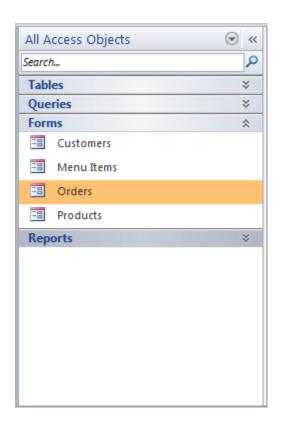
3. The objects in the Navigation pane will now be sorted to reflect your choice.





To further customize the appearance of the Navigation pane, you can **minimize groups** of objects you don't want to see. Simply click the upward double arrow next to the name of the group. To restore the group to its full size, click the downward double arrow.



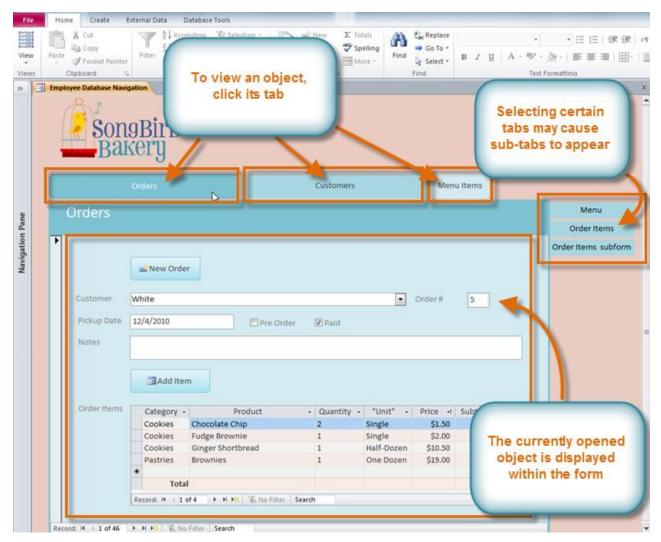


Databases with navigation forms

Some databases include a **navigation form** that opens automatically when the database is opened. Navigation forms are designed to be a **user-friendly** replacement for the **Navigation pane**. They contain **tabs** that allow you to view and work with common forms, queries, and reports. Having your frequently used objects available to you in one place lets you access them quickly and easily.

To **open** an object from a navigation form, simply click its tab. The object will be displayed within the navigation form. Once an object is open, you can work with it as you normally would.





Generally, navigation forms include only the objects a typical user will need to work with fairly regularly, which is why your navigation form may not include every single form, query, or report. This makes it easier to navigate the database. By hiding tables and rarely used forms, queries, and reports, it also reduces the chance of the database being damaged by users accidentally editing or deleting necessary data.

For this reason, it's important to ask your database designer or administrator before you work with objects that are not available in your navigation form. Once you have the go-ahead, you can simply **maximize** the **Navigation pane** and open the objects from there.

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