

## Wireless Internet Architecture Lab Exercises and Solutions

### Lab 1 Design a WAP site as follows:

Radiant Software Ltd  
( Join with us to make a Wireless World)

#### Solution:

```
<wml>
  <card id="card1" title="First Lab">
    <p align="center" mode="wrap">
      <big><b>Radiant Software Ltd</b></big><br/>
      ( MSU-Technology Wing )
    </p>
  </card>
</wml>
```



### Lab 2 Design a WAP page about RADIANT in the following way:

- The page have the title "Radiant Software Ltd"
- The content of the page:

Radiant Software Ltd

**RADIANT** the pioneer in higher end technology training and specilizes in *Client Server Computing, GUI and OOPS* methodology and Dedicates iteself to evolve a New Era in Software Education.

Radiant Provides Job Oriented Training with Ultimate Technical Excellence.

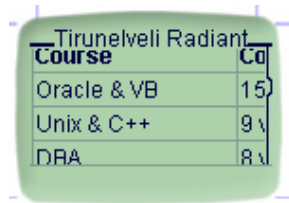
*Radiant Offers the following Courses:*

Oracle  
Visual Basic  
Oracle DBA  
Unix Administration  
CADRe  
Unix C, C++





```
</wml>
```



Tirunelveli Radiant	
Course	Co
Oracle & VB	15
Unix & C++	9
DRA	8

#### Lab 4 Design a site as follows: (Do it yourself)

Mathametical formulas

```
1 < 2 = True
1 > 2 = False
(1>2) & (1<3) - False
```

Using WML entities.

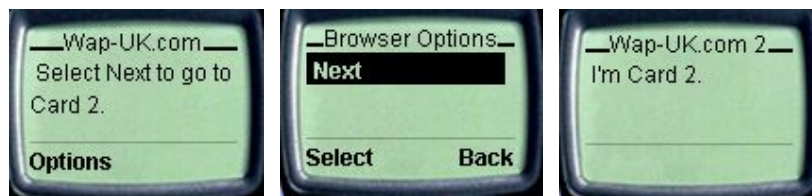
#### Lab 5 Create a WAP page that will traverse from one card to another.

**Solution:**

```
<?xml version="1.0"?>
  <!DOCTYPE wml PUBLIC "-//WAPFORUM//DTD WML 1.1//EN"
"http://www.wapforum.org/DTD/wml_1.1.xml">

  <wml>
    <card id="Card1" title="Wap-UK.com">
      <do type="accept" label="Next">
        <go href="#Card2"/>
      </do>
      <p>
        Select Next to go to Card 2.
      </p>
    </card>
    <card id="Card2" title="Wap-UK.com">
      <p>
        I'm Card 2.
      </p>
    </card>
  </wml>
```

The following is the output of the above program.



**Lab 6 Create a WAP page to explain about the timer event.****Solution:**

```

<?xml version="1.0"?>
<!DOCTYPE wml PUBLIC "-//WAPFORUM//DTD WML 1.1//EN"
"http://www.wapforum.org/DTD/wml_1.1.xml">
<wml>
  <card id="Intro" ontimer="#Main" title="Wap-Uk.com">
    <timer value="150"/>
    <p>
      Welcome to Wap-Uk.com!!
      We will bring you to our main page after 15 seconds.
    </p>
  </card>
  <card id="Main" title="Menu">
    <p>
      This is our main page. Under construction.
    </p>
  </card>
</wml>

```

Following is the output of above code.

**Lab 7 Design a WAP site contains the following information. (Do it your self)**

- Title for all cards should be "Radiant Software Ltd".
- The first card is the Welcome card.

Welcome To Radiant Family

- The second card gives the information about Radiant.

Radiant Software Ltd

**RADIANT** the pioneer in higher end technology training and specializes in *Client Server Computing*, **GUI** and **OOPS** methodology and Dedicates itself to evolve a New Era in Software Education.

- The third card includes all course details.  
Radiant Offers the following courses.

Oracle  
Visual Basic

Oracle DBA  
Unix Administration  
CADRe  
Unix C, C++

**WAP**

- The fourth card includes all branch names.

Radiant Branches

West Mambalam  
Adyar  
Anna Nagar  
Adambakkam  
Purasaiwalkam  
Mylapore  
Tambaram  
Vadapalani

Note : Allow user to navigate from one card to another card.

**Lab 8 Try the same program with template element. (Do it yourself)**

---

**Lab 9 Design a WAP site for all details about all branches of Radiant. (Do it yourself)**

---

- The title should be “Radiant Software Ltd”
- The first card list out all branch names as a links.

**West Mambalam**

Adyar  
Anna Nagar  
Adambakkam  
Purasaiwalkkam  
Mylapore  
Tambaram

- After selecting any one of the branch, the third card shows the information about that particular branch.

Radiant Software Ltd

West Mambalam Branch

Contact Phone No. 4843959 /  
4720101 /  
4725823

Note : Design this page using <a> and <anchor> elements

**Lab 10 Create your own WBMP Image and display in a WAP site.**

---

```

<wml>
  <card id = "WMLImage" title = "Bala's Home Page">
  <p>
    
    <b> Welcome to Rainy days</b>
  </p>
</card>

</wml>

```



### Lab 11 Create a WAP page that will allow user to input and give the result.

#### Solution:

```

<?xml version="1.0"?>
<!DOCTYPE wml PUBLIC "-//WAPFORUM//DTD WML 1.1//EN"
"http://www.wapforum.org/DTD/wml_1.1.xml">
<wml>
  <card id="main" title="Wap-Uk.com">
    <do type="accept" label="Next">
      <go href="#wel"/>
    </do>
    <p>
      Please enter your name:
      <input type="text" name="name"/>
    </p>
  </card>
  <card id="wel" title="Welcome">
    <do type="prev" label="Back">
      <prev/>
    </do>
    <p>
      Your name is $(name). Click Back to go to previous page.
    </p>
  </card>
</wml>

```

Following will be the output of above code.



**Lab 12 Design a WAP site to Receive the information from the user and Display information. (Do it yourself)**

---

- The first card receives information from the user.

Radiant Software Ltd

Enter Your Name .....  
 Enter Your Age .....  
 Select your Country.....

- After receiving, the second card shows the information.

Welcome .....  
 You are .... yers old..  
 You are from.....

**Lab 13 Design a WAP Weather site that containing three columns Date, F'Cast and Temp and in which F'Cast column is containing the WBMP images.**

---

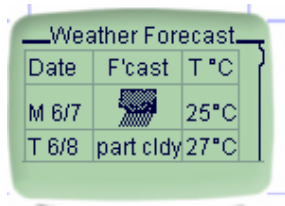
```
<wml>
  <card id="card1" title="Weather Forecast">
    <p>
      <table columns="3" align="LCC">
        <tr>
          <td>Date</td><td>F&apos;cast</td><td>T &#xB0;C</td>
        </tr>
        <tr>
          <td>M 6/7</td><td></td>
          <td>25&#xB0;C</td>
        </tr>
        <tr>
          <td>T 6/8</td><td></td>
          <td>27&#xB0;C</td>
        </tr>
      </table>
    </p>
  </card>
</wml>
```



```

        </tr>
        <tr>
        <td>W 6/9</td><td></td>
        <td>24&#xB0;C</td>
        </tr>
        <tr>
        <td>T 6/10</td><td></td>
        <td>28&#xB0;C</td>
        </tr>
        <tr>
        <td>F 6/11</td><td></td>
        <td>29&#xB0;C</td>
        </tr>
    </table>
</p>
</card>
</wml>

```



#### Lab 14 Create a function called Compare in WML Script that will use the if .. and Else statement.

Your source code will look like this.

```

extern function compare(varName,number) {
var myNumber = 10;
var myString = "lion";
var result;
if (Lang.isInt(number)) { // First if statement:
// if this returns true,
// else block is not executed.
number = Lang.parseInt(number);
if (number < myNumber) { // Comparison of numbers.
// If comparison returns true,
// this substitution is executed:
result = "Your number is smaller.";
}
// If (number < myNumber) did not return true,
// control comes here, where if statement is
// detected:
else if (number == myNumber) {
// If comparison returns true,
// this substitution is executed:
result = "Our numbers are equal.";
}
// If both comparison with number and myNumber returned
// false, this block is executed:

```

```
else {
result = "Your number is bigger.";
}
} // Comparison if (Lang.isInt(number)) ends here.
```

**Lab 15 Create a WML Script that will use the While Loop Your source code will look like this.**

---

**WML Page Code:**

```
<wml>
<card id="card1" title="WHILE" newcontext="true">
<do type="accept" label="Get result">
<go href="ex4050.wmls#whileStatement('result')"/>
</do>
<p>
<u>$(result)</u>
</p>
</card>
</wml>
```

**WML Script Page Code:**

```
extern function whileStatement(result) {
var i = 10;
var j = 0;
var answer = "";
while (i > j) {
answer += i + " is bigger than " + j + ". ";
j++;
}
WMLBrowser.setVar(result,answer);
WMLBrowser.refresh();
}
```

**Lab 16 Create a WML Script Page that will using Continue statement in the for loop and while loop**

---

**WML Page Code:**

```
<wml>
<card id="card1" title="Continue 1" newcontext="true">
<do type="accept" label="Get result">
<go href="ex4060.wmls#odds()"/>
</do>
<p>
<u>$(result)</u>
<br/>
<a href="#card2" title="Next">Next card</a>
</p>
</card>
<card id="card2" title="Continue 2" newcontext="true">
<do type="accept" label="Get result">
<go href="ex4061.wmls#oddsWhile()"/>
</do>
```

```

<p>
<u>$(result2)</u>
</p>
</card>
</wml>

```

**WML Script Page Code:**

The use of a **continue** statement in a **for** loop

```

extern function odds() {
var answer = "";
for (var i = 1; i < 10; ++i) {
if (i%2 == 0) continue;
answer += " * " + i;
}
WMLBrowser.setVar("result",answer);
WMLBrowser.refresh();
}

```

The use of a **continue** statement in a **while** loop

```

extern function oddsWhile() {
var answer = "";
var i = 0;
while (i < 10) {
++i;
if (i%2 == 0) continue;
answer += " * " + i;
}
WMLBrowser.setVar("result2",answer);
WMLBrowser.refresh();
}

```

**Lab 17 Design a WAP site for Mortgage Calculation that will allow the user to edit the value of Principle , interest , no of payments through Input box and display the result using WML script function.**

Your WML Code will look like this.

```

wml>
    <card id="card1" title="Mortgage Calc" newcontext="true">
        <p>
            Principal: <input format="N*N" name="principal" title="Principal:"
value="150000"/>
            <br/>
            Interest: <input format="N*M" name="interest" title="Interest:"
value="8.00"/>
            <br/>
            Num payments:<input format="N*N" name="num_payments" title="Num. payments:"
value="360"/>
            <br/>

            Payment = <u>$(payment)</u>
                <do type="accept" label="Calculate">

```

```
<go
href="mortgage.wmls#payment('$principal','$interest','$num_
payments)')"/>
</do>
<do type="help" label="Help">
    <go href="#help"/>
</do>
</p>
</card>
<card id="help" title="Help">
<p>
<u>Principal</u> - $$ amount<br/>
    <u>Interest</u> - e.g. 7.5<br/>
    <u>Payments</u> - e.g. 360 for 30 years<br/>
    <do type="prev" label="Back">
        <prev/>
    </do>
</p>
</card>
</wml>
```

**Your WMLScript Code will look Like this.**

```
/*
 * Caluclute a mortgage's payment
 *
 * @param varname the variable name to store the result
 * @param principal the principal
 * @param interest the interest rate
 * @param num_payments the number of payements
 * @return the payment
 */
extern function payment(varname, principal, interest, num_payments) {
    /*
     * Interest formulae:
     *
     * If (i != 0), then:
     *   pmt = principal * [i * (1+i)^n / ((1+i)^n - 1)]
     *
     * If (i == 0), then:
     *   pmt = principal / n
     */
    var mi = interest/1200; // monthly interest from annual percentage
    var payment = 0;
    if (mi != 0) {
        var tmp = Float.pow((1 + mi), num_payments);
        payment = principal * (mi * tmp / (tmp - 1));
    } else {
        if (num_payments != 0)
            payment = principal / num_payments;
    }
    var s;
    if (payment != 0)
        s = String.format("$%6.2f", payment);
    else
```

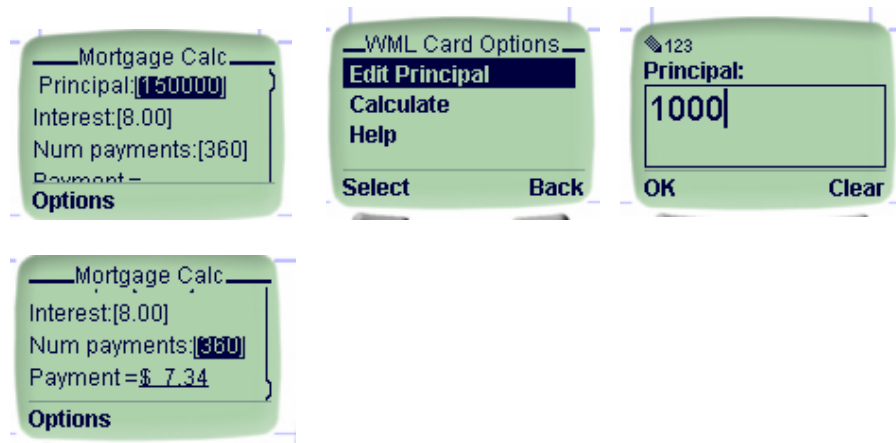
```

        s = "Missing data";

        /*
        * Send the result to the browser
        */
        WMLBrowser.setVar(varname, s);

        /*
        * Make sure the browser updates its current card
        */
        WMLBrowser.refresh();
    };

```



**Lab 18 Design a WAP site as follows.. (Do it Your self)**

- The first card is the Welcome card.
- The second card contains all courses offered by Radiant.
- The Third card shows about Radiant.

Allow the user to view the second card only after showing about the Radiant using WML events. (Note : Use onenterforward event).

1. Get the login and password from the user. After getting don't allow the user to view the login card once again. (Note : Use onenterbackward event).

2. Design a WAP site for Radiant courses.

- The first card gives all the course names offered by Radiant.
- Allow the user to select any one course.
- Give the details about the particular course.

Note : Use onpick event

3. Get the input from the User using <input> element and display in different card.

**Lab 19 Do the following Script pages for practice.**

1. Write a WMLScript to display "welcome".

2. Write a WMLScript to add two numbers and call this from WML deck.
3. Write a WMLScript program to perform all arithmetic operations.
4. Write a WMLS to display the numbers 1 to 10 using the loops.
5. Write a program to get two inputs from the user and perform all arithmetic operations.
6. Write a program to get a information about student and display the status of the student. Receive marks in subjects and check the grade.

**Lab 20 Do the following exercises for practice.**

---

1. Write a WMLScript to give a welcome to the user using alert function.
2. Write a WMLScript to get the input from the user and check the given input is integer or not.
3. Write a Script to receive the inputs from the user and find the power that numbers after round the floating numbers.
4. Write a WMLScript to test the given email id is valid or not.  
Note : All characters should be small letters and no special characters or not allowed except & and .
5. Find the number of words in a given string.
6. Check the given string is present or not in a message.

❧

## Tags

Tags	Syntax	Example
<a>	<a accesskey="value" href= "url" title="title">...</a>	<a href="index.wml">Home</a>
<access>	<access domain= "domain" path="path"/>	<head> <access domain="forta.com"/>
<anchor>	<anchor title="title">...</anchor>	<anchor> home <go href="index.wml"/>
<b>	<b>...</b>	<p> Example of the use of <b>bold</b> text. </P>
big>	<big>...</big>	<p> Example of the use of <b>big</b> text. </P>
br>	 	<p> Welcome   to the WAP version of my web site </p>
<card>	<card id = "id" newcontext= "true false" onenterbackward="URL" onenterforward="URL" ontimer="URL" ordered="true false" title="title">...</card>	<card id ="welcome"> <p> welcome to the WAP version of my web site! </p> </card>
</catch>	<catch name="name" onthrow="value">...</catch>	<catch name="err#1" onthrow="/error.wml"> <receive name="msg"> </catch>
<do>	<do label= "label="name" optional="true false" type="type">...</do>	<card id ="card1"> <do type="accept" label="card 2"> <go href="#card2"/> </do>
<em>	<em>...</em>	<p> <b>Example of the use of &lt;em&gt;emphasis &lt;/em&gt; formatting</b> </p>
<exit>	<exit>...</exit>	<exit> <send value="100"/> </exit>
<fieldset>	<fieldset title="title">... </fieldset>	<p> <fieldset title="name"/> <input type="text" name="fname"/> </br>
<go>	<go accept-charset="charset" href="URL" method="GET POST" snedreferer="true false">...</go>	<go href="/search/index.cfm" method="post"> <postfield name="user" value="Benforta"/> <postfield name="format" value="full"/> </go>

<code>&lt;head&gt;</code>	<code>&lt;head&gt;...&lt;/head&gt;</code>	<code>&lt;head&gt;</code> <code>&lt;access domain="forta.com" /&gt;</code> <code>&lt;/head&gt;</code>
<code>&lt;i&gt;</code>	<code>&lt;i&gt; ... &lt;/i&gt;</code>	<code>&lt;p&gt;</code> Example of the use of <code>&lt;i&gt;italic&lt;/i&gt;</code> text. <code>&lt;/p&gt;</code>
<code>&lt;img&gt;</code>	<code>&lt;img align="bottom middle top"</code> <code>alt="text" height="value"</code> <code>hspace="value" localsrc="name id"</code> <code>src="path" space="value"</code> <code>width="value" /&gt;</code>	<code>&lt;img src="mailbox.bmp" localsrc=" " mailbox alt=" " /&gt;</code>
<code>&lt;input&gt;</code>	<code>&lt;input accesskey="value"</code> <code>emptyok="true false"</code> <code>format="mask"</code> <code>maxlength="value" name="name"</code> <code>size="value" tabindex="value" title="</code> <code>"title" type="password text"</code> <code>value="value" /&gt;</code>	<code>&lt;p&gt;</code> name: <code>&lt;input type="text" name="user"/&gt;</code> ID: <code>&lt;input type="text" name="ID" format="NNNN" /&gt;</code> <code>&lt;p&gt;</code>
<code>&lt;link&gt;</code>	<code>&lt;link href="URL" rel="value"</code> <code>sendreferer="false true" /&gt;</code>	<code>&lt;head&gt;</code> <code>&lt;link href="/next/index.wml" rel="next" /&gt;</code> <code>&lt;/head&gt;</code>
<code>&lt;meta&gt;</code>	<code>&lt;meta content="content"</code> <code>forua="true false"</code> <code>http-equiv="name="name"</code> <code>scheme="value" /&gt;</code>	<code>&lt;head&gt;</code> <code>&lt;meta http-equiv="cache.control" content="max.age=1"</code> <code>forua="true" /&gt;</code> <code>&lt;/head&gt;</code>
<code>&lt;noop&gt;</code>	<code>&lt;noop /&gt;</code>	<code>&lt;do type="accept"&gt;</code> <code>&lt;noop /&gt;</code> <code>&lt;/do&gt;</code>
<code>&lt;onevent&gt;</code>	<code>&lt;onevent type="type"&gt; ....</code> <code>&lt;/onevent&gt;</code>	<code>&lt;onevent type="onenterbackward"&gt;</code> <code>&lt;go href=" /index.wml"/&gt;</code> <code>&lt;/onevent&gt;</code>
<code>&lt;optgroup&gt;</code>	<code>&lt;optgroup title="title"&gt; ...</code> <code>&lt;optgroup&gt;</code>	<code>&lt;select name="color"&gt;</code> <code>&lt;optgroup title="color1"&gt;</code> <code>&lt;option value="red"&gt; Red&lt;/option&gt;</code> <code>&lt;/optgroup&gt;</code>
<code>&lt;option&gt;</code>	<code>&lt;option onpick="URL" title="title"</code> <code>value="value"&gt;...&lt;/option&gt;</code>	<code>&lt;select name="size"&gt;</code> <code>&lt;option value="s"&gt;small&lt;/option&gt;</code> <code>&lt;/select&gt;</code>
<code>&lt;p&gt;</code>	<code>&lt;p align="center left right"</code> <code>mode="nowrap wrap"&gt;...&lt;/p&gt;</code>	<code>&lt;wml&gt;</code> <code>&lt;p align="left"&gt;</code> This text is left justified. <code>&lt;/p&gt;</code>
<code>&lt;postfield&gt;</code>	<code>&lt;postfield name="name"</code> <code>value="value"/&gt;</code>	<code>&lt;go href="/search/index.cfm" method="post"&gt;</code> <code>&lt;postfield name="user" value="BenForta"/&gt;</code> <code>&lt;postfield name="format" value="full"/&gt;</code> <code>&lt;/go&gt;</code>
<code>&lt;prev&gt;</code>	<code>&lt;prev&gt;...&lt;/prev&gt;</code>	<code>&lt;do type="accept" label="previous"&gt;</code> <code>&lt;prev/&gt;</code> <code>&lt;/do&gt;</code>



<receive>	<receive name="value" />	<catch name="err#1" onthrow="/error.wml"> <receive name="msg"> </catch>
<refresh>	<refresh>...</refresh>	<do type="options" label="reset"> <refresh> <setvar name="fname" value= " " /> <setvar name="lname" value= " " /> </refresh> </do>
<reset>	<reset/>	<go href="/home"> <reset> </go>
<select>	<select name="value" i value="value" multiple="false true" name="name" tabindex="value" title="title" value="value">...</select>	<select name="size"> <option value="s">small</option> <option value="l">large</option> </select>
<send>	<send value="value" />	<exit> </send value = "100" /> </exit>
<setvar>	<setvar name="name" value="value" />	<do type = "options" label= Reset"> <refresh> <setvar name="fname" value= " " /> <setvar name="lname" value= " " /> </refresh> </do>
<small>	<small> ...</small>	<p> Example of the use of <small>small</small> text </p>
<spawn>	<spawn accept-charset="charset" href="URL" method="GET POST" enexit="value" sendreferer="true false">...</spawn>	<spawn href="*/child*" onexit="*/continue*"> <setvar name="fname" value="Ben" /> <setvar name="lname" value="Forta" /> </spawn>
<strong>	<strong>...</strong>	<p> Example of the use of <strong>strong</strong>format. </p>
<table>	<table align="c  r l" columns="value" title="title">...</table>	<table columns="2"> <tr> <td> Name:</td> </tr>
<td>	<td>...</td>	<table columns="2"> <tr> <td> name:<td> <td>Ben Forta</td> </tr>
<template>	<template>...</template>	<template ontimer="/logout.wml"> <do type="prev" label="previous"> <prev/> </do> </template>

<throw>	<throw name="name">... </throw>	<throw name="logon failure"> <send value="Invalid login name or password"/> </throw>
<timer>	<timer name="name" value="value"/>	<card id="card1" ontimer="#card2"> <timer value="50"/> <p> waiting 5 seconds... </p>
<tr>	<tr>...</tr>	<table coumns="2"> <tr> <td> Name:</td> <td> Ben Forta</td> </tr>
<u>	<u>... </u>	<p> Example of the use of <u> underlined</u> text. </p>
<WML>	<wml> ... </wml>	<wml> <card id="card1"> <p> This is card1 </p> </card>
WML Script		
abort	Lang.abort(errorDescription)	//Compare passwords if (password1!=password2) { //password do not match Lang.abort("passwords do not match"); }
abs	Lang.abs(value)	//Get absolute value of a var b=Lang.abs(a);
Characters et	Lang.characterset( )	//check character set function charsetTest ( ) if (Lang.characterset( ) ==4) { return("western Europe!"); { else { return ("unknown"); }
exit	Lang.exit(value)	//check if okay to proceed, exit if not if (! Proceed) { Lang.exit("cannot proceed as requested"); }
float	Lang.float( )	//check if floating point is supported before continuing if (!Lang.float()) { Lang.abort("cannot perform calculation, floating point operations are not supported"); }
isfloat	Lang.isfloat(value)	//Is "a" a float? if (Lang.isFloat(a)) { // Yes it is, convert to integer var b=Float.round(a);

		}
isInt	Lang.isInt(value)	//Is "a" an int? if (!Lang.isInt(a)) { //prompt for it again a=Dialogs.prompt ("please enter a valid integer value", " "); }
max	Lang.max(value1,value2)	//Get greater value var a=Lang.max(var1,var2);
maxInt	Lang.maxInt( )	//Initialize to greatest possible value var a=Lang.maxInt( );
min	Lang.min(value1,value2)	Get lesser value Var a =Lang.min(var1,var2);
minInt	Lang.minInt( )	//Initialize to smallest possible value var a=Lang.minInt( );
parseFloat	Lang.parseFloat(value)	//prompt for temperature and parse into a float var temp=Lang.parseFloat (Dialogs.prompt("Temperature:","");
ParseInt	Lang.parseInt(value)	//Get house number var house_num=Lang.parseInt(address1);
random	Lang.random(value)	//return a random number between 0 and 100 function GetRandom( ) { return Lang.random(100); }
seed	Lang.seed(value)	//Initialize random sequence Lang.seed(42);
ceil	Float.ceil(value)	//convert to integer var b=Float.ceil(a);
floor	Float.floor(value)	//convert to integer var b=Float.floor(a);
maxFloat	Float.maxFloat( )	//Initialize to greatest possible value var a=Float,maxFloat( );
minFloat	Float.minFloat( )	//Initialize to greatest possible value var a=Float,minFloat( );
pow	Float.pow(value1,value2)	//Determine the cubed value of a var b=Float.pow(a,3);
round	Float.round(value)	//Round to nearest whole number var temp=Float.round (temp1);
Sqrt	Float.sqrt(value)	//Get square root var s=Float.sqrt(a);
charAt	String.charAt(string,index)	//Get Initial var initial=string.charAt (first_name, 0);
compare	String.compare(string1,string2)	//Is a greater than b? if (string.compare(a,b)) { //yes, switch a and b var x=a b=x;

		<pre>b=x; }</pre>
elementAT	String.elementAt(string,index,separator)	//Get first word var first_word=string.elementAt(sentence,0," ");
elements	String.element(string,separator)	//How many words in the sentence var num_words=string.elements(sentence," ");
find	String.find(string.substring)	//Find start off page title var a=string.find(page,"<title>"); }
format	String.format(format,value)	//Display age Dialog.alert(string.format("You are %d years old",age));
insertAT	String.insertAt(string,element,index,separator)	//Insert new item at front of list var list=string.insertAt(list, item, 0," ,");
isEmpty	String.isEmpty(string)	//check e-mail address is not empty if (string.isEmpty(email)) { Dialog.alert("E-mail address cannot be left blank!"); }
length	String.length(string)	//check enough dight entred if (string.length(acn)! = 12) { Dialogs.alert("You must enter the full 12 digit account number!"); }
removeAt	String.removeAt(string,index,separator)	//Remove last element from list var list=string.removeAt(list, string.elements(list)-1, ",");
replace	String.replaceAt(string,oldsubstring,newsubstring)	//Replace all "Wap" with "Wap" var string=string.replace (string,"Wap","Wap");
replaceAt	String.replaceAt(string,element,index,separator)	//Update first element var list=string.replaceAt (list,new_value,0," ,");
Squeeze	String.squeeze(string)	//Remove extraneous white spaces var name=string.squeeze (name);
substring	String.substring(string,starIndex,length)	//Get first sentence var sentence=string.substring(paragarph,0,string.find(paragraph,".")-1);
toString	String.toString(value)	//Build displayable phone number var phone="("+string.toString(p1)+")"+string.toString (p2)+"-"+string.toString(p3)
trim	String.trim(string)	//Trim address var email=string.trim(email);
escapestring	URL.escapestring (string)	//Escape query string var=qs=URL.escapeString(qs) //Append to url url=url+"?" +qs;
getBase	URL.getBase( )	//Display file being executed dialogs.Alert("Executing "+URL.getBase());

getFragmen t	URL.getFragment(url)	//Get fragment var frag=URL.getFragment(url);
getHost	URL.getHost(url)	//Display file being executed Dialog.Alert ("Executing script retrieved from "+URL.getHost(URL.getBase()));
getParamet ers	URL.getparameters(URL)	//Get parameters var param=URL.getParameters(url);
getPath	URL.getPath(url)	//Get path var path =URL.getPath(url)
getQuery	URL.getQuery(url)	//Get query string var qs=URL.getQuery(url);
getReferer	URL.getReferer( )	//Go back to referrer WMLBrowser.go (URL.getReferer( ));
GetScheme	URL.getScheme(url)	//Get scheme var scheme=URL.getscheme(url); //if empty, use default of "http" if (scheme==" ") { scheme="http"; }
isValid	URL.isValid(url)	//Check if valid if (urlValid(url)) { // Go to it WMLBrowser.go(url); else { //Invalid, display error message Dialogs.alert(url+" is not a valid URL!") }
loadString	URL.loadString(url,content Type)	//Get url and process var content=URL.loadString (url, 'text/vnd.wap.wml'); process(content); }
resolve	URL.resolve(baseUrl,embeddedUr l)	//Get host root var resolved =URL.resolve(URL.getHost(url), "/") //Go to it WMLBrowser.go (resolved)
unescapeSt ring	URL.unescapeString(string)	//Unescape string var unescaped=URL.unescapeString(escaped)
getcurrentC ard	WMLBrowser.getCurrnetCard( )	//Get current card function browserCard() { var curCard=WMLBrowser.getCurrentCard( ); }
getVar	WMLBrowser.getvar(name)	//Get "Zip" variable var zipvalue=WMLBrowser.getvar("zip" );
go	WMLBrowser.go(url)	//check if valid if (urlvalid(url)) {

		// Go to it WMLBrowser.go(url); }
newContext	WMLBrowser.newContext	//create new context WMLBrowser.newContext( );
prev	WMLBrowser.prev( )	// Go back one step WMLBrowser.prev( );
refresh	WMLBrowser.refresh( )	//check if refresh needed if (need_refresh) { WMLBrowser.refresh(); }
setvar	WMLBrowser.setvar(name,value)	//set "status" WMLBrowser.setvar ("status","done");
alert	Dialog.alert(message)	//Check login length if (string.length(login)>8) { //Too short ask again Dialogs.alert("Login must be longer than 8 chars"); }
confirm	Dialogs.confirm(message, ok,cancel)	//Get order confirmation var confirm=Dialogs.confirm("confirm your order","yes","No");
prompt	Dialogs.prompt(message, defaultInput)	//Get phone number var phone=Dialogs.prompt ("Enter phone numbnr", "650");
closeFile	Debug.closeFile( )	//create output file Debug.openfile ("c:\\log\\log.txt", "a"); //Write debug output Debug.println("value of X is: " + x); //close log file debug.closeFile( );
openFile	Debug.openfile (filename, mode)	//Createoutput file Debug.openfile("c:\\log\\log.txt","a"); //Write debug output Debug.println (" value of x is : " + x); //close log file debug.closeFile( );
println	Debug.println(string)	//create output file Debug.openfile ("c:\\log\\log.txt", "a"); //Write debug output debug.println("value of X is : " + x); // close log file Debug.closeFile( );
print	Console.print( )	//Write debug output console.print ("In loop, iteration: "+String.toString(i));
println	Console.println	//Write debug output console.println ("In loop, iteration: " + string.toString(i));

☯ Best of Luck ☯