

* PHP - Introduction :-

→ PHP was developed by "Rasmus Lerdorf" in 1994.

↳ In 1995, he developed package called personal Home page tools, which became the first publicly distributed version of PHP.

↳ originally, PHP was an acronym for "Hypertext-preprocessor".

What is PHP :-

↳ PHP is an open source, interpreted and object-oriented server-side scripting language. It is used to develop web applications.

↳ PHP is an interpreted language, i.e. there is no need for compilation.

↳ As a server-side scripting language, PHP is naturally used for form handling and database access.

↳ Database access has been a prime focus of PHP development; as a result, it has driver support for 15 different database systems.

↳ PHP is a server-side, XHTML-embedded scripting language, as such, it is an alternative to CGI (Common Gateway Interface) and ASP (Active Server Pages) and JSP (Java Server Pages).

⇒ The PHP processor has two modes of operations

↳ Copy mode

↳ Interpret mode

→ The PHP processor, takes a PHP document file as input and produces an XHTML document file.

↳ When, the PHP processor finds XHTML code in the input file, it simply copies it to the output file.

↳ When, it encounters PHP script in the input file, it interprets it and sends output of the script to the output file.

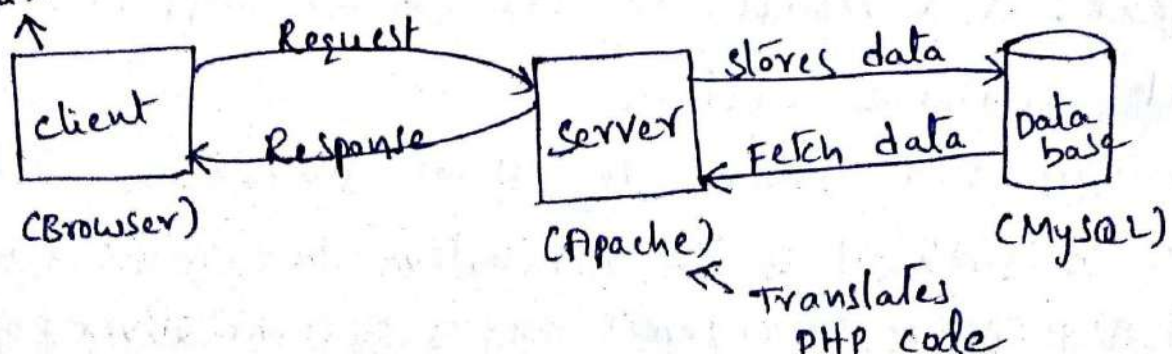
↳ The new file (output file) is sent to the requesting browser

Note:- PHP is usually purely interpreted programming language

→ PHP is can be used in popular websites like, Facebook, yahoo, wikipedia and word processor.

* client - server model (Request - Response cycle)

understands
simple stuff (html, js, css)



→ In this, Apache can be used as server, MySQL as database and PHP as scripting language.

Installing PHP :-

↳ To install PHP, we need to install AMP (Apache, MySQL, PHP) software pack. It is available for all operating systems. And it is an open source (free of cost).

↳ WAMP for Windows

↳ LAMP for Linux

↳ MAMP for Mac

↳ SAMP for Solaris

↳ XAMPP (cross, Apache, MySQL, PHP, Perl) for cross platforms.

→ To check, the WAMP stack is installed or not, just open browser and type "localhost" at address bar as url, then we will get WAMP homepage (i.e. installed successfully).

* PHP Example :-

It is very easy to create a simple PHP example, To do so, create a file and write HTML tags + PHP code and save this file with .php extension.

⇒ To create PHP file, better use text editors (notepad, notepad++).

→ All PHP code write between php tag.

Syntax of php tag is

opening tag ← `<?php`

`// code here`

`?>` → closing tag

→ In php, each statement ends with ; (semicolon).

* echo statement:-

↳ echo statement is used to print something on screen. just like print function in 'C' prog language.

Ex:- echo "Hello... Welcome!"

o/p: Hello... Welcome!

Ex: echo "Hello " . 10 * 3;

o/p Hello 30

Note: In PHP, • (dot) symbol is used to concatenate two strings.

↳ To create PHP file, we need to ^{know} basic knowledge of HTML (Hypertext markup language) to generate static content where php script generates dynamic content.

HTML tags + php script = php file.

Example :-

"First.php"

```
<html>
  <head>
    <title> First PHP Example </title>
  </head>
  <body>
    <?php
      echo "This is my first php example";
    ?>
  </body>
</html>
```

O/P :-

@ First PHP Example	-DX
This is my first php example	

* Comments in PHP :-

↳ Generally, comments are used to describe (or) hide any line of code so that developer can understand the code easily.

↳ PHP supports Single line and Multi-line comments.

→ Single line comments // /* ... */

Ex: // single line comment

→ Multi-line comments

Ex: /* This is
a multi-line
comment */

* Declaring variables in PHP :-

↳ A variable in PHP is a name of memory location that holds data.

(or)

↳ A variable is a temporary storage that is used to store data temporarily.

→ In PHP, a variable is declared using \$ sign followed by variable name.

Syntax: \$variablename = value;

Rules for naming variable :-

↳ In php, variables must start with letter (or) underscore only.

↳ The variable can't be start with numbers and special symbols.

Example:

\$a = 'hello';
\$_b = 'Madhu';

} valid

\$4c = 'hello';
\$xd = 'Madhu';

} invalid

→ In php, variable names are case-sensitive, so variable name

"A" is different from "a". i.e. \$A ≠ \$a, Ex \$A = "Madhu";

\$a = "Kiran";

where both (\$A, \$a) are different.

→ PHP is a loosely typed language, it means PHP automatically converts the variable to its correct data type.

Ex:- \$str = "hello"; // string type.

 \$x = 200; // integer type.

 \$y = 14.6; // float type.

here, no need to declare (or) specify any data type.

Example :-

"vardemo.php"

<html>

<head>

<title> Variables Demo </title>

</head>

<body>

<?php

\$str = "Madhu";

\$x = 112;

\$y = 13.42;

echo "String is : \$str
";

echo "Int is : \$x
";

echo "float is : \$y
";

?>

</body>

</html>

o/p:-

© Variables Demo		- □ X
String is : Madhu		
Int is : 112		
float is : 13.42		

* Datatypes in PHP :-

↳ Generally, the datatypes are used to hold different types of data (or) values.

(or)
↳ Datatype specifies what type of data (or) value will be stored in variable.

→ PHP supports 8 primitive data types that can be categorized

into 3 types

1. scalar data types
2. compound data types
3. special data types

⇒ scalar data types :

↳ scalar data type contains only a single value.

There are 4 scalar data types.

- | | |
|-----------|----------------------|
| → boolean | EX: \$status = TRUE; |
| → integer | EX: \$n = 15; |
| → float | EX: \$f = 16.61; |
| → string | EX: \$str = "Madhu"; |

⇒ compound data types :

↳ compound data type contains more than one value. There are 2 types of compound data types

→ array Ex:- \$n = array (1,2,3,4,5);
→ object Ex:- \$s = new student(1);

⇒ special data types :-

↳ php supports 2 special data types

→ resource Ex:- Any file (or) database

→ Null Ex:- NULL (or) null (or) \$age = null;

* Operators in PHP :-

↳ An operator is a symbol i.e used to perform operations on operands.

↳ PHP supports following operators,

those are

• Arithmetic operators :-

+ Addition
- Subtraction
* Multiplication
/ Division
%. Modulus
** exponentiation

• Assignment operators :-

= Assignment
+= Assignment after Addition
-= Assignment after Subtraction
*= Assignment after Multiplication
/= " " Division
%= " " Modulus.

• Increment / Decrement operators :-

++ Increment
-- decrement

• Comparison (or) Relational operators :-

==	Equal	===	Identical (if variables are of the same type)
<> (or) !=	Not equal	!==	Not Identical (if both variables have same value)
>	Greater than	>=	Greater than (or) equal to
<	Less than	<=	Less than or equal to

• Logical operators :-

and	And	&&	And
or	Or		Or
xor	Xor	!	Not

• String operators :-

- Concatenation
- = concatenation assignment

• Array operators :-

+	Union	===	Identity
==	Equality	!==	Non-Identity
<> (or) !=	Inequality		

↳ We can also categorize operators on behalf of operands.

They can be categorized in 3 forms

- Unary operators: Works on single operands, such as ++, -- etc.
- Binary operators: Works on two operands, such as +, -, *, /, etc.
- Ternary operators: Works on three operands, such as condition? value1 : value2

Example :-

"operatorDemo.php"

```
<html>
  <head>
    <title> operators Demo </title>
  </head>
  <body>
    <?php
      $a = 42;
      $b = 20;
      $c = $a + $b;
      echo "Addition is : $c <br/>";
      $c = $a - $b;
      echo "Subtraction is : $c <br/>";
      $c = $a++;
      echo "Increment is : $c <br/>";
      $c = $a--;
      echo "Decrement is : $c <br/>";
      $c += $a;
      echo "Addition assignment is : $c <br/>";
      $c -= $a;
      echo "Subtraction assignment is : $c <br/>";
    ?>
  </body>
</html>
```

O/p:-

```
Operators Demo
Addition is : 62
Subtraction is : 22
Increment is : 42
decrement is : 43
Addition assignment is : 85
Subtraction assignment is : 43
```

* control structures in php :-

↳ control structures (or) statements

- ↳ Conditional statements
- ↳ Loop statements
- ↳ Jump statements

• conditional statements :-

→ conditional statements are used to perform different actions based on different conditions.

→ PHP supports following conditional statements

↳ if statement :- executes some code if one condition is true.

Syntax :

```
if (condition)
{
    statements (or) code
}
```

↳ if-else statement :- executes some code if condition is true and another code if that condition is false.

Syntax :

```
if (condition)
{
    code (or) statements
}
else
{
    code (or) statements
}
```

↳ if-elseif-else statement :- executes different codes for more than two conditions.

Syntax :-

```
if (condition)
{
    code
}
elseif (condition)
{
    code
}
elseif (condition)
{
    code
}
:
else
{
    code
}
```

Example:-

"ConditionalDemo.php"

```
<html>
  <head>
    <title> conditional demo </title>
  </head>
  <body>
    <?php
      $x = 15;
      $y = 25;
      if ($x > $y)
      {
        echo " $x is greater than $y ";
      }
      elseif ($x < $y)
      {
        echo " $x is less than $y ";
      }
      else
      {
        echo " $x is equal to $y ";
      }
    ?>
  </body>
</html>
```

o/p:-

Conditional Demo
15 is less than 25

↳ switch statement :- used to execute one block of statements from multiple conditions.

Syntax:

```
switch (expression)
{
    case value1: code
                break;
    case value2: code
                break;
    ---
    default: code
}
```

Example :-

"switchDemo.php"

```
<html>
<head>
  <title> SwitchDemo </title>
</head>
<body>
  <?php
    $x = 15;
    $y = 10;
    $op = '*';
    switch ($op)
    {
      case '+': echo $x + $y;
                break;
      case '-': echo $x - $y;
                break;
```

```
case 'x': echo $x * $y;  
break;
```

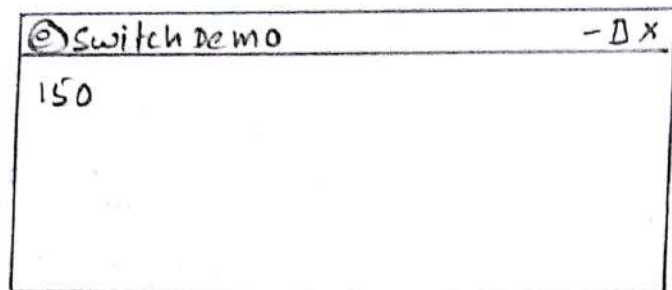
```
case '/': echo $x / $y;  
break;
```

```
case '%': echo $x % $y;  
break;
```

```
default: echo "Invalid operator!";
```

```
?>  
</body>  
</html>
```

o/p:-



• Loop Statements :-

→ Loop statements can be used to execute set of code for the specified number of times.

→ PHP supports following loop statements

↳ While Loop :- executes a block of code as long as the specified condition is true.

Syntax:-
while (condition)
{
 code (or) statements
}

Note:- While should be used if number of iteration is not known.

Example :-

"while Demo.php"

```
<html>
  <head>
    <title> While Demo </title>
  </head>
  <body>
    <?php
      $n=1;
      while ($n<=5)
      {
        echo "$n<br/>";
        $n++;
      }
    ?>
  </body>
</html>
```

o/p:-

While Demo		- □ x
1		
2		
3		
4		
5		

↳ Do..While Loop :- It will always execute the block of code once, it will then check condition, and repeat the loop while the specified condition is True.

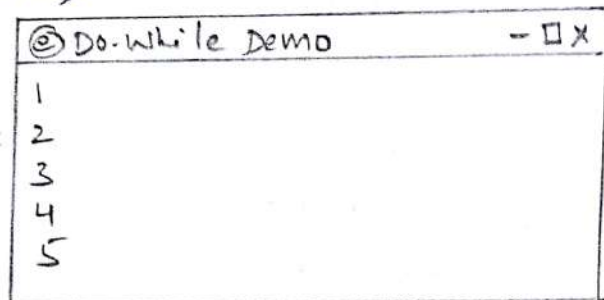
Syntax:-
do
{
 code (or) statements
} while (condition);

→ It executes the code at least one time always because condition is checked after executing the code.

Example:-

"DowhileDemo.php"

```
<html>
<head>
  <title> Do-while Demo </title>
</head>
<body>
  <?php
    $n=1;
    do
    {
      echo "$n <br/>";
      $n++;
    } while ($n<=5);
  ?>
</body>
</html>
```



↳ FOR Loop:- Executes a block of code for the specified number of times.

Syntax:- for (initialization; condition; increment/decrement)

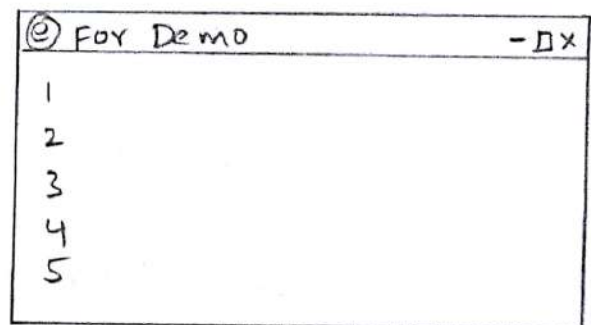
```
{
  code (or) statements
}
```

Note:- for loop should be used if number of iteration is known otherwise use while loop.

Example :-

"ForDemo.php"

```
<html>
  <head>
    <title> FOR Demo </title>
  </head>
  <body>
    <?php
      for ($n=1; $n<=5; $n++)
      {
        echo " $n <br/>";
      }
    ?>
  </body>
</html>
```



• Jump statements :-

→ Jump statements are used to alter the normal control flow of loop statements.

→ PHP supports following jump statements

↳ break :- When a break statement is encountered inside a loop, the loop is terminated and program control resumes at the next statement following the loop.

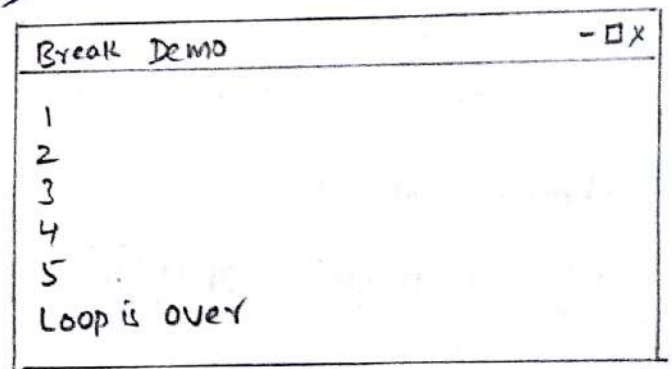
Syntax :- break;

→ In simple words, the break is used to break (stop) a loop execution.

Example:-

"BreakDemo.php"

```
<html>
<head>
  <title> Break Demo </title>
</head>
<body>
  <?php
    for($n=1; $n<=10; $n++)
    {
      if($n==6)
      {
        break; //terminates loop if $n is 6
      }
      echo "$n <br/>";
    }
    echo "Loop is over";
  ?>
</body>
</html>
```



↳ continue:- When a continue statement is encountered inside the loop, remaining statements are skipped and loop proceeds with the next iteration.

Syntax:- continue;

→ In simple words, The continue is used to skip the

particular iteration and jumps to the next iteration of a particular loop.

Example :-

"continuedemo.php"

```
<html>
  <head>
    <title> Continue Demo </title>
  </head>
  <body>
    <?php
      for($n=1; $n<=10; $n++)
      {
        if($n%2 == 0)
        {
          continue; //skip next stmt if $n is even.
        }
        echo "$n <br/>";
      }
    ?>
  </body>
</html>
```

Continue Demo	
1	
3	
5	
7	
9	

* Expressions:-

↳ Expressions are the most important building blocks of PHP. In PHP, almost anything you write is an expression.

↳ The simplest way to define an expression is "anything that has a value".

↳ In other words, an expression is made up of with variables and operators, that evaluates to a single value.

Ex:- `$a = 15;`
 `$b = 20;`
 `$c = $a + $b;`

* Arrays:-

↳ An array is a special variable, which can hold more than one value at a time.

(or)

↳ An array can hold many values under single name, and we can access the values by referring to an index number.

→ In PHP, the `array()` function is used to create an array.

`array();`

→ There are 3 types of arrays

↳ Indexed Array

↳ Associative Array

↳ Multidimensional Array.

⇒ Indexed Array:-

→ In php, index is represented by number.
which starts from 0.

→ In this array, all elements are assigned
to an index number by default.

→ There are two ways to define indexed array:

1st-Way:

```
$marks = array(60, 72, 66);
```

2nd-Way:

```
$marks[0] = 60;
```

```
$marks[1] = 72;
```

```
$marks[2] = 66;
```

Example:-

"IArray.php"

```
<html>
```

```
<head>
```

```
<title> Indexed Array </title>
```

```
</head>
```

```
<body>
```

```
<?php
```

```
$marks = array(60, 72, 66, 75);
```

```
echo "Marks are : $marks[0], $marks[1], $marks[2]  
and $marks[3]";
```

```
?>
```

```
</body>
```

```
</html>
```

O/P:-

@ Indexed Array		- 1 x
Marks are : 60, 72, 66 and 75		

→ Associative Array:-

→ The associative arrays are very similar to Indexed arrays in term of functionality but they are different in terms of their index.

→ Associative array will have their index as string so that we can establish a strong association between key and value.

→ In php, we can associate name with each array element using '=>' symbol.

→ There are two ways to define associative array.

1st way :

```
$marks = array ("Madhu" => 60, "Kiran" => 72,  
                "Gini" => 66, "Kalam" => 75);
```

2nd way :

```
$marks ["Madhu"] = 60;  
$marks ["Kiran"] = 72;  
$marks ["Gini"] = 66;  
$marks ["Kalam"] = 75;
```

Example :-

"AArray.php"

```
<html>
```

```
<head>
```

```
<title> Associative Array </title>
```

```
</head>
```

```
<body>
```

```
<?php
```

```
$marks = array ("Madhu" => 60, "Kiran" => 72,  
                "Gini" => 66, "Kalam" => 75);
```

```
echo "Marks of Madhu : " . $marks ["Madhu"] . "<br/>";
```

```
echo "Marks of Kiran : " . $marks ["Kiran"] . "<br/>";
```

```
echo "Marks of Gini : " . $marks ["Gini"] . "<br/>";
```

```
echo "Marks of Kalam : " . $marks ["Kalam"] . "<br/>";
```

```
?>
```

```
</body>
```

```
</html>
```

o/p:-

② Associative Array	
Marks of Madhu :	60
Marks of Kiran :	72
Marks of Gini :	66
Marks of Kalam :	75

⇒ Multi dimensional Array :-

→ In php, Multidimensional array is also known as array of arrays. It allows you to store tabular data in an array.

→ Multidimensional array can be represented in the form of Matrix which is represented by rows and columns.

Defⁿ:

```
$students = array (
    array (501, "Hani", 72),
    array (502, "Madhu", 62),
    array (503, "Naveen", 82)
);
```

→ A Multidimensional array is an array containing one or more arrays. php understands multidimensional arrays that are two, three, four, five (or) more levels deep.

Example :-

<html>

"MDArray.php"

<head>

<title> Multi-Dimensional Array </title>

</head>

<?php <body>

```
$students = array (  
    array (501, "Hari", 72),  
    array (521, "Madhu", 65);  
    array (536, "Naveen", 82));
```

```
for ($i=0; $i<3; $i++)
```

```
{
```

```
for ($j=0; $j<3; $j++)
```

```
{
```

```
    echo $students[$i][$j]. "    " ;
```

```
}
```

```
    echo "<br/>";
```

```
}
```

```
?>
```

</body>

</html>

o/p:-

| © Multi-Dimensional Array | | | - 0 x |
|---------------------------|--------|----|-------|
| 501 | Hari | 72 | |
| 521 | Madhu | 65 | |
| 536 | Naveen | 82 | |

* Strings:-

↳ A string is a sequence of characters i.e. used to store and manipulate text.

↳ There are 2 ways to specify string in PHP.

→ Single quotes Ex:- `$str = 'Hello world';`

→ Double quotes Ex:- `$str = "Hello world";`

→ Where in single quoted string, we can store multi-line text, special characters and escape sequences.

→ Where in double quoted string, we can't able use special characters directly.

Example:-

```
$str = 'php stands for "Hypertext preprocessor"';  
echo $str;    o/p: php stands for "Hypertext preprocessor"  
$str = "php stands for "Hypertext preprocessor";  
echo -$str;   o/p: parse error, syntax error.
```

⇒ String functions in PHP:-

↳ PHP provides various string functions to access and manipulate strings.

↳ A list of important string functions are

1. strtolower():-

→ It returns string in lowercase letter.

Syntax:- strtolower(string \$str)

Example:- <?php

```
$str = "My name is MADHU";
```

```
$str = strtolower($str);
```

```
echo $str;    O/P:- my name is madhu
```

```
?>
```

2. strtoupper():-

→ It returns string in upper case letter.

Syntax:- strtoupper(string \$str)

Example:- <?php

```
$str = "madhu";
```

```
$str = strtoupper($str);
```

```
echo $str;    O/P:- MADHU
```

```
?>
```

3. ucwords():-

→ It returns string converting first character of each word into uppercase

Syntax:- ucwords(string \$str)

Example:- <?php

```
$str = "my name is madhu";
```

```
$str = ucwords($str);
```

```
echo $str;    O/P:- My name is Madhu
```

4. strlen() :-

→ It returns length of the string.

Syntax:- `strlen(string $str)`

Example:-

```
<?php
$str = "Madhu T";
$len = strlen($str);
echo $len;    o/p:- 7
?>
```

5. strrev() :-

→ It returns reversed string.

Syntax:- `strrev(string $str)`

Example:-

```
<?php
$str = "Madhu T";
$str = strrev($str);
echo $str;
?>    o/p:- T uhdam
```

6. str_word_count() :-

→ It counts the number of words in a string.

Syntax:- `str_word_count(string $str)`

Example:-

```
<?php
$str = "Hello World!";
$wc = str_word_count($str);
echo $wc    o/p:- 2
?>
```

7. strpos():-

→ It searches for a specific text within a string.

If a match is found, the function returns the character position of the first match. If no match is found, it will return false.

Syntax:- `strpos($str, $text)`

Example:- `<? php`

`echo strpos("Hello world!", "world");`

`?>`

O/p:- 6.

8. str_replace():-

→ It replaces some characters with some other characters in a string.

Syntax:- `str_replace($text, $ntext, $str)`

Example:- `<? php`

`echo str_replace("world", "Madhu",
"Hello world!");`

`?>`

O/p:- Hello Madhu!

9. substr():-

→ It returns a sub part of a string.

Syntax:- `substr($string, $start, $length)`

Example:- `<? php`

`echo substr("Hello world", 6);`

`echo substr("Hello world", 1, 4);`

`?>`

O/p:- world
ello

Example:-

"StringFundemo.php"

```
<html>
```

```
<head>
```

```
<title> String - Functions </title>
```

```
</head>
```

```
<body>
```

```
<?php
```

```
$str = "My name is MADHU";
```

```
echo strtolower($str); echo "<br/>";
```

```
echo strtoupper($str); echo "<br/>";
```

```
echo ucwords($str); echo "<br/>";
```

```
echo strlen($str); echo "<br/>";
```

```
echo strrev($str); echo "<br/>";
```

```
echo str_word_count($str); echo "<br/>";
```

```
echo strpos($str, "MADHU"); echo "<br/>";
```

```
echo str_replace("MADHU", "KIRAN", $str); echo "<br/>";
```

```
echo substr($str, 1, 4);
```

```
<?>
```

```
</body>
```

```
</html>
```

opp

```
String - Functions
My name is madhu
MY NAME IS MADHU
My Name Is MADHU
16
UHDAM SI eman yM
4
11
My name is Kiran
y na
```

* Functions :-

→ A function is a piece of code that is used to perform a particular task.

→ PHP supports both built-in and user-defined functions.

→ The main advantage of functions is that code-reusability. (Write once Invoke Multiple).

→ PHP supports thousands of built-in functions.

→ And, php allows the user to define own functions, by using "function" Keyword.

Syntax:-
function functionname()
{
 //code
}

Note:- Function name must be start with letter and underscore only.

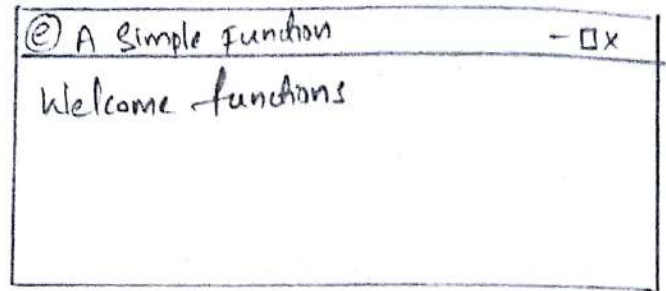
Example:- "SimpleFun.php"

```
<html>
<head>
  <title> A Simple function </title>
</head>
<body>
  <?php
    function msg() { //defining function
    } echo "welcome functions";
```

msg(); // calling function.

?>
</body>
</html>

o/p:-



- parameterized functions are functions with parameters. you can pass any number of parameters inside a function.
- We can pass the information in function through arguments which are separated by comma.
- These passed parameters (or) arguments acts as variables inside your function.

Example:-

"paramfun.php"

```
<html>
<head>
  <title> parameterized functions </title>
</head>
<body>
  <?php
```

```
function add($x,$y) // defining function
```

```
{
```

```
  $sum = $x + $y;
```

```
  echo " sum of two numbers is : $sum <br/>";
```

```
}
```

```
add(467,123); //calling function
```

```
function sub($x, $y) // defining function
{
```

```
    $diff = $x - $y;
```

```
    echo "difference of two numbers is: $diff";
```

```
}
```

```
sub(467, 123); // calling function
```

```
?>
```

```
</body>
```

```
</html>
```

o/p:-

@ parameterized function	- 1 x
sum of two numbers is: 590	
difference of two numbers is: 344	

→ PHP allows you to call function by value and reference.

* call by value:

In case of call by value, actual value is not modified

if it is modified inside the function.

"CallbyvalueFun.php"

Example:- <html>
<head> <title> Call-By-Value </title> </head>

```
<body>
```

```
<?php
```

```
function increment($i)
```

```
{
```

```
    $i++;
```

```
}
```

```
$i=10;
```

```
increment($i);
```

```
echo $i;
```

```
</body>
```

```
</html>
```

o/p:-

@ Call-By-Value	- 1 x
10	

* call by reference :

→ In case of call by reference, actual value is modified, if it is modified inside the function.

→ In such case, you need to use & (ampersand) symbol with formal arguments.

→ The & represents reference of the variable.

Example:-

"callbyreferenceFun.php"

```
<html>
<head>
<title> Call - By - Reference </title>
</head>
<body>
<?php
function adder(&$str2)
{
    $str2 = 'Call By Reference';
}
$str = 'This is';
adder($str);
echo $str;
?>
</body>
</html>
```

o/p:-

Call - By - Reference	
This is Call By Reference	

→ PHP allows you to define default argument values. In such case if you don't pass any value to the function, it will use default argument value.

Example:-

```
<html>
<head>
<title> Default - argument Function </title>
</head>
<body>
<?php
function msg ($name = "Madhu")
{
    echo " Hello $name <br/>";
}
msg("Kiran");
msg();
msg("Srinu");
?>
</body>
</html>
```

O/P:

Default - argument Function	-BX
Hello Kiran	
Hello Madhu	
Hello Srinu	

Example:-

```
<?php
function add ($n1=10, $n2=10){
    $n3 = $n1 + $n2;
    echo " Addition is : $n3 <br/>";
}
add();
add(20);
add(20, 40);
?>
```

O/P:

```
Addition is : 20
Addition is : 30
Addition is : 60
```

* Recursive Function :-

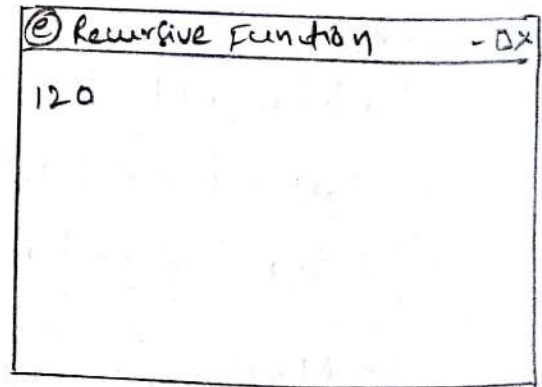
→ PHP also supports recursive function. In such case, we call current function within function. It is also known as recursion.

"RecursiveFun.php"

Example :-

```
<html>
<head>
  <title> Recursive Function </title>
</head>
<body>
  <?php
    function factorial($n)
    {
      if($n < 0)
        return -1;
      if($n == 0)
        return 1;
      return ($n * factorial($n-1));
    }
    echo factorial(5);
  ?>
</body>
</html>
```

o/e



* Reading data from web form controls:-

→ To read data from a form, we need to use superglobal variables.

→ A superglobal variable is a built in php variable that is available in any scope.

→ PHP supports two superglobal variables, those are

↳ `$_GET` - contains list of all field names and values sent by a form using the get method.

↳ `$_POST` - contains list of all field names and values sent by a form using the post method.

⇒ Get Form:-

→ Get request is the default form request. The data passed through get request is visible on the URL browser so it is not secured.

→ We can able to send limited amount of data through get request.

Example:-

"GetForm.html"

```
<html>
```

```
<head>
```

```
<title> Get Form </title>
```

```
</head>
```

```
<body>
```

```

<form action = "Getform.php" method = "get">
  Name : <input type = "text" name = "name" /> <br/> <br/>
  Age : <input type = "text" name = "age" /> <br/> <br/>
  <input type = "submit" value = "click me" />
</form>
</body>
</html>

```

Get Form

Name :

Age :

"Getform.php"

```

<html>
<head>
  <title> Welcome </title>
</head>
<body>
  <?php
    $name = $_GET["name"];
    $age = $_GET["age"];
    echo "welcome, $name your age is : $age";
  ?>
</body>
</html>

```

Welcome

Welcome, Madhu your age is : 30

→ post Form:-

→ post request is widely used to submit form that have large amount of data such as file upload, login form, registration form etc.

→ The data passed through post request is not visible on the URL browser so it is secured.

Example:-

"postForm.html"

```
<html>
```

```
<head>
```

```
<title> post form </title>
```

```
</head>
```

```
<body>
```

```
<form action = "postForm.php" method = "post">
```

```
<table>
```

```
<tr> <td> Username : </td>
```

```
<td> <input type = "text" name = "uname" /> </td>
```

```
</tr>
```

```
<tr> <td> password : </td>
```

```
<td> <input type = "password" name = "pwd" /> </td>
```

```
</tr>
```

```
<tr> <td> </td>
```

```
<td> <input type = "submit" value = "login" /> </td>
```

```
</tr>
```

```
</table>
```

```
</form>
```

```
</body>
```

```
</html>
```

"postForm.php"

```
<html>
<head>
<title> Welcome </title>
</head>
<body>
<?php
    $name = $_POST["uname"];
    $pwd = $_POST["pwd"];
    echo "Welcome : $name, your password is : $pwd";
?>
</body>
</html>
```

o/p:

postForm.html

@ post Form - DX

userName :

password :

postForm.php

@ Welcome - DX

Welcome : madhuS211t, your password is : 123456

Note:- post method uses http protocol, to send data. This provides a secured way to send the data.

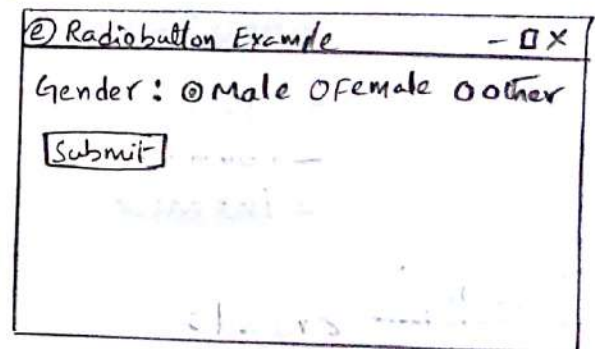
→ Don't use Get method if form has password or other sensitive information sent to the server.

• Reading data from Radio button :-

Example :-

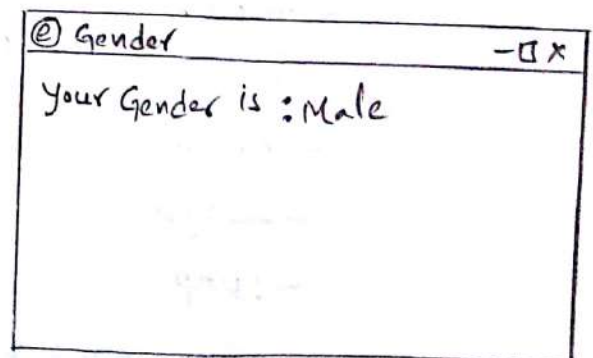
"Radiogen.html"

```
<html>
<head>
  <title> Radiobutton Example </title>
</head>
<body>
  <form action="radiogen.php" method="post">
    <b> Gender : </b>
    <input type="radio" name="gen" value="Male"> Male </input>
    <input type="radio" name="gen" value="Female"> Female </input>
    <input type="radio" name="gen" value="Other"> Other </input>
    <br/> <br/>
    <input type="submit" value="Submit" />
  </form>
</body>
</html>
```



"radiogen.php"

```
<html>
<head>
  <title> Gender </title>
</head>
<body>
  <?php
    $gen = $_POST['gen'];
    echo "your Gender is : $gen";
  ?>
</body>
</html>
```



• Reading data from select list :-

Example:

```
<html>
```

```
<head>
```

```
<title> List Example </title>
```

```
</head>
```

```
<body>
```

```
<form action="list.php" method="post">
```

```
<b> Branch : </b> &nbsp;
```

```
<select name="branch">
```

```
<option value="CSE"> CSE </option>
```

```
<option value="ECE"> ECE </option>
```

```
<option value="EEE"> EEE </option>
```

```
</select>
```

```
&nbsp; <input type="submit" value="Submit" />
```

```
</form>
```

```
</body>
```

```
</html>
```

"listDemo.html"

"list.php"

```
<html>
```

```
<head>
```

```
<title> List </title>
```

```
</head>
```

```
<body>
```

```
<?php
```

```
$branch = $_POST['branch'];
```

```
echo "your branch is : $branch";
```

```
?>
```

```
</body>
```

```
</html>
```

o/p:-

© List Example - O X

Branch : CSE Submit

© List - O X

your Branch is : ECE