

**Course :** Web Designing Using PHP and MYSQL(3361603)

**Branch:** Diploma in Information Technology

**SEM:** 6

**Teaching & Examination Scheme:**

Teaching Scheme (in Hours)			Total Credits (L+T+P)	Examination Scheme				
				Theory Marks		Practical Marks		Total Marks
L	T	P	Credit	ESE	PA	ESE	PA	200
3	0	4	7	70	30	40	60	

**Legends:** L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; ESE - End Semester Examination; PA - Progressive Assessment

**Course Outcomes:**

<b>CO-1</b>	Develop simple script using basic PHP concepts.
<b>CO-2</b>	Apply In-Built and User defined functions in PHP scripts.
<b>CO-3</b>	Develop interactive Web pages using various form controls and methods.
<b>CO-4</b>	Apply the concept of state management for building web application.
<b>CO-5</b>	Create dynamic Website/ Web based Application using PHP and MySQL database.

**CO-1**

Develop simple script using basic PHP concepts.

**PRACTICAL LIST - 1**

- 1.1 Write a PHP script to display welcome message && write a PHP script to display given paragraph.
- 1.2 Write a PHP script to demonstrate use of global and local and static and constant variables.
- 1.3 Write a PHP script to demonstrate arithmetic operators, comparison operator, and logical operator.
- 1.4 Write PHP Script to print Fibonacci series of ten numbers.
- 1.5 Write a PHP script to find a factorial of n using Recursive Function.
- 1.6 Write a PHP script to Fibonacci series in html tabular format.
- 1.7 Write PHP Script to generate result and display grade.
- 1.8 Write a PHP Script to show different looping structure.
- 1.9 Write PHP Script to find maximum number out of three given numbers with and without Command line.
- 1.10 Write a PHP script to call by reference and call by value.
- 1.11 Write PHP script to display table of number 11.
- 1.12 Write PHP Script for addition and multiplication of two 2x2 matrices.
- 1.13 Write a PHP Script for numeric, Associative and multi-dimensional array.
- 1.14 Write a PHP script to Find Perimeter and area of rectangle using parameterized function.
- 1.15 Write a PHP Script for performing function that takes arguments, returns arguments, default argument and variable length argument.
- 1.16 Write a PHP script to find var args that uses to find max and minimum of Passed parameters

**Aim:**

- 1.1 Write a PHP script to display welcome message and write a php script to display given paragraph.
- 1.2 Write a PHP script to demonstrate use of global and local and static and constant variables.

**Software Required:** Notepad, WordPad, Notepad++, Dreamweaver, Wamp/Xampp

**Pre-requisite:** Basic knowledge of editor

**Theory/Logic:****❖ Structure:-**

**<? php**

.....  
**// Code or statement to be execute on server side**  
.....

**?>**

- ❖ Whenever requesting web page with .php extension the server locates the requested file and executing the script that is specified between <? php and ?> tag and returns output in form of just HTML back to the user.

**❖ Rules of php syntax:-**

□ You must follow following rules for PHP syntax:- 1.

The script of PHP must contain between <? php ?>

2. Every statement inside <? php ?> must ends with a semicolon.
3. String must contain between either single quotation mark or double quotation mark.
4. You can make a line as a comment using either // or /\* \*/. No other symbols are permitted for making a line as a comment.
5. Every variable in a script must starts with \$ sign.
6. Name of the variable cannot start with digit and it cannot contain white spaces.
7. PHP is case sensitive.

**❖ Constants in php:-**

Syntax:- **define (name, value, case-insensitive)**

- ❖ *name*: Specifies the name of the constant
- ❖ *value*: Specifies the value of the constant
- ❖ *Case-insensitive*: Specifies whether the constant name should be case-insensitive. Default is false.

**❖ Static Variable:-**

Syntax:-

**Static \$VariableName=value; Program/Solution:**

**Program:****1.1:**

&lt;?php

```
    echo "<h3>Welcome to This PHP Website!</h3> <hr>This is First Page Using PHP and  
Xampp Environment, Nice to see you the all course of PHP.";
```

```
    $name = "Tarun";  
    $surname = "Prajapati";  
    echo "<hr>Hi I am ", "<b>$name $surname</b>";  
?>
```

**Output:**

**Welcome to This PHP Website!**

This is First Page Using PHP and Xampp Environment, Nice to see you the all course of PHP.

Hi I am Tarun Prajapati

**1.2:**

&lt;?php

```
    $name = "Tarun Prajapati";//global variable
```

```
//local Variable
```

```
function local()
```

```
{
```

```
    echo "<h3>Local Variable</h3>";
```

```
    $sub = "PHP";
```

```
    echo "Value Of Local Variable = " . $sub;
```

```
}
```

```
//Global Variable
```

```
function globaltest()
```

```
{
```

```
    echo "<h3>Global Variable</h3>";
```

```
    global $name;
```

```
    echo "My Name is ".$name;
```

```
}
```

```
//constant Variable
```

```
function constanttest()
```

```
{
```

```
    echo "<h3>Constant Variable</h3>";
```

```
    define("surname","Prajapati");
```

```
    echo "Your Surname is ".$surname;
```

```
}
```

```
//static variable
```

```
function statictest()
```

```
{
```

```
    echo "<h3>Static Variable</h3>";
```

```
    static $n1 = 3;
```

```
    $n2 = 5;
```

```
    $n1++;
```

```
$n2++;  
echo "Static Variable Value = " . $n1;  
echo "<br>Non-Static Variable Value = " . $n2;  
}  
globaltest();  
local();  
constanttest();  
statictest();  
statictest();  
statictest();  
?>
```

**Output:**

```
Global Variable  
My Name is Tarun Prajapati  
Local Variable  
Value Of Local Variable = PHP  
Constant Variable  
Your Surname is Prajapati  
Static Variable  
Static Variable Value = 4  
Non-Static Variable Value = 6  
Static Variable  
Static Variable Value = 5  
Non-Static Variable Value = 6  
Static Variable  
Static Variable Value = 6  
Non-Static Variable Value = 6
```

**Questions:**

1. Write down full form of WAMP, LAMP and XAMPP.

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2. Justify: PHP is a Loosely Typed Language.

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### 1.3 Write a PHP script to demonstrate arithmetic operators, comparison operator, and logical operator

**Software Required:** Notepad, WordPad, Notepad++, Dreamweaver, Wamp/Xampp

**Pre-requisite:** Basic knowledge of editor

#### Theory/Logic:

- Operators are used to perform operations on variables and values.
- PHP divides the operators in the following groups:
  - ☐ Arithmetic operators
  - ☐ Assignment operators
  - ☐ Comparison operators
  - ☐ Increment/Decrement operators
  - ☐ Logical operators
  - ☐ String operators
  - ☐ Array operators

#### Arithmetic operator:-

Operator	Name	Example	Result
+	Addition	$\$x + \$y$	Sum of $\$x$ and $\$y$
-	Subtraction	$\$x - \$y$	Difference of $\$x$ and $\$y$
*	Multiplication	$\$x * \$y$	Product of $\$x$ and $\$y$
/	Division	$\$x / \$y$	Quotient of $\$x$ and $\$y$
%	Modulus	$\$x \% \$y$	Remainder of $\$x$ divided by $\$y$
**	Exponentiation	$\$x ** \$y$	Result of raising $\$x$ to the $\$y$ 'th power (Introduced in PHP 5.6)

#### Comparison Operators:-

Operator	Name	Example	Result
==	Equal	$\$x == \$y$	Returns true if $\$x$ is equal to $\$y$
===	Identical	$\$x === \$y$	Returns true if $\$x$ is equal to $\$y$ , and they are of the same type
!=	Not equal	$\$x != \$y$	Returns true if $\$x$ is not equal to $\$y$
<>	Not equal	$\$x <> \$y$	Returns true if $\$x$ is not equal to $\$y$
!==	Not identical	$\$x !== \$y$	Returns true if $\$x$ is not equal to $\$y$ , or they are not of the same type
>	Greater than	$\$x > \$y$	Returns true if $\$x$ is greater than $\$y$
<	Less than	$\$x < \$y$	Returns true if $\$x$ is less than $\$y$
>=	Greater than or equal to	$\$x >= \$y$	Returns true if $\$x$ is greater than or equal to $\$y$
<=	Less than or equal to	$\$x <= \$y$	Returns true if $\$x$ is less than or equal to $\$y$

## Logical Operators:-

Operator	Name	Example	Result
and	And	\$x and \$y	True if both \$x and \$y are true
or	Or	\$x or \$y	True if either \$x or \$y is true
xor	Xor	\$x xor \$y	True if either \$x or \$y is true, but not both
&&	And	\$x && \$y	True if both \$x and \$y are true
	Or	\$x    \$y	True if either \$x or \$y is true
!	Not	!\$x	True if \$x is not true

### Program/Solution:

#### 1.3:

```
<?php
$n1 = 10;
$n2 = 5;
$n3 = 10.0;

echo "<h2>Arithmetic Operators</h2>";
echo "Addition of $n1 and $n2 =" . $n1+$n2;
echo "<br>Subtraction of $n1 and $n2 =" . $n1-$n2;
echo "<br>Multiplication of $n1 and $n2 =" . $n1*$n2;
echo "<br>Divison of $n1 and $n2 =" . $n1/$n2;
echo "<br>Modulo of $n1 and $n2 =" . $n1%$n2;
echo "<h2>Comparison Operators</h2>";
if($n1==$n2)
{
    echo "$n1 == $n2 is True";
}
else echo "$n1 == $n2 is False";
if($n1=== $n3)
{
    echo "<br>$n1 === $n3 is True";
}
else echo "<br>$n1 === $n3 is False";
if($n1>$n2)
{
    echo "<br>$n1 is Greater than $n2";
}
else echo "<br>$n1 is Smaller than $n2";
if($n1!=$n2)
{
    echo "<br>$n1 and $n2 is not identical";
}
```

```
}
else echo "<br>$n1 is $n2 identical";

echo "<h2>Logical Operators</h2>";
if($n1==10 and $n2==5)
{
    echo "AND Opreator = Welcome!<br> Both Conditions are Satisfied</b>";
}
else echo " AND Opreator = Sorry!<br> Both Conditions are Not Satisfied</b>";
if($n1==10 or $n2==10)
{
    echo "<br> OR Opreator = Welcome!<br> One Condition is Satisfied</b>";
}
else echo "<br> OR Opreator = Sorry!<br> No Conditions are Not Satisfied</b>";
?>
```

**Output:**

```
| Arithmetic Operators
|
| Addition of 10 and 5 =15
| Subtraction of 10 and 5 =5
| Multiplication of 10 and 5 =50
| Divison of 10 and 5 =2
| Modulo of 10 and 5 =0
|
| Comparison Operators
|
| 10 == 5 is False
| 10 === 10 is False
| 10 is Greater than 5
| 10 and 5 is not identical
|
| Logical Operators
|
| AND Operator = Welcome! Both Conditions are Satisfied
| OR Operator = Welcome! One Condition is Satisfied
|
```

**Questions:**

1. List out logical operators in PHP.

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2. List out Arithmetic operators in PHP.

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- 1.4 Write PHP Script to print Fibonacci series.
- 1.5 Write a PHP script to find a factorial of n using Recursive Function.
- 1.6 Write a PHP script to Fibonacci series in html tabular format.
- 1.7 Write PHP Script to generate result and display grade.
- 1.8 Write a PHP Script to show different looping structure.

**Software Required:** Notepad, WordPad, Notepad++, Dreamweaver, Wamp/Xampp

**Pre-requisite:** Basic knowledge of editor

**Theory/Logic:** In PHP we have the following conditional statements:

❖ **PHP Conditional structure: -**

- ❖ **if statement** - executes some code if one condition is true
- ❖ **if...else statement** - executes some code if a condition is true and another code if that condition is false
- ❖ **if...else if...else statement** - executes different codes for more than two conditions ❖

**Switch statement** - selects one of many blocks of code to be executed.

❖ **syntax:**

```
Switch (n) {  
  case label1:  
    code to be executed if  
    n=label1;   break;   case label2:  
    code to be executed if  
    n=label2;   break;   default:  
    code to be executed if n is different from all labels;  
}
```

❖ **PHP looping structure:-**

- It allows you to execute certain portion of the script repeatedly based on some condition.
- **for** - loops through a block of code a specified number of times

Syntax:-

```
□ for (init counter; test counter; increment counter) {   code  
  to be executed;  
}
```

□ **foreach** - loops through a block of code for each element in an array.

Syntax:-

```
□ foreach ($array as $value)  
  {
```

```
    code to be executed;  
}
```

□ **while** - loops through a block of code as long as the specified condition is true

Syntax:

```
□ while (condition is true)  
{  
    code to be executed;  
}
```

□ **do...while** - loops through a block of code once, and then repeats the loop as long as the specified condition is true.

Syntax:

```
□ do {    code to be  
    executed;  
} while (condition is true);
```

### Program/Solution:

1.4:

```
<?php  
$st = 0;  
$n1 = 0;  
$n2 = 1;  
echo "<h3>Fibonacci Series of First 10 Numbers</h3>";  
echo $n1." " . $n2." ";
```

```
while($st<8)  
{  
    $sum = $n2 + $n1;  
    echo "$sum ";  
    $n1 = $n2;  
    $n2 = $sum;  
  
    $st++;  
}  
?>
```

### Output:

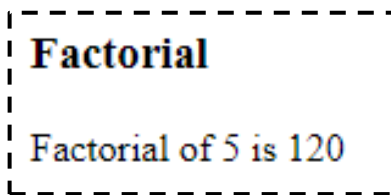
**Fibonacci Series of First 10 Numbers**

0 1 1 2 3 5 8 13 21 34

**1.5:**

```
<?php
function fact($n)
{
    if($n <= 1)
    {
        return 1;
    }
    else
    {
        return $n * fact($n-1);
    }
}

$n=5;
echo "<h3>Factorial</h3>";
echo "Factorial of $n is ".fact($n);
?>
```

**Output:****1.6:**

```
<html>
<head>
    <title>Document</title>
</head>
<body>
<h3>Fibonacci Series of First 10 Numbers</h3>
<table border="1px">
<?php
$st = 0;
$n1 = 0;
$n2 = 1;

echo "<tr><td>".$n1."</td></tr><tr><td>".$n2."</td></tr>";

while($st<8)
{
    $sum = $n2 + $n1;
    echo "<tr><td>$sum </td></tr>";
    $n1 = $n2;
    $n2 = $sum;

    $st++;
}
```

```

}
?>
</table>
</body>
</html>

```

**Output:**

Fibonacci Series of First 10 Numbers	
0	
1	
1	
2	
3	
5	
8	
13	
21	
34	

**1.7:**

```

<html>
<head>
    <title>Gradesheet</title>
</head>
<body align="center">
    <form method="post">
        <table border=2 align="center" cellpadding="8" style="color: aqua" ;
bgcolor=black>
            <tr align="center">
                <td>
                    Enrollment No :
                </td>
                <td>
                    <input type="text" name="t1">
                </td>
            </tr>
            <tr align="center">
                <td>
                    Web and Network Security :
                </td>
                <td>
                    <input type="text" name="t2">
                </td>
            </tr>
            <tr align="center">
                <td>
                    Advanced Java Programming :
                </td>
                <td>

```

```

        <input type="text" name="t3">
    </td>
</tr>
<tr align="center">
    <td>
        Android Application Development :
    </td>
    <td>
        <input type="text" name="t4">
    </td>
</tr>
<tr align="center">
    <td>
        Web Designing using PHP & MySQL :
    </td>
    <td>
        <input type="text" name="t5">
    </td>
</tr>
<tr align="center">
    <td>
        Project - II :
    </td>
    <td>
        <input type="text" name="t6">
    </td>
</tr>
<tr align="center">
    <td colspan=2>
        <input type="submit" name="s" value="Result">
    </td>
</tr>
</table>
<br>
<br>

<?php
$ER = $_POST['t1'];
echo "<h2 align=center><u>GTU Diploma SEM-6 Gradesheet</u></h2>
    <h3 align=center>Enrollment No.:- $ER</h3>";
if (isset($_POST['s'])) {
    $WNS = $_POST['t2'];
    $AJ = $_POST['t3'];
    $AAD = $_POST['t4'];
    $PHP = $_POST['t5'];
    $PRJ = $_POST['t6'];
    $sum = ($WNS+$AJ+$AAD+$PHP+$PRJ)/5;

    function grade($avg)
    {
        if ($avg >= 90 && $avg < 100)

```

```

        echo "AA";
    elseif ($avg >= 80)
        echo "AB";
    elseif ($avg >= 70)
        echo "BB";
    elseif ($avg >= 60)
        echo "BC";
    elseif ($avg >= 50)
        echo "CC";
    elseif ($avg >= 40)
        echo "FF";
    else echo "Sorry!";
    }
}
?>
<table align="center" border="1" cellpadding="8" style="color: aqua" ;
bgcolor=black>
    <tr>
        <th bgcolor="yellow" style="color: red;">Subject Code</th>
        <th bgcolor="yellow" style="color: red;">Subject</th>
        <th bgcolor="yellow" style="color: red;">Grade</th>
    </tr>
    <tr>
    <tr>
        <td>3361601</td>
        <td>Web and Network Security</td>
        <td><?php grade($WNS); ?></td>
    </tr>
    <tr>
        <td>3360701</td>
        <td>Advanced Java Programming</td>
        <td><?php grade($AJ); ?></td>
    </tr>
    <tr>
        <td>3361602</td>
        <td>Android Application Development</td>
        <td><?php grade($AAD); ?></td>
    </tr>
    <tr>
        <td>3361603</td>
        <td>Web Designing using PHP & MySQL</td>
        <td><?php grade($PHP); ?></td>
    </tr>
    <tr>
        <td>3361606</td>
        <td>Project - II</td>
        <td><?php grade($PRJ); ?></td>
    </tr>
</table>
<p style=color:darkblue;> <b>Your Obtained Grade : <?php grade($sum)?></b></p>
<p style=color:darkblue;> <b>Average : <?php echo $sum ?></b></p>

```

```

<p style=color:red> <b>This is Your Result, Thank You.</b></p>
</body>
</html>

```

**Output:**

Enrollment No :	206120316008
Web and Network Security :	99
Advanced Java Programming :	87
Android Application Development :	89
Web Designing using PHP & MySQL :	90
Project - II :	88
Result	

**GTU Diploma SEM-6 Gradesheet****Enrollment No.:- 206120316008**

Subject Code	Subject	Grade
3361601	Web and Network Security	AA
3360701	Advanced Java Programming	AB
3361602	Android Application Development	AB
3361603	Web Designing using PHP & MySQL	AA
3361606	Project - II	AB

**Your Obtained Grade : AA****Average : 90.6****This is Your Result, Thank You.****1.8:**

```

<?php
$x = 1;
echo "<h2>While loop</h2>";
while($x<=3)
{
    echo "<h5>Value of X = $x <br></h5>";
    $x++;
}

```

```
}

$y = 1;
echo "<h2>do-while Loop</h2>";
do{
    echo "<h5>Value of Y = $y <br></h5>";
    $y++;
}while($y>=3);

echo "<h2>for Loop</h2>";
for($z=0; $z<=3; $z++)
{
    echo "<h5>Value of Z = $z <br></h5>";
}

echo "<h2>foreach Loop</h2>";
$frd = array("Tarun","Sanket","Hansil","Pranav","Vaibhav","Milan");
foreach($frd as $value)
{
    echo "<h5>Value = $value <br></h5>";
}
?>
```

**Output:****While loop**

Value of X = 1

Value of X = 2

Value of X = 3

**do-while Loop**

Value of Y = 1

**for Loop**

Value of Z = 0

Value of Z = 1

Value of Z = 2

Value of Z = 3

**foreach Loop**

Value = Tarun

Value = Sanket

Value = Hansil

Value = Pranav

Value = Vaibhav

Value = Milan



**Questions:**

1. Differentiate for V/S foreach loop.

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2. In which situation foreach loop is used in PHP?

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- 1.9** Write PHP Script to find maximum number out of three given numbers with and without Command line.
- 1.10** Write a PHP script to call by reference and call by value.
- 1.11** Write PHP script to display table of number 11.

**Software Required:** Notepad, WordPad, Notepad++, Dreamweaver, Wamp/Xampp **Pre-requisite:** Basic knowledge of editor

### Theory/Logic:

#### Steps for run PHP scripts in command line:

- 1) Start a command prompt (Start button > Run > cmd.exe)
- 2) In the window that appears, type the full path to the PHP executable (php.exe) followed by the full path to the script you wish to run as a windows service. ...
- 3) Hit the Enter key to execute the command line.

#### Call by Value:-

- When you define a function that accepts arguments you must have to pass those arguments while calling function.
- If you pass wrong number of arguments at the time of calling the function then it will generate a warning message.
- In PHP you can define function having default argument.
- If you don't pass value for that argument then it will consider default value for that argument otherwise it will overwrite value for argument.
- You need to assign the value to argument while defining the function.

#### Call by Reference:

- In this case, the address of the variable is passed into the function. Change to the value within the function will be reflected in the variable.
- To pass parameters into functions by reference, append & sign to the variable.

#### Program/Solution:

##### 1.9:

```
<?php
echo "<h2>Maximum Number without Command Line</h2>";
$a = 10;
$b = 20;
$c = 30;

if($a>$b && $a>$c)
{
    echo "Maximum Number = $a";
}
elseif($b>$a && $b>$c)
{
```

```
    echo "Maximum Number = $b";
}
else echo "Maximum Number = $c";

echo "<h2>Maximum Number using Command Line</h2>";
echo "Enter Three Numbers<br>";
echo "Enter First Numbers:";
$x = fgets(STDIN);
echo "Enter Second Numbers:";
$y = fgets(STDIN);
echo "Enter Third Numbers:";
$z = fgets(STDIN);

if($x>$y && $x>$z)
{
    echo "Maximum Number = $x";
}
elseif($y>$x && $y>$z)
{
    echo "Maximum Number = $y";
}
else echo "Maximum Number = $z";
?>
```

**Output:**

```
Maximum Number without Command Line
Maximum Number = 30
```

**Maximum Number with Command Line ::**

```
PS C:\xampp\htdocs\206120316008\Practical List-1> php p1_9.php
Enter First Numbers:20
Enter Second Numbers:30
Enter Third Numbers:10
Maximum Number = 30
```

**1.10:**

```
<?php
function Pass_ByReference($x,&$y)
{
    $x *= 2;
    $y *=2;
}
$a=3;
$b=5;
echo "<h2>Before Function Call</h2>";
echo "Value of A = $a";
echo "<br>Value of B = $b";
Pass_ByReference($a,$b);
echo "<h2>After Function Call</h2>";
echo "Value of A = $a"; echo "<br>Value of B = $b"; ?>
```

**Output:**

<b>Before Function Call</b>
Value of A = 3 Value of B = 5
<b>After Function Call</b>
Value of A = 3 Value of B = 10

**1.11:**

```
<?php
echo "<h2>Table Of 11</h2>";
$n=11;
for($i=0; $i<=10; $i++){
    echo "$i X $n = ".$i * $n;
    echo "<br>";
}
?>
```

**Output:**

<b>Table Of 11</b>
0 X 11 = 0
1 X 11 = 11
2 X 11 = 22
3 X 11 = 33
4 X 11 = 44
5 X 11 = 55
6 X 11 = 66
7 X 11 = 77
8 X 11 = 88
9 X 11 = 99
10 X 11 = 110

**Questions:**

1. Differentiate call by value Vs call by reference

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**Aim:**

- 1.12** Write PHP Script for addition and multiplication of two 2x2 matrices.
- 1.13** Write a PHP Script for numeric, Associative and multi-dimensional array.
- 1.14** Write a PHP script to Find Perimeter and area of rectangle using parameterized function.
- 1.15** Write a PHP Script for performing function that takes arguments, returns arguments, default argument and variable length argument.
- 1.16** Write a PHP script to find var args that uses to find max and minimum of Passed parameters

**Software Required:** Notepad, WordPad, Notepad++, Dreamweaver, Wamp/Xampp

**Pre-requisite:** Basic knowledge of editor

**Theory/Logic:**

- ❖ There are mainly two types of arrays:-

1) Indexed/Numeric array. 2) Associative array. **Indexed/Numeric**

**Array:-**

- ❖ These arrays can store numbers, strings and any object but their index will be represented by numbers. By default array index starts from 0;
- ❖ An array is created using array() keyword. Syntax:-

**\$ArrayName=array (value1, value2...ValueN);**

**Associative Array:-**

- ❖ In Associative array each element having key associated with it.
- ❖ The key can be either numeric or string. Syntax:-

**\$ArrayName=array (key1=>value1, key2=>value2...keyN=>valueN);**

**User defined functions:-**

- ❖ A function is a block of statements that can be used repeatedly in a program.
- ❖ There is no need to declare function in PHP. You can directly define function.

Syntax:-

```
Function FunctionName (arguments)
{ //code to be executed;
}
```

## Function with variable length argument:-

- ❖ PHP allows you to pass variable number of arguments to the function without defining it.
- ❖ You can just define a function with empty argument list and then use one of the following three built in function.
- ❖ **func\_num\_args ()** — Returns the number of arguments passed to the function.
- ❖ **func\_get\_args (position)** — Return the value of the specific argument specified in position. Position index starts with 0.
- ❖ **func\_get\_args ()** - Returns an array which contains value of all arguments passed to the function.

### Program/Solution:-

#### 1.12:

```
<?php
$a = array(array(1,2),array(3,4));
$b = array(array(5,6),array(7,8));
echo "<h1>Matrix-1</h1>";
for($i=0;$i<2;$i++) {
    for($j=0;$j<2;$j++){
        echo $a[$i][$j]. " ";
    }
    echo "<br>";
}
echo "<h1>Matrix-2</h1>";
for($i=0;$i<2;$i++){
    for($j=0;$j<2;$j++) {
        echo $b[$i][$j]. " ";
    }
    echo "<br>";
}
echo "<h1>Matrix Addition</h1>";
for($i=0;$i<2;$i++){
    for($j=0;$j<2;$j++) {
        echo $a[$i][$j] + $b[$i][$j]. " ";
    }
    echo "<br>";
}
echo "<h1>Matrix Multiplication</h1>";
```

```
for($i=0;$i<2;$i++) {  
    for($j=0;$j<2;$j++) {  
        $temp=0;  
        for($k=0;$k<2;$k++)  
        {  
            $temp += $a[$i][$k] * $b[$k][$j];  
        }  
        $m[$i][$j] = $temp;  
        echo $m[$i][$j] . " ";  
    }  
    echo "<br>";  
}
```

**Output:**

```
Matrix-1  
1 2  
3 4  
  
Matrix-2  
5 6  
7 8  
  
Matrix Addition  
6 8  
10 12  
  
Matrix Multiplication  
19 22  
43 50
```

**1.13:**

&lt;?php

```
echo "<h2>Indexed/Numeric Array</h2>";  
$arr = array("India","USA","Russia","UAE");  
echo "Countries = ". $arr[0]. " ".$arr[1]. " ".$arr[2];  
echo "<hr>";  
echo "<h2>Associative Array</h2>";  
$arr1 = array("India"=>"Rupee","USA"=>"Dollar","Russia"=>"Russian  
Ruble","Iran"=>"Riyal");  
print_r($arr1);
```

```
echo "<hr>";
echo "<h2>Multi-dimensional Array</h2>";
$arr2 = array(array(1,2,3),
              array(4,5,6),
              array(7,8,9));
echo "</h3>Matrix :</h3><br>";
for($i=0;$i<3;$i++){
    for($j=0;$j<3;$j++) {
        echo $arr2[$i][$j]. " ";
    }
    echo "<br>";
}
?>
```

**Output:****Indexed/Numeric Array**

Countries = India USA Russia

**Associative Array**

Array ( [India] => Rupee [USA] => Dollar [Russia] => Russian Ruble [Iran] => Riyal )

**Multi-dimensional Array**

Matrix :  
1 2 3  
4 5 6  
7 8 9

**1.14:**

<?php

```
echo "<h2>Perimeter Of Rectangle</h2>";
function getperimeter($l,$w){
    $pm = 2 * ($l + $w);
    echo "<h4>Perimeter of Rectangle = $pm</h4>";
}
function area($l,$w){
    $ar = $l * $w;
    echo "<h4>Area of Rectangle = $ar</h4>";
}
getperimeter(10,20);
```



```
echo "<h2>Area Of Rectangle</h2>";  
area(10,20);  
?>
```

**Output:**

```
Perimeter Of Rectangle  
Perimeter of Rectangle = 60  
Area Of Rectangle  
Area of Rectangle = 200
```

**1.15:**

```
<?php  
function demo($a,$b=5) {  
    echo"<h2>Function with Argument,Return Arguments,Default Arguments,Variable Length  
Argument</h2>";  
    echo "No of Arguments = ". func_num_args();  
    echo "<br>";  
    echo "Arguments = ";  
    print_r(func_get_args());  
    return $a+$b;  
}  
echo "<br>Sum = ". demo(10);  
?>
```

**Output:**

```
Function with Argument,Return Arguments,Default Arguments,Variable Length Argument  
No of Arguments = 1  
Arguments = Array ( [0] => 10 )  
Sum = 15
```

**1.16:**

```
<?php  
function Max_Min(){  
    $arr = func_get_args();  
    echo "<b>Values = </b>";  
    $n = count($arr);  
    for($i=0;$i<$n;$i++) {
```

```
    echo $arr[$i]. " ";  
}  
sort($arr);  
echo "<h4>Minimum Value = $arr[0]</h4>";  
$x = $n-1;  
echo "<h4>Maximum Value = $arr[$x]</h4>";  
}  
Max_Min(9,980,87,-7,9000,200,800,700,3000,609);  
?>
```

**Output:**

```
Values = 9 980 87 -7 9000 200 800 700 3000 609  
Minimum Value = -7  
Maximum Value = 9000
```

**Questions:**

1. In which situation associative array is used in PHP?

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2. Describe user defined function with default argument.

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**Conclusion: -**

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