

Unit (3)

Creating web site pages for computer dictionary

|   | Page name   | Purpose  | description  |
|---|---|--|--|
| 1 | (Home page)<br>Index.php                          | Contains all hyperlinks ,<br>activation all links to help in<br>moving between web pages | <b>Start</b> page that appear<br>to user when<br>downloading site  |
| 2 | (connect page with<br>database)<br>Connection.php | Achieve connect to<br>database , which called<br>before dealing with the data            | Not appear to user but<br>has been separated ,to<br>achieve connect to<br>database   |
| 3 | (head of web site)<br>Header.php                  | Show picture and links that<br>take us to all pages in web<br>site                       | This page contains<br><b>fixedparts</b> that need to<br>be shown in all pages in<br>the site                               |
| 4 | (Adding)<br>Add_Term.php                          | Entering the term and all its<br>data in a table terminology<br>database.                | Add new term in<br>database  |
| 5 | (Searching)<br>Search_Term.php                    | Search term in the<br>terminology database table.  | Search about term in<br>database   |
| 6 | (Editing)<br>Edit_Term.php                        | Modify term's data in the<br>terminology database table.                                 | Choose term which we<br>need to <b>modify</b> it and<br>make the necessary<br>adjustment and save                          |
| 7 | (Deleting)<br>Del_Term.php                        | Delete term's data in the<br>terminology database table                                  | Delete a term that was<br>chosen   |
| 8 | (Help)<br>Help_Term.php                           | Show information about<br>web site   | In most web sites we<br>find " <b>About us</b> " ,which<br>display information<br>about location , phone ,<br>e-mail,..... |

**Phpsyntax :**

```
<?php
Your code here
?>
```

**A- Variables and constants:**

**1- Variables:** are reserved memory locations to store values changed temporarily

**Declaration:** `$ Total = 100;`

**2- Constants :** hold data that can't be changed during program execution

**Declaration:** `Define ('constant name' , value) ;`

**Ex. :**`define ('name' , ' mark');`  
`Echo ( ' my name is : ' .name ) ;`

• **Data Type:**

| Variable value | Data Type |
|----------------|-----------|
| Mark           | String    |
| 123            | Integer   |
| 1.23           | Double    |
| True / false   | boolean   |

• **Operators in PHP:**( + , - , \* , / , % (Ex. 10 % 3 = 1)

| symbol | Ex                    | meaning                    |
|--------|-----------------------|----------------------------|
| +=     | <code>\$x += 5</code> | <code>\$x = \$x + 5</code> |
| -=     | <code>\$x -= 5</code> | <code>\$x = \$x - 5</code> |
| *=     | <code>\$x *= 5</code> | <code>\$x = \$x * 5</code> |
| /=     | <code>\$x /= 5</code> | <code>\$x = \$x / 5</code> |
| %=     | <code>\$x %= 5</code> | <code>\$x = \$x % 5</code> |
| ++     | <code>\$x++</code>    | <code>\$x = \$x + 1</code> |
| --     | <code>\$x--</code>    | <code>\$x = \$x - 1</code> |

• **Comparison operator :**

| Symbol | meaning      | Symbol | meaning               |
|--------|--------------|--------|-----------------------|
| = =    | equal        | != =   | Not equal             |
| >      | Greater than | >=     | Greater than or equal |
| <      | Less than    | <=     | Less than or equal    |

**Notes:**

- 1- Variable name begins with : \$
- 2- Variable name consists of : **letters** , **numbers** and ( \_ ) **underscore** only
- 3- It is preferable variable name **reflect** its content
- 4- (=) called **assignment** operator
- 5- Every line in PHP end with semi colon (;)
- 6- To print any data use : **Echo** or **Print**

Ex.

| Code (\$name = "mark")       | result            |
|------------------------------|-------------------|
| Echo "my name is \$name" ;   | my name is mark   |
| Echo 'my name is \$name' ;   | my name is \$name |
| Echo 'my name is' . \$name ; | my name is mark   |

7- Function ( **gettype (\$var);** ) : can **knowdata type** of any variable

| Code : Ex. :   | Result   |
|--|--|
| <pre>&lt; ?php     \$U_name = "mark" ;     Echo gettype (\$U_name) ;     Echo "&lt;br/&gt;" ;     Echo gettype (\$test) ; ? &gt;</pre> | <p>Print → <b>String</b><br/>                     Meaning "enter" (new line)<br/>                     Print → <b>Null</b> , because variable test is empty ,<br/>                     has no value</p> |

8- we use ( . ) to **connect** between 2 strings (concatenation symbol)

9- we use word “**define**” to declare constant

10- to write **only one line comment** → use //

11- to write a **comment in more than one line use** :

begin with →“ /\* ” and end with →“ \*/ ”

**If condition:**

|   |  |
|---|--|
| <p>(1)<br/>If (Logical condition)<br/>{<br/>Code<br/>}<br/><b>Note:</b> if condition <b>true</b> then code will be executed</p>   | <p><b>Ex.</b><br/>&lt;? Php<br/>\$A= “first” ;<br/>If ( \$A == “first”)<br/>{<br/>Echo “ you first ”;<br/>}<br/>?&gt;</p>  |
| <p>(2)<br/>If (Logical condition)<br/>{<br/>Code (if condition true)<br/>}<br/>Else<br/>{<br/>Code (if condition false)<br/>}</p> | <p><b>Ex.</b><br/>&lt;? Php<br/>\$A= “second” ;<br/>If ( \$A == “first”)<br/>{<br/>Echo “ you first ” ;<br/>}<br/>Else<br/>{<br/>Echo “ you second ” ;<br/>}<br/>?&gt;</p> |

### Questions

#### Q 1 :Put ( √) or ( X) :

1. Variable content can change during the execution ( )
2. we using \$ to declare variable and constant ( )
3. Variable name must reflect its contents ( )
4. Variable and constant are case sensitive ( )
5. \$name is a correct variable name in php ( )
6. The concatenation mark in php is (&) ( )
7. Php code begin with <php> ( )
8. != this operator mean not equal ( )
9. Variable names consists of letters only ( )

#### Q 2 :complete the following :

- 1- .....word used to reserve a constant in php.
- 2- .....menu used to create a new site.'
- 3- Syntax of php begin with .....and end with.....
- 4- To call (print) anything in the browser page use .....or .....
- 5- \$x+=10 mean .....
- 6- .....symbol represent the equal operation in php
- 7- .....is storage location that hold data can't change during the execution

**Q3:match :**

|   | code                               | discussion                               |
|---|------------------------------------|--|
| 1 | <code>\$name="math"</code>         | Print new line in the page (..... )      |
| 2 | Define ('first name','sfls')       | Output the content of variable X(..... ) |
| 3 | Echo \$x;                          | Comment of more than one line( ..... )   |
| 4 | <code>// this is a comment</code>  | Assign value math to variable( ..... )   |
| 5 | <code>/*this is a comment*/</code> | Comment of one line( ..... )             |
| 6 | Echo "<br>";                       | Assign value sfls to constant ( ... )    |

**Q4: Choose using the following words:**

[Boolean - get type- double - string - % - \$x++ -semi colon- ]

- 1..... operator used to find the remainder .
- 2.variable of type .....can store characters only.
- 3.variable of type .....can store true or false
- 4.php code lines end with .....
- 5.....mean increase variable by one
- 6.....is a function which return the data type of any variable.
- 7.variable of type .....can store fractional value.

### Model answers

#### Q 1 :Put ( √ ) or ( X ) :

1. Variable content can change during the execution (√ )
2. we using \$ to declare variable and constant ( X )
3. Variable name must reflect its contents ( X )
4. Variable and constant are case sensitive (√ )
5. \$name is a correct variable name in php ( X )
6. The concatenation mark in php is (&) ( X )
7. Php code begin with <php> ( X )
8. != this operator mean not equal (√ )
9. Variable names consists of letters only ( X )

#### Q 2 :complete the following :

1. ....define.....word used to reserve a constant in php.
2. ....site.....menu used to create a new site.'
3. Syntax of php begin with <?php.....and end with.....?>.....
4. To call (print) anything in the browser page use ...echo.....or ...print....
5. \$x+=10 mean .....\$x=\$x+10.....
6. ....==.....symbol represent the equal operation in php
7. ....constants.....is storage location that hold data can't change during the execution

**Q3:match :**

|   | code                         | discussion  |
|---|------------------------------|---|
| 1 | <code>\$name="math"</code>   | Print new line in the page (... <u>6</u> .... )       |
| 2 | Define ('first name','sfls') | Output the content of variable X (... <u>3</u> .... ) |
| 3 | Echo \$x;                    | Comment of more than one line (... <u>5</u> .... )    |
| 4 | // this is a comment         | Assign value math to variable (... <u>1</u> .... )    |
| 5 | /*this is a comment*/        | Comment of one line (... <u>4</u> .... )              |
| 6 | Echo "<br>";                 | Assign value sfls to constant ( <u>2</u> .... )       |

**Q4: Choose using the following words:**

[Boolean - get type- double - string - % - \$x++ -semi colon- ]

- 1.....%..... Operator used to find the remainder .
2. Variable of type .....string.....can store characters only.
3. Variable of type .....boolean.....can store true or false
4. Php code lines end with .....semi colon.....
- 5.....\$x++.....mean increase variable by one
- 6.....get type.....is a function which returns the data type of any variable.
7. Variable of type .....double.....can store fractional value.

**Unit (4)**  
**Dealing with the data of website**

First we need to create a Page search term "Search\_term.php" but before this we need to know:

**Looping (repetition) mean:** repeat specific code several times or repeat until a certain condition

**Repetition phrases in PHP such as:** While - Do While - For

|   |  |
|---|--|
| <p>(1)<b>While:</b> Ex1: write of code to print the <b>numbers</b> from 1: 100</p> <pre>&lt;? PHP     \$ x = 1; While (\$ x &lt;= 100) {     Echo (\$x) ;     Echo ("&lt;Br&gt;");     \$ x ++; } ?&gt;</pre> | <p>(note : we <b>test condition first</b> and after that loop will be executed or not that depends on result of <b>condition T or F</b>)</p> <pre>//start of code php // Variable begins at 1 // implement all the commands which appear in brackets {} as long as the condition is true this means that the value of \$ variable x is less than or equal to 100. // Print value of the variable // Go down to the next line // Increment the counter or the value of variable 1 (And this sentence can be written as \$ x = \$ x + 1: ) //end of code php</pre> |
| <p>(3) <b>Do...While</b> : Ex. to print the numbers of 1: 100</p> <pre>&lt;? PHP \$ x = 1; Do {     Echo (\$ x. "&lt;Br&gt;");     \$ x ++; } While (\$ x &lt;= 100); ?&gt;</pre>                             | <p>(note : we execute loop <b>once</b> before test condition)</p> <pre>// Variable put the beginning of the counter // do the following sentence // The beginning of sentences repetition // Print variable and go down to the next line //Increase the value of the counter variable by 1 // End of sentences repetition // Stop iteration's condition, if counter(x) increased from 100</pre>  |
| <p>(2) <b>For:</b> Ex. to print the <b>numbers</b> of 1: 100</p>  | <p>(note : we execute <b>certain number of iteration as similar to while</b>)</p>  |

|  |  |
|--|--|
| <pre>&lt;? PHP For (\$ x = 1; \$ x &lt;= 100; \$ x ++) { Echo (\$ x); Echo ("&lt;Br&gt;"); } ?&gt;</pre> | <pre>//start of code php // the <b>beginning</b> of the counter variable \$ x is equal to the value of 1 ,<b>repetition</b> is performed sentences as long as the \$ x is less than or equal to 100 , <b>increase</b> the value of the variable \$ x by 1. // Then is repeated code in brackets {} // Print value of the variable // Go down to the next line // end of code php</pre> |
|--|--|

The needed codes for different courses:

| Code  | Description of the code  |
|---|--|
| <pre>&lt;?php include ("header.php); Include("connection");</pre>             | <p><b>Including</b> the header and connection pages <b>into</b> the all pages of the in website</p>                    |
| <pre>Mysql_query("SET NAMES'utf8");</pre>                                     | <p>Dealing with data written in <b>Arabic</b> language</p>   |
| <pre>\$sql="select*from terms" ;</pre>  | <p>Assign select statement as string into the <b>variableSql</b></p>   |
| <pre>\$query=mysql_query(\$sql) ;</pre>                                       | <p>Use "<b>mysql_query</b>"function to save the query output <b>from \$sql into \$query</b></p>                        |
| <pre>\$num=mysql_num_row(\$query) ; ?&gt;</pre>                               | <p>The function "<b>mysql_num_rows</b>" <b>counted</b> records in the query <b>and saved</b> in the variable \$num</p> |
| <pre>&lt;?php Echo("&lt;h1&gt; عدد المصطلحات \$num &lt;/h1&gt;"); ?&gt;</pre> | <p><b>Display</b> number of terms on web page</p>  |

**Notes:**

1. **While statement**:test condition first and after that loop will be executed or not that depends on result of condition T or F)
2. **Do while statement**:we execute loop **once** before test condition
3. **For statement**: number of repetition is **preknown**
4. **Select statement** : used to search about records inside the database
5. **GET "method"**: - Requests data from a specified resource and Data is visible to everyone in the URL
6. **Root** :The default username when setup Xampp with **no password**

### Questions

#### Q1 : put ( √ ) or ( X ):

1. Do{ }while statement using as a branching statement ( )
2. To support Arabic language in the pages of website use UTF16 encoding ( )
3. For statement used when number of repetition is preknown ( )
4. The function mysql\_num\_rows used to count the records inside the variable( )
5. Include (header.php) mean including the page header ( )
6. While statement test condition first and after that execute or not that depends on result of condition T or F) ( )
7. The default password for the user when setup Xampp is "admin" ( )

#### Q2 :complete the following using words :

( select - for{ } - utf8 - while - do}while -include(connection.php) -\$\_Get )

1. ....mean adding the page connection into the wepage.
2. ....the used Encode to support Arabic language.
3. ....is a method used to bring the data from the title bar of the URL
4. ....is a looping statement used for a certain number of looping
5. ....is a statement executed once then test the condition
6. ....is a statement test the condition first
7. ....is a statement used to search about data inside the database

**Q3 :match:**

|   | Code  | Result                                   |
|---|---|--|
| 1 | <pre>&lt;?php //echo "assign value to variable" ?&gt;</pre>                                 | Adding the pages to my site (.....)      |
| 2 | <pre>&lt;?php \$x=1; While (\$x&lt;=100) { Echo (\$x . "&lt;br/&gt;"); \$x++; } ?&gt;</pre> | Print the odd number from 1 to 10 (....) |
| 3 | <pre>&lt;?php Include("header.php"); Include("connection.php"); ?&gt;</pre>                 | Print the numbers from 1to100 (.....)    |
| 4 | The default username when setup Xampp   | Nothing will happened (.....)            |
| 5 | <pre>&lt;?php For(\$x=1;\$x&lt;=10;\$x+=2) { Echo \$x; Echo "&lt;br/&gt;"; } ?&gt;</pre>    | Root (.....)                             |

Answer

Q1 : put ( √ ) or ( X ):

1. Do{ }while statement using as a branching statement (X )
2. To support Arabic language in the pages of website use UTF16 encoding(X)
3. For statement used when number of repetition is preknown (√)
4. The function mysql\_num\_rows used to count the records inside the variable(√)
5. Include (header.php) mean including the page header (√)
6. While statement test condition first and after that execute or not that depends on result of condition T or F (√ )
7. The default password for the user when setup Xampp is "admin" (X)

Q2 :complete the following using words :

( select - for{ } - utf8 - while - do{}while -include(connection.php) -\$\_Get )

1. include(connection.php) ..mean adding the page connection into the wepage.
2. ... utf8 .....the used Encode to support Arabic language.
3. ....\$\_Get .....is a method used to bring the data from the title bar of the URL
4. .... for{ } ....is a looping statement used for a certain number of looping
5. .... do{}while .....is a statement executed once then test the condition
6. .... while .....is a statement test the condition first
7. .... select .....is a statement used to search about data inside the database

**Q3 :match:**

|   | Code  | Result                                    |
|---|---|---|
| 1 | <pre>&lt;?php //echo "assign value to variable" ?&gt;</pre>                                 | Adding the pages to my site (3)           |
| 2 | <pre>&lt;?php \$x=1; While (\$x&lt;=100) { Echo (\$x . "&lt;br/&gt;"); \$x++; } ?&gt;</pre> | Print the odd number from 1 to 10 (...5.) |
| 3 | <pre>&lt;?php Include("header.php"); Include("connection.php"); ?&gt;</pre>                 | Print the numbers from 1to100 (...2.)     |
| 4 | The default username when setup Xampp   | Nothing will happened (...1.)             |
| 5 | <pre>&lt;?php For(\$x=1;\$x&lt;=10;\$x+=2) { Echo \$x; Echo "&lt;br/&gt;"; } ?&gt;</pre>    | Root (...4.)                              |

## Unit (5) Insurance Website

### 1. The concept of penetration

Penetrate the site and is usually expressed as Website Hacking. Hacker can get control of the site management or dealing with location data in any way the validity of the (view - delete - Amendments ... etc) by exploiting a security flaw or weak programming.

### 2. the result of penetration may be :

1. Loss of data which may be relevant and lead to financial losses for some institutions.
2. Theft of important data from the site.
3. Access to institutional or personal data, and to this damage.

### 3. ways that protect the Web sites which are divided into two parts:

#### **1. protection at the server level (Server) (the host server for the site Website Hosting):**

Protection here and be the responsibility of the host server or site for which you must set up security options correctly.

#### **2. Protecting the developer's site level**

- \* Check input before storing them in the database.
- \* Encrypt passwords. Using (MD5 function)
- \* Manage the site folders important words of a powerful secret.
- \* Define the powers of users correctly.

### Questions

#### Choose the correct answer :

- 1..... is usually expressed as Website Hacking  
( theft - penetration - other )
2. ways to protect the web site on developer level is.....  
(Define the powers of users - Encrypt passwords -Check input - all the previous )
3. The use of function MD5 is .....  
(Delete data - cut data - Encrypt data )

#### Put ( √ ) or ( X ) :

1. The function MD5 used to add record ( )
2. Web hacking mean penetration ( )
3. Penetration is a good job ( )
4. We must not protect the site on server level ( )
5. Penetration lead to Access personal data ( )

Answers

Choose the correct answer :

- 1..... is usually expressed as Website Hacking  
( theft - penetration - other )
2. ways to protect the web site on developer level is.....  
(Define the powers of users - Encrypt passwords -Check input - all the previous )
3. The use of function MD5 is .....  
(Delete data - cut data - Encrypt data )

Put ( √ ) or ( X ) :

1. The function MD5 used to add record ( X )
2. Web hacking mean penetration ( √ )
3. Penetration is a good job ( X )
4. We must not protect the site on server level ( X )
5. Penetration lead to Access personal data ( √ )