

PHP

PHP (Hypertext Pre-processor)

⇒ PHP is a server side scripting language, that is used to develop static websites or dynamic websites.

Downloading XAMPP

⇒ XAMPP is a working environment for PHP

⇒ Download XAMPP from apachefriend.org and install it. After installation, start Apache and MySQL.

⇒ After that, go to browser and write `localhost/phpmyadmin`. Here you can manage and create database.

* Download VS Code.

Link: <https://code.visualstudio.com>

⇒ Open XAMPP folder > htdocs. Create a new folder, right click and open

with code.

Creating our first PHP file

- ⇒ Create a file with name index.php
- ⇒ Write some HTML and open with live server, then open view page source.
- ⇒ You will see your complete code.

But if PHP is used only the output is displayed not the code.

Eg. `<?php`

`Echo "Hello World";`
`?>`

* Echo outputs one or more strings

Variables

They are the containers for holding the values in it.

- ⇒ You can create a variable by including the "\$" before declaring it

Eg.

`$variable1 = 5;`

`$variable2 = 2;`

`Echo $variable1 + $variable2;`

(We will be using these values, Remember them)

* You don't have to declare the

datatypes.

- * PHP is a case insensitive language.

Operators

- They are symbol that tell the PHP processor to perform certain actions.

* To get spacing use `Echo "
"`;

Types

i) Arithmetic operator

They perform $+$, $-$, $*$, $/$, exponentiation and modulus operation.

Eg. `Echo "Value of $var1 * var2$ is";`
`Echo $\$variable1 * \$variable2$;`

Print: Value of $var1 * var2$ is 10

→ Similarly other operations can be used.

ii) Assignment operators

These are used to assign a value from one variable to other.

Eg. i) `$new var = $variable 1;`
`Echo $new var;`
↳ This will print '5'

ii) `$new var += 1` (This will print '6')
`Echo $new var;`

Other operators: `=`, `+=`, `-=`, `*=`,
`/=`.

iii) Comparison operator
Used to compare two values in Boolean fashion.

Eg.

`Echo "The value of $1=4$ is";`

`Echo var_dump(1==4);`

Here, `var_dump` holds type and value of the variable.

Print: The value of $1=4$ is `bool(false)`
As the condition is not true.

More: `!=`, `<=`, `>=`, `>`, `<`

4) Incrementing and Decrementing Operators

i) Post increment ($i++$)

After assigning the value to the variable, the value is incremented.

Eg. `Echo $variable1++;`

↳ Print 5 and value will be increased by 1. That is, if we print it now it will give 6.

`Echo $variable1;`

↳ Print 6

* Same goes with `Variable1--;`

ii) Pre increment ($++i$)

Before assigning the value to the variable, the value is incremented by 1.

Eg. `Echo $--variable1;`

↳ 1 is subtracted and value is printed i.e 4.

5) Logical Operators

⇒ `And ($&)`

It returns true if both operands are true.

Eg. \$myvar = (true and False);
Echo var_dump(\$myvar);

• Prints false as only one is true.

⇒ or (||)

Prints true if any one is true.

Eg. \$myvar = (true or false);
Echo var_dump(\$myvar);

Print: True

⇒ Xor

If one is true ~~and~~ then it returns true, but not both.

Eg.

\$myvar = (true xor true);
Echo var_dump(\$myvar);

Output: False.

⇒ ! (Not)

True if \$a is not true.

Datatypes

i) String: Alphanumeric Characters are classified as strings.

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Date / /

Eg. \$var = "Pikacoden";
Echo var_dump(\$var);
Print: String(9) Pikacoden

ii) Integer

Eg. \$var = 67;
Echo var_dump(\$var);
Print: int(67)

iii) Float

Numbers with decimal point.

Eg. \$var = 67.1;
Echo var_dump(\$var);
Print: float(67.1)

iv) Boolean

Eg. \$var = true;
Echo var_dump(\$var);

Constant

- ⇒ whose value cannot be changed.
- ⇒ To declare a constant in PHP use define.

Example:


```
define ('PI', 3.141);  
$radius = 15;  
$area = PI * $radius * $radius;  
Echo $area;
```

Output : 706.5

Conditional Statements

- i) if
- ii) if-else
- iii) if-else-if

Eg. \$age = 6;
if (\$age > 18) { Echo "You can go to party";
}
Else if (\$age == 7) {
Echo "You are a Kid" ; }

Else { Echo "You can't go to the party"; }

Here, The first (if) condition is checked and if it is false then Else if is checked.

If all conditions are false the Else statement is printed.

* many more Else-if can be included.

Arrays

It is a self-contained list of variables.

* Index in an array starts from 0

Eg.

```
$languages = array("Python", "C++", "PHP",  
                  "Node");
```

Echo \$languages[0]; \Rightarrow Gives the first item in the array

```
Echo count($languages);
```

\rightarrow Gives no. of items in an array.

Loops

Loops are used to execute the same block of code until a certain condition is met.

1) While loop

The block of code is executed until the condition is true. This loop can be used to iterate over the array.

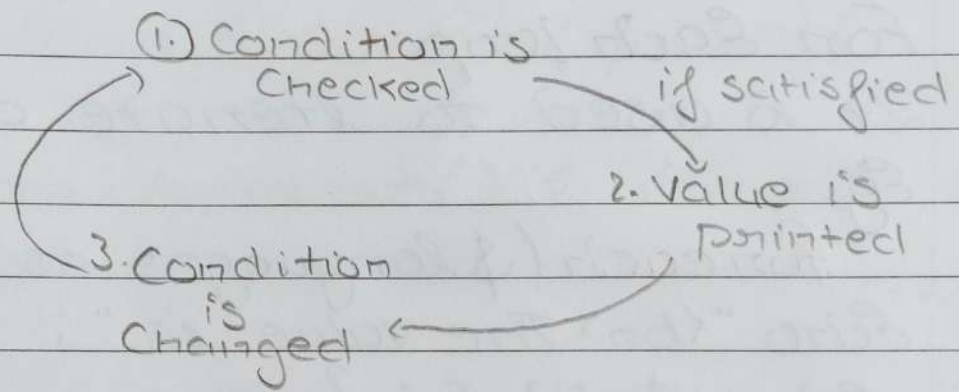
* Iterating over an array means accessing each element of array

one by one.

Eg. \$a = 0

Condition

2. Value [while (\$a < count(\$languages)) {
Echo "
The value of language is:";
Echo \$languages[\$a];
3. Update [\$a++;
}

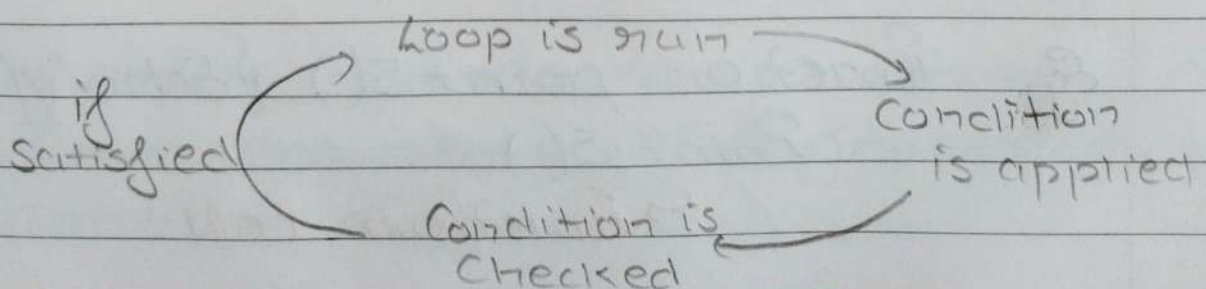


ii) Do-while

The block of code is executed once for sure.

Eg. \$a = 200;

do { Echo "
The value of a is:";
Echo \$a;
\$a++;
} while (\$a < 10);



For Loop

Eg.

for (\$a = 60; \$a < 10; \$a++) {
 Echo "
The value is : ";
 Echo \$a;
}

initialisation Condition Increment

For Each Loop

It is used to iterate over arrays.

Eg.

foreach (\$languages as \$value) {
 Echo "
The value is ";
 Echo \$value;
}

Functions

A function is a reusable piece of code that performs some action.

Types

- i) Build-in function Eg. var_dump
- ii) User-defined function

Eg. function print5() {Echo "five";}
Print 5()

→ function call.

Strings

Eg.

\$ str = "This is a string";
Echo \$ str; \Rightarrow Give string

i) strlen() \Rightarrow Returns the length of the string.

Eg. \$ len = ~~strlen~~ (\$ str);

ii) str_word_count() \Rightarrow Returns the no. of words.

Eg.

Echo "No. of words in string is" .

str_word_count(\$ str)

Concatenate
↓

• (concatenate) \Rightarrow Use to join two or more text strings into one string.

iii) strrev() \Rightarrow Returns the reverse of a string.

Eg.

Echo "The reversed string is" . strrev(\$ str);

iv) strpos() \Rightarrow finds the position of the first occurrence of a string inside another string.

Project (US Trip form)

* Create a form using HTML and CSS.

=> All values that we are taking from the user must be stored in Database.

Steps.

- i) Open your XAMPP Control Panel, click on MySQL Admin. Create a database named trip > Create table with eight column.
- ii) Add details, like name, Datatype, length etc and click Save.
- iii) Click on insert, insert a row. Now, copy the code of SQL query.

Create Index.php

We will use extension of mySQLi to make connection with my SQL database.

```
Write:    $insert = false;
          if(isset($_POST['name'])) {
```


Now

1. Step 1: Set connection variables

```
$server = "localhost";  
$username = "root";  
$password = "";
```

> default
2. Create a database connection

```
$con = mysqli_connect($server,  
$username, $password);
```
3. Check for connection success

```
if (! $con) {  
die("Connection failed due to".  
mysqli_connect_error  
());}
```
- 4.) Collect Post variable

```
$name = $_POST['name'];  
$age = $_POST['email'];  
:  
:
```

Similarly select your column and the post variable.

⇒ At end

\$sql = Paste the SQL query which you have copied.

5. Execute the Query
- ```
if ($con->query($sql) == true) {
 $insert = true; }
else {
 Echo "ERROR: $sql (
 $con->
 error"; }
6.) Close the database connection
$con->close();
```

In HTML, write the code.  
The text which we want to occur  
when the user submit the form.

```
<?php
if ($insert == true) {
 Echo "<p class = 'submitmsg'> Thankyou
 for joining </p>"; }
?>
```

- Now, all you need to do is include this HTML inside PHP.  
⇒ You can copy content of index.html and paste it in index.php

\* All the Best