PRACTICAL – 2

Aim: Perform basic programs of PHP using operator, condition, Loop, Date & Time functions.

1. **Study the following functions & write a description for each:**
   echo(), print(), phpinfo(), define(), var_dump(), date(), Time()

❖ echo(): echo used to display the statement in PHP which executes fast than print statement. we can print use echo to print multiple lines as well.

Code:

```
<?php
  echo "Using Echo()";
 ?>
```

Output:

Using Echo()

❖ print(): Print is also use to display the statement but it execute slower than echo. in print we can only use single string we cannot use two different strings separated by comma.

Code:

```
<?php
  print "Using Print()";
 ?>
```

Output:

Using Print()

❖ phpinfo(): this function is used to get details about PHP like its configurations , build setup and etc.

Code:

```
<?php
  phpinfo();
 ?>
```

Output:

PHP Version 8.2.4

System	Windows NT DEVICE-OF-SHERE 10.0 build 22631 (Windows 11) AMD64
Build Date	Mar 14 2023 17:50:26
Build System	Microsoft Windows Server 2019 Datacenter [10.0.17763]
Compiler	Visual C++ 2019
Architecture	x64
Configure Command	cscript /nologo /e:jscript configure.js "--enable-snapshot-build" "--enable-debug-pack" "--with-pdo-oci=..\..\..\..\instantclient\sdk,shared" "--with-oci8-19=..\..\..\..\instantclient\sdk,shared" "--enable-object-out-dir=../obj/" "--enable-com-dotnet=shared" "--without-analyzer" "--with-pgo"
Server API	Built-in HTTP server
Virtual Directory Support	enabled
Configuration File (php.ini) Path	*no value*
Loaded Configuration File	C:\xampp\php\php.ini
Scan this dir for additional .ini files	(none)
Additional .ini files parsed	(none)

- define():define is used to define a static values as a key value pair where we can access the value by using key.

Code:

```
<?php
  define("PI", 3.14);
  echo  "The Value of pi is: ",PI;
 ?>
```

Output:

```
The Value of pi is: 3.14
```

- var_dump(): var_dump() is used to get the data type of variable
  for int value it will display the type + value
  for string it will display the type + string length + value
  for array it will display type + total elements as well the type and value /length of the element

Code:

```
<?php
  $x = 15;
  $y = 75.5;
  $z = "Hello";
  $a = [75,25,62];
  var_dump($x);
  var_dump($y);
  var_dump($z);
  var_dump($a);
?>
```

Output:

```
int(15) float(75.5) string(5) "Hello" array(3) { [0]=> int(75) [1]=> int(25) [2]=> int(62) }
```

- date(): it will display the current date and time by entering some parameters like d for date , M for month , Y for Year, h:i:s for the time.

Code:

```
<?php
  echo date("d M Y, H:i:s");
?>
```

Output:

```
03 Mar 2025, 16:35:33
```

- time(): it will display the current time by entering some parameters like h:i:s for the time.

Code:

```
<?php
  echo date("H:i:s");
```

```
?>
```

Output:

```
16:36:18
```

2. Demonstrate different ways to write a PHP code.

1. Without any HTML markups

2. Embedding HTML markups in PHP code

3. Embedding PHP code in HTML

a) Without any HTML markups:

Code:

```
<?php
   echo "Hello World";
 ?>
```

Output:

```
Hello World
```

b) Embedding HTML markups in PHP code

Code:

```
<?php
   echo "<i>"," Embedded HTML's Italic Markup in PHP Code","</i>";
 ?>
```

Output:

Embedded HTML's Italic Markup in PHP Code

c) Embedding PHP code in HTML

Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Document</title>
</head>
<body>
   <?php
      echo " PHP Embedded into HTML Code";
   ?>
</body>
```

```
</html>
```

Output:

PHP Embedded into HTML Code

3. Write a program that displays a different message based on time of day

Code:

```
<?php
   date_default_timezone_set("Asia/Kolkata");
   $time = date("H:i:s");
   if ($time >= "12:00:00" && $time < "17:00:00") {
      echo "Good Afternoon !";
   } elseif ($time >= "17:00:00" && $time < "22:00:00") {
      echo "Good Evening !";
   } elseif ($time >= "22:00:00" || $time < "04:00:00") {
      echo "Good Night !";
   } else {
      echo "Good Morning !";
   }
?>
```

Output:

Good Evening !

4. Write a PHP function daysInMonth() that takes a month (between 1 and 12) as a parameter and returns the number of days in that month in a non-leap year.

Code:

```
<?php
   function daysInMonth($m){
      $month = date("M Y");

      if($m == 1 || $m == 3 || $m == 5 || $m == 7 || $m == 8 || $m == 10 ||  $m == 12 ){
         echo "This Month Have 31 Days";
      }
      elseif($m == 4 || $m == 6 || $m == 9 || $m == 11  ){
         echo "This Month Have 30 Days";
      }
      else{
         $y =  date("Y");
```

```
        if($y % 4 == 0){
           echo "This Month Have 29 Days";
        }
        else{
           echo "This Month Have 28 Days";
        }
     }
  }
  $m=2;
  daysInMonth($m);
?>
```

Output:

```
This Month Have 28 Days
```

5. Write a PHP program to make the sum of first 100 odd numbers.

Code:

```
<?php
$s = microtime(time());
$sum = 0;
for ($i = 1; $i <= 200; $i += 2) {
  $sum += $i;
}
echo "Sum of first 100 odd numbers: " . $sum . "<br/>";
$a = microtime(time());
echo "Execution time: " . ($a - $s) . " seconds";
?>
```

Output:

```
Sum of first 100 odd numbers: 10000
Execution time: 1.5020370483398E-5 seconds
```

6. Write a PHP program to list out Prime numbers in given range.

Code:

```
<?php
function PrimeNumbers($num) {
  for ($i = 2; $i <= $num; $i++) {
     $isPrime = true;
     for ($j = 2; $j <= sqrt($i); $j++) {
```

```
            if ($i % $j == 0) {
                $isPrime = false;
                break;
            }
        }
        if ($isPrime) {
            echo $i . "<br>";
        }
    }
}
PrimeNumbers(30);
?>
```

Output:

```
2
3
5
7
11
13
17
19
23
29
```

7. Write a PHP program to print fibonacci series with and without using recursion and check which method is efficient.

Code:

```
<?php
$a = 0;
$b = 1;
$timeNoRecur = microtime(time());
echo "Without Recursion <br/>";
echo $a . "<br />";
for($i=0; $i<=10; $i++){
   $c= $a + $b;
   $a = $b;
   $b = $c;
   echo $c ."<br/>";
}
$timeNoRecur2= microtime(time());
echo "Time taken without recursion: " . ($timeNoRecur2 - $timeNoRecur) ."<br/>";
```

```
$timeWithRecur = microtime(time());
echo "With Recursion <br/>";
$x = 10;
function Fibonacci($x){
   $a = 0;
   $b = 1;
   echo $a . "<br />";
   for($i=0;$i<=$x;$i++){
      $c = $a + $b;
      $a = $b;
      $b = $c;
      echo $c ."<br/>";
   }
}
Fibonacci($x);
$timeWithRecur2 = microtime(time());
echo "Time taken with recursion: " . ($timeWithRecur2 - $timeWithRecur);
?>
```

Output:

```
Without Recursion
0
1
2
3
5
8
13
21
34
55
89
144
Time taken without recursion: 1.3113021850586E-5
With Recursion
0
1
2
3
5
8
13
21
34
55
89
144
Time taken with recursion: 3.0994415283203E-6
```

8. Write a PHP program to enter the numbers of rows and columns and in the next page generate the table with given rows and cols.

Code:

```
<?php
   echo "<table>";
   for($i = 0;$i<3;$i++){
      echo "<tr>";
      for($j = 0;$j<3;$j++){
         echo "<td>";
         echo "Row ". $i . " Col " . $j;
         echo "</td>";
      }
      echo "</tr>";
   };
   echo "</table>";
?>
```

Output:

Row 0 Col 0 Row 0 Col 1 Row 0 Col 2
Row 1 Col 0 Row 1 Col 1 Row 1 Col 2
Row 2 Col 0 Row 2 Col 1 Row 2 Col 2

9. Write a PHP program to print table of a number.

Code:

```
<?php
   $n=9;
   for($i=1;$i<=10;$i++){
      echo $n ." x ". $i ." = ". $n * $i . "<br/>";
   }
?>
```

Output:

9 x 1 = 9
9 x 2 = 18
9 x 3 = 27
9 x 4 = 36
9 x 5 = 45
9 x 6 = 54
9 x 7 = 63
9 x 8 = 72
9 x 9 = 81
9 x 10 = 90