CO-2	Apply In-Built and User defined functions in PHP scripts.

PRACTICAL LIST – 2

2.1 Write PHP script to demonstrate Variable function.

2.2 Write a PHP script to implement my_gettype () using various type testing functions covered in class.

2.3 Write PHP script to demonstrate use of various string handling function.

2.4 Write a PHP script to demonstrate use of various str_replace ().

2.5 Write a PHP script to Demonstrate implode (), explode () to convert array into string and string into array.

2.6 Write a PHP script to demonstrate use of date () with all format specifications.

2.7 Write a PHP script to Demonstrate getdate () and checkdate().

2.8 write a PHP script to Demonstrate time() and mktime()(use my birthdate).

2.9 Write PHP script to demonstrate all Math functions.

2.10 Write PHP script to demonstrate Array functions.

2.11 Write a PHP script to demonstrate sort (), asort (), ksort () on associative array.

2.12 Write PHP script to demonstrate use of fopen (), fread (), fwrite () and fclose () File functions.

2.13 Write a PHP script to count no. of words in a file using file and string handling functions.

Aim:

2.1   Write PHP script to demonstrate Variable function.

2.2   Write a PHP script to implement gettype() using various type testing functions covered in class.

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

Pre-requisite: Basic knowledge of editor

Theory/Logic:

❖ VARIABLE FUNCTION:

❑ It allows you to manipulate variables such as type of variable, set type, display value.

❑ Following table shows variable function with its syntax and description.

Name	Syntax	Description
gettype()	gettype(variable name);	It accepts variable as an argument and returns the data type of that variable.
settype()	settype(Variable name, Data type);	It accepts a variable as an argument and set it to specific data type passed as an argument.
isset()	isset(Variable Name);	It accepts a variable as an argument and determines whether the variable exists and it is assigned value or not.
unset()	unset(Variable Name);	It accepts a variable as an argument and destroys that variable from memory.
strval()	strval(variable name);	It accepts variable as an argument and returns the string value of that variable.
floatval()	floatval(variable name);	It accepts variable as an argument and returns the Float value of that variable.
intval()	intval(variable name);	It accepts variable as an argument and returns the Integer value of that variable.
print_r()	print_r(variable name);	It accepts variable as an argument and display it in a human readable format.

Program/Solution:

PR-2.1 file code: -

```php
<?php
  $a=40;
  $str="Abhi";
  $check="true";
  echo "gettype() Function Example: -<br><br>";
  echo "Data type of $a :".gettype($a)."<br>";
  echo "Data type of $str :".gettype($str)."<br>";
  echo "Data type of $check :".gettype($check)."<br>";

  $b=40.19;
```

```php
echo "<br>settype() Function Example: -<br><br>";
echo "Before converting, Data type of $b :".gettype($b)."<br>";
settype($b,"integer");
echo "After converting, Data type of $b ".gettype($b)."<br><br>";
echo "Before converting, Data type of $a :".gettype($a)."<br>";
settype($a,"string");
echo "After converting, Data type of $a :".gettype($a)."<br><br>";
echo "Before converting, Data type of $a :".gettype($a)."<br>";
settype($a,"double");
echo "After converting, Data type of $a :".gettype($a)."<br><br>";

echo "<br>isset() Function Example: -<br><br>";
$n;
if(isset($a))
{
    echo "Value is assigned to variable 'a' and value is: $a<br>";
}
else
    echo "Value is not assigned to variable 'a'.<br>";
if(isset($n))
    echo "Value is assigned to variable 'n' and value is: $n<br>";
else
    echo "Value is not assigned to variable 'n'.<br>";
if(isset($str))
    echo "Value is assigned to variable 'str' and value is: $str<br>";
else
    echo "Value is not assigned to variable 'str'.<br>";

echo "<br>usset() Function Example: -<br><br>";
echo "Before unset, Value of variable 'a' is :$a";
unset($a);
echo "After unset, Value of variable 'a' is :$a <br><br>";
echo "Before unset, Value of variable 'b' is :$b";
unset($b);
echo "After unset, Value of variable 'b' is :$b <br><br>";
echo "Before unset, Value of variable 'str' is :$str";
unset($str);
echo "After unset, Value of variable 'str' is :$str<br><br>";

echo "<br>strval() Function Example: -<br><br>";
$a=40;
echo "Integer value:$a and String value:".strval($a)."<br>";
$str="40.19";
echo "Float value:$str and String value:".strval($str)."<br>";
echo "Boolean value:$check and String value:".strval($check)."<br>";

echo "<br>floatval() Function Example: -<br><br>";
$a=40;
echo floatval($a)."<br>";
$str=40.19;
echo floatval($str)."<br>";
```

```php
  $n=72.40;
  echo floatval($n)."<br>";

  echo "<br>intval() Function Example: -<br><br>";
  $a=40;
  echo intval($a)."<br>";
  $str=40.19;
  echo intval($str)."<br>";
  $n=72.40;
  echo intval($n)."<br>";

  echo "<br>print_r() Function Example: -<br><br>";
  $bikes=array("Yamaha","Hero","Royal Enfield");
  print_r($bikes);
  echo "<br>";
  $names=array("1"=>"Abhishek","2"=>"Dhruv","3"=>"Nilesh");
  print_r($names);
?>
```

PR-2.2 file code: -
```php
<?php
  function my_gettype($a)
  {
    switch($a)
    {
      case is_null($a):
        return "1<br>";
        break;
      case is_bool($a):
        return "Boolean Value<br>";
        break;
      case is_int($a):
        return "Integer<br>";
        break;
      case is_double($a):
        return "Double<br>";
        break;
      case is_string($a):
        return "String<br>";
        break;
      case is_object($a):
        return "Object<br>";
        break;
      case is_array($a):
        return "Array<br>";
        break;
      case is_file($a):
        return "File<br>";
        break;
      case is_resource($a):
        return "Resource<br>";
```

```php
        break;
      default:
        return "Null<br>";
    }
  }
  echo my_getype(null);
  echo my_getype(true);
  echo "19 is a " . my_getype(19);
  echo "40 is a " . my_getype(40);
  echo "72 is a " . my_getype(72);
  echo "19.10 is a " . my_getype(19.10);
  echo "40.10 is a " . my_getype(40.10);
  echo "72.10 is a " . my_getype(72.10);
  echo "Dhruv is a " . my_getype("Dhruv");
  echo "Abhi is a " . my_getype("Abhi");
  echo "Nilesh is a " . my_getype("Nilesh");
  echo "array(19,40,72) is a " . my_getype(array(19,40,72));
  echo "array(19.10,40.10,72.10) is a " . my_getype(array(19.10,40.10,72.10));
  echo "array(Dhruv,Abhi,Nilesh) is a " . my_getype(array("Dhruv","Abhi","Nilesh"));
 // $a=fopen("a.txt","w+");
  //echo "file a is a " . my_getype($a);
  echo "mysqli() is a " . my_getype(new mysqli());

?>
```

Output:

2.1

gettype() Function Example: -

Data type of 40 :integer
Data type of Abhi :string
Data type of true :string

settype() Function Example: -

Before converting, Data type of 40.19 :double
After converting, Data type of 40 :integer

Before converting, Data type of 40 :integer
After converting, Data type of 40 :string

Before converting, Data type of 40 :string
After converting, Data type of 40 :double

isset() Function Example: -

Value is assigned to variable 'a' and value is: 40
Value is not assigned to variable 'n'.
Value is assigned to variable 'str' and value is: Abhi

usset() Function Example: -

Before unset, Value of variable 'a' is :40
Warning: Undefined variable $a in **C:\xampp\htdocs\PHP Practicals\Practical-2\PR2_1.php** on line 42
After unset, Value of variable 'a' is :

Before unset, Value of variable 'b' is :40
Warning: Undefined variable $b in **C:\xampp\htdocs\PHP Practicals\Practical-2\PR2_1.php** on line 45
After unset, Value of variable 'b' is :

Before unset, Value of variable 'str' is :Abhi
Warning: Undefined variable $str in **C:\xampp\htdocs\PHP Practicals\Practical-2\PR2_1.php** on line 48
After unset, Value of variable 'str' is :

strval() Function Example: -

Integer value:40 and String value:40
Float value:40.19 and String value:40.19
Boolean value:true and String value:true

floatval() Function Example: -

40
40.19
72.4

intval() Function Example: -

40
40
72

print_r() Function Example: -

Array ([0] => Yamaha [1] => Hero [2] => Royal Enfield)
Array ([1] => Abhishek [2] => Dhruv [3] => Nilesh)

2.2

Boolean Value
Boolean Value
19 is a Integer
40 is a Integer
72 is a Integer
19.10 is a Double
40.10 is a Double
72.10 is a Double
Dhruv is a String
Abhi is a String
Nilesh is a String
array(19,40,72) is a Array
array(19.10,40.10,72.10) is a Array
array(Dhruv,Abhi,Nilesh) is a Array
mysqli() is a Object

Questions:

1. Describe use of isset () function in PHP.

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2. Describe use of unset () function in PHP.

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Aim:

2.3 Write PHP script to demonstrate use of various string handling function.

2.4 Write a PHP script to demonstrate use of various str_replace ().

2.5 Write a PHP script to demonstrate implode (), explode () to convert array into string and string into array.

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

Pre-requisite: Basic knowledge of editor

Theory/Logic:

❑ **STRING FUNCTION: -**

❑ It allows you to manipulate String in Various Ways such as type of variable, set type, display value.

❑ Following table shows string function with its syntax and description.

Name	Syntax	Description
chr()	chr(ASCII-Value);	Accepts ASCII value as an argument and Returns a character value of it.
ord()	ord(string);	Accepts string as an argument and Returns an ASCII Value of first char of that strings an argument.
strtolower ()	strtolower(string);	Accepts string as an argument and converts all the characters of the specified string into lowercase letters.
strtoupper ()	strtoupper(string);	Accepts string as an argument and converts all the characters of the specified string into uppercase letters.
strlen()	strlen(string);	Accepts string as an argument and returns an integer value indicating the length of a string.
ltrim()	ltrim(string [, predefine character]);	Accepts string as an argument and removes white spaces from left side of the string.
rtrim()	rtrim(string [, predefine character]);	Accepts string as an argument and removes white spaces from right side of the string.
trim()	trim(string [, predefine character]);	Accepts string as an argument and removes white spaces from both sides of the string.
substr()	substr(string ,st,[,number]);	Accepts string as an argument and returns specific part of the string.
strcmp()	strcmp(string 1 ,string 2);	Accepts two strings as an argument and compares that strings.
strpos()	strpos(Original	Accepts two strings as an argument and returns

	string ,Search string [, Start]);	the position of the first occurrence of a search string inside another string.
strstr()	strstr(Original string ,Searchstring);	Accepts two strings as an argument and searches for the first occurrence of a search string inside original string.
str_replace()	str_replace(Find-character, Replace-character, string);	Accepts a string as an argument and Replace specified Characters of the string with another Specified characters.
strrev()	strrev(string);	Accepts string as an argument and Reverses that string.
echo()	echo (string);	Accepts one or more strings as an argument and Display one or more strings on the browser.
Print()	print (string);	Accepts one or more strings as an argument and Display one or more strings on the browser.

Program:-
Pr-2.3 file code: -

```php
<?php
  echo "chr(40) is ". chr(40)."<br>";
  echo "chr(75) is ". chr(75)."<br>";
  echo "chr(97) is ". chr(97)."<br>";
  echo "ord(Abhi) is ". ord("Abhi")."<br>";
  echo "ord(Dhruv) is ". ord("Dhruv")."<br>";
  echo "ord(]abhi) is ". ord("]abhi")."<br>";
  echo "strtolower(ABHI) is ". strtolower("ABHI")."<br>";
  echo "strtolower(DhRuV) is ". strtolower("DhRuV")."<br>";
  echo "strtolower(abhI) is ". strtolower("abhI")."<br>";
  echo "strtoupper(abhi) is ". strtoupper("abhi")."<br>";
  echo "strtoupper(dHrUv) is ". strtoupper("dHrUv")."<br>";
  echo "strtoupper(aBhI) is ". strtoupper("aBhI")."<br>";
  echo "strlen(abhi) is ". strlen("abhi")."<br>";
  echo "strlen(abhishek) is ". strlen("abhishek")."<br>";
  echo "strlen(nalla abhishek) is ". strlen("nalla abhishek")."<br>";
  echo "ltrim(    abhi) is ". ltrim("    abhi")."<br>";
  echo "ltrim(    abh   i) is ". ltrim("    abh   i")."<br>";
  echo "ltrim(   ab   hi) is ". ltrim("   ab   hi")."<br>";
  echo "rtrim(abhi    ) is ". rtrim("abhi    ")."<br>";
  echo "rtrim(abh   i    ) is ". rtrim("abh   i    ")."<br>";
  echo "rtrim(ab   hi   ) is ". rtrim("ab   hi    ")."<br>";
  echo "trim(   abhi   ) is ". trim("   abhi   ")."<br>";
  echo "trim(   abh   i   ) is ". trim("   abh   i   ")."<br>";
  echo "trim(   ab   hi   ) is ". trim("   ab   hi   ")."<br>";
  echo "substr(ABHISHEK,4) is ". substr("ABHISHEK",4)."<br>";
  echo "substr(Dhruvpuri,4,5) is ". substr("Dhruvpuri",4,5)."<br>";
  echo "substr(Nilesh) is ". substr("Nilesh",6)."<br>";
  echo "strcmp(Abhi,Dhruv) is ". strcmp("Abhi","Dhruv")." //-1 means S2 greater than S1.<br>";
  echo "strcmp(Kaushik,Dhruv) is ". strcmp("Kaushik","Dhruv")." //1 means S1 greater than S2.<br>";
```

```php
echo "strcmp(abhi,Abhi) is ". strcmp("abhi","Abhi")." //case sensitiver.<br>";
   echo "strmcasecmp(abhi,Abhi) is ". strcasecmp("abhi","Abhi")." //0 means s1 same as s2.<br>";
   echo "strpos(Abhishek,h) is ". strpos("Abhishek",'h')."<br>";
   echo "strpos(Dhruvpuri,i) is ". strpos("Dhruvpuri",'i')."<br>";
   echo "strpos(Kaushik,shik) is ". strpos("Kaushik","shik")."<br>";
   echo "strstr(Kaushik,shik) is ". strstr("Kaushik","shik")."<br>";
   echo "strstr(Abhishek,bhi) is ". strstr("Abhishek","bhi")."<br>";
   echo "strstr(Dhruvpuri,puri) is ". strstr("Dhruvpuri","puri")."<br>";
   echo "strrev(Kaushik) is ". strrev("Kaushik")."<br>";
   echo "strrev(Abhishek) is ". strrev("Abhishek")."<br>";
   echo "strrev(Dhruvpuri) is ". strrev("Dhruvpuri")."<br>";
?>
```

Pr-2.4 file code: -

```php
<?php
   echo "str_replace(shek,nalla,Abhishek) is ". str_replace("shek","nalla","Abhishek")."<br>";
   echo "str_replace(shek,nalla,Abhishek) is ". str_replace("puri","Abhi","Dhruvpuri")."<br>";
   $a=array("Hello","world");
   $b=array("Welcome");
   $c=array("Hello","World","?");
   print_r(str_replace($a,$b,$c));
?>
```

Pr-2.5 file code: -

```php
<?php
   echo "Implode() function:<br>";
   $a=array(1,2,3);
   $b=array(4,5,6);
   $c=array('1st'=>'Seven','2nd'=>'Eight','3rd'=>'Nine');
   echo implode(',',$a),'/',implode(',',$b)."<br>";
   echo implode(',',$b),'/',implode(',',$c)."<br>";

   echo "<br><br>";
   echo "Explode() function:<br>";
   $str1='1,2,3,4,5,6';
   print_r(explode(',', $str1));
   echo "<br>";
   $str2='7,8,9,10,11,12';
   print_r(explode(',', $str2));
   echo "<br>";
   $str3='13.14.15.16.17.18';
   print_r(explode('.', $str3));
   echo "<br>";
?>
```
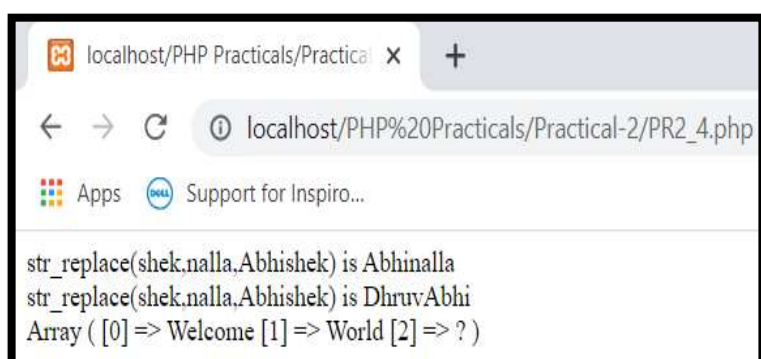
Output:

<div align="center">2.3</div>

Browser content:

```
chr(40) is (
chr(75) is K
chr(97) is a
ord(Abhi) is 65
ord(Dhruv) is 68
ord(]abhi) is 93
strtolower(ABHI) is abhi
strtolower(DhRuV) is dhruv
strtolower(abhI) is abhi
strtoupper(abhi) is ABHI
strtoupper(dHrUv) is DHRUV
strtoupper(aBhI) is ABHI
strlen(abhi) is 4
strlen(abhishek) is 8
strlen(nalla abhishek) is 14
ltrim( abhi) is abhi
ltrim( abh i) is abh i
ltrim( ab hi) is ab hi
rtrim(abhi ) is abhi
rtrim(abh i ) is abh i
rtrim(ab hi ) is ab hi
trim( abhi ) is abhi
trim( abh i ) is abh i
trim( ab hi ) is ab hi
substr(ABHISHEK,4) is SHEK
substr(Dhruvpuri,4,5) is vpuri
substr(Nilesh) is
strcmp(Abhi,Dhruv) is -1 //-1 means S2 greater than S1.
strcmp(Kaushik,Dhruv) is 1 //1 means S1 greater than S2.
strcmp(abhi,Abhi) is 1 //case sensitiver.
strncasecmp(abhi,Abhi) is 0 //0 means s1 same as s2.
strpos(Abhishek,h) is 2
strpos(Dhruvpuri,i) is 8
strpos(Kaushik,shik) is 3
strstr(Kaushik,shik) is shik
strstr(Abhishek,bhi) is bhishek
strstr(Dhruvpuri,puri) is puri
strrev(Kaushik) is kihsuaK
strrev(Abhishek) is kehsihbA
strrev(Dhruvpuri) is irupvurhD
```

<table>
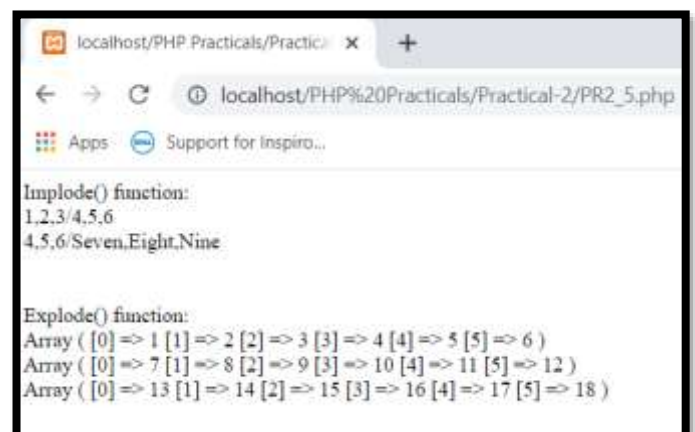<tr><td align="center">2.4</td><td align="center">2.5</td></tr>
</table>


```
str_replace(shek,nalla,Abhishek) is Abhinalla
str_replace(shek,nalla,Abhishek) is DhruvAbhi
Array ( [0] => Welcome [1] => World [2] => ? )
```



```
Implode() function:
1,2,3/4,5,6
4,5,6/Seven,Eight,Nine


Explode() function:
Array ( [0] => 1 [1] => 2 [2] => 3 [3] => 4 [4] => 5 [5] => 6 )
Array ( [0] => 7 [1] => 8 [2] => 9 [3] => 10 [4] => 11 [5] => 12 )
Array ( [0] => 13 [1] => 14 [2] => 15 [3] => 16 [4] => 17 [5] => 18 )
```

Questions:

1. Describe use of substr () function in PHP.

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2. Describe use of echo () function in PHP.

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Aim:

2.6   Write a PHP script to demonstrate use of date () with all format specifications.

2.7   Write a PHP script to Demonstrate getdate () and check date ().

2.8   Write a PHP script to Demonstrate time () and mktime () (use my birth date).

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

Pre-requisite: Basic knowledge of editor

Theory/Logic:

❑ DATE FUNCTION:

❑ It allows you to display, format and manipulate the date and time on server.

❑ Following table shows date function with its syntax and description.

Name	Syntax	Description
date()	date(format, timestamp);	Allows you to format and display current date and time of web server.
getdate()	getdate(timestamp);	Returns an array which contains following information of current UNIX timestamp.
set date()	set date (year, month, day);	It will set the year, month and day as per passing parameters from set date () function.
check date()	check date(month ,day, year);	Accepts month, day & year of date as an argument and determines specified date is valid or not.
time()	time( );	Returns current UNIX timestamp.
mktime()	mktime(hour, minute, second, month, day, year, is_dst);	Returns current UNIX timestamp if no parameter is passed.

Program/Solution:-

Pr-2.6 file code: -

```php
<?php
   echo "<b><br>Using format ( d - n - y ) : </b>".date("d/n/y")."<br><br>";
   echo "<b>Using format ( D - M - Y ) : </b>".date("D/M/Y")."<br><br>";
   echo "<b>Using format ( l - F - y ) : </b>".date("l/F/y")."<br><br>";
   echo "<b>Using format ( d - m - y - h - i - s - a ) : </b>".date("d/m/y h:i:s a")."<br><br>";
   echo "<b>Using format ( d - m - y - H - i - s - A ) : </b>".date("d/m/y H:i:s A")."<br><br>";
   echo "<b>Using format ( d - m - y - G - i - s - A ) : </b>".date("d/m/y G:i:s A")."<br><br>";
   echo "<b>Using format ( j - M - Y - g - i - s - A ) : </b>".date("d/M/Y g:i:s A")."<br><br>";
?>
```
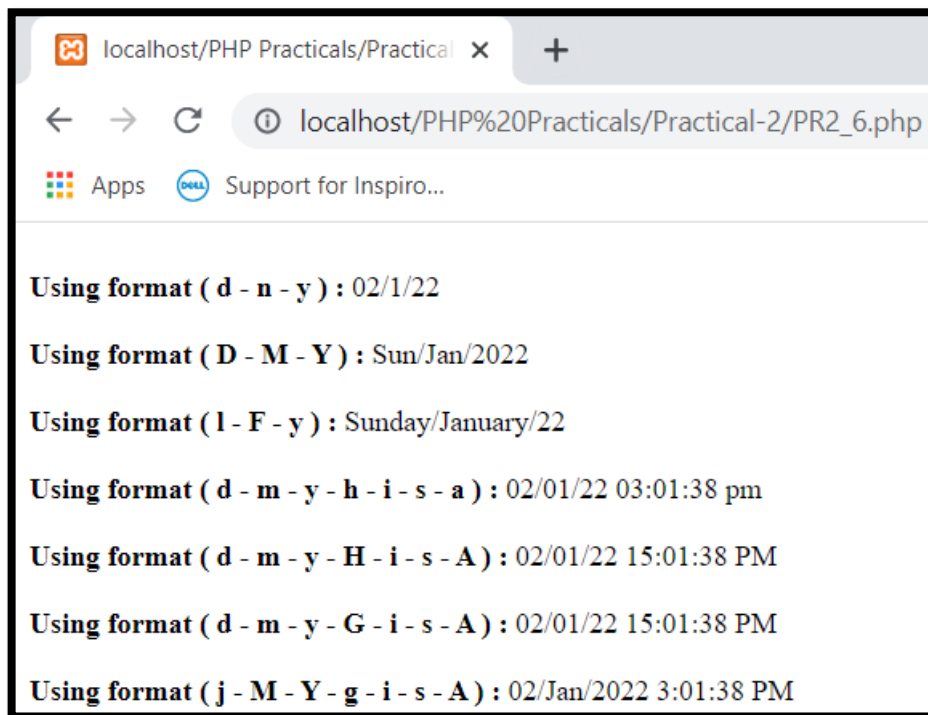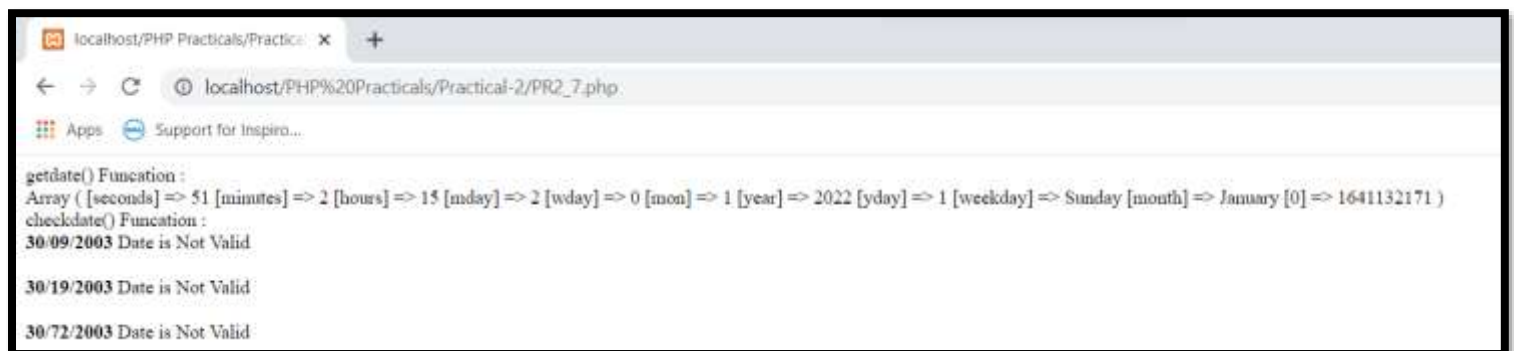
Pr-2.7 file code: -

```php
<?php
   echo "getdate()                                         Funcation :<br>";
```

```php
  print_r(getdate());

  echo "<br>checkdate() Funcation :<br>";
  if(checkdate(30,9,2003)){
    echo "<b>30/09/2003</b> Date is Valid";
  }
  else{
    echo "<b>30/09/2003</b> Date is Not Valid";
  }
  echo "<br><br>";
  if(checkdate(30,19,2003)){
    echo "<b>30/19/2003</b> Date is Valid";
  }
  else{
    echo "<b>30/19/2003</b> Date is Not Valid";
  }
  echo "<br><br>";
  if(checkdate(30,72,2003)){
    echo "<b>30/70/2003</b> Date is Valid";
  }
  else{
    echo "<b>30/72/2003</b> Date is Not Valid";
  }
?>
```

Pr-2.8 file code: -

```php
<?php
  echo "<h1> time()</h1>";
  echo "Time is:";
  print_r(time());
  echo "</br>";
  echo "</br>";
  $nextWeek=time()+(7*24*60*60);//7days;24hours;60mins;60secs
  echo'Today Date: '.date('Y-m-d')."<br>";
  echo'Next Week Date: '.date('Y-m-d',$nextWeek)."<br>";//orusingstrtotime():
  echo'Next-to-Next Week Date: '.date('Y-m-d',strtotime('+2week'))."<br>";?>
  <hr>
  <?php
  echo "<h1> mktime()</h1>";
  echo "GMT TIME IS".mktime(1,1,1,1,1,2003)."<br>";
  echo date("M-d-Y",mktime(0,0,0,9,30,2003))."<br>";
  echo date("M-d-Y",mktime(0,0,0,21,11,1998));
?>
```

Output:

2.6

2.7

2.8

Questions: -

1. How to find current date and time?

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2. Describe use of mktime () function in PHP.

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Aim:

2.9   Write PHP script to demonstrate all Math functions.

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

Theory/Logic:

❑ MATH FUNCTION:
- ❑ It allows you to perform various operations on numeric values.
- ❑ Following table shows math function with its syntax and description.

Name	Syntax	Description
abs()	abs(Number);	Accepts numbers an argument and Returns the absolute value of a number.
ceil()	ceil(Number);	Accepts number as an argument and Returns the number which is rounded upwards to the nearest integer value.
floor()	floor(Number);	Accepts number as an argument and Returns the number which is rounded downwards to the nearest integer value.
round()	round(Number [,Precision]);	Accepts number as an argument and Returns the number rounded to the nearest integer.
fmod()	fmod(Number 1,Number2);	Accepts two numbers as an argument and divides num1 by num2 and returns reminder of division.
min()	min(Number 1,Number2);	Accepts two numbers as an argument and returns lowest value among them.
max()	max(Number 1,Number2);	Accepts two numbers as an argument and returns highest value among them.
pow()	pow(Number 1,Number2);	Accepts two numbers as an argument and raises num1 to the power of num2 and returns result.
sqrt()	sqrt(Number);	Accepts a number as an argument and Returns square root of a number.
rand()	rand([min],[max]);	Generate a random integer between the ranges of 0 to ROUND_MAX.

Program/Solution:
Pr-2.9 file code: -
```php
<?php
echo "<h1> Math functions</h1>";
echo "<h3> abs() </h3>";
echo "<h4> Before function:</h4>";
$a=-40.5;
$b=-19.7;
$c=-72;
```

```php
echo "$a"."</br>";
echo "$b"."</br>";
echo "$c";
echo "<h4> After function</h4>";
echo abs($a)."</br>";
echo abs($b)."</br>";
echo abs($c);

echo "<h3> ceil() </h3>";
echo "<h4> Before function:</h4>";
$a1=40.5;
$b1=-19.7;
$c1=0.18;
echo "$a1"."</br>";
echo "$b1"."</br>";
echo "$c1";
echo "<h4> After function:</h4>";
echo ceil($a1)."</br>";
echo ceil($b1)."</br>";
echo ceil($c1);

echo "<h3> floor() </h3>";
echo "<h4> Before function:</h4>";
$a2=40.5;
$b2=-19.7;
$c2=0.72;
echo "$a2"."</br>";
echo "$b2"."</br>";
echo "$c2";
echo "<h4> After function:</h4>";
echo floor($a2)."</br>";
echo floor($b2)."</br>";
echo floor($c2);

echo "<h3> round() </h3>";
echo "<h4> Before function:</h4>";
$a3=40.23;
$b3=19.75;
$c3=0.18;
echo "$a3</br>";
echo "$b3</br>";
echo "$c3";
echo "<h4> After function:</h4>";
echo round($a3)."</br>";
echo round($b3)."</br>";
echo round($c3);

echo "<h3> fmod() </h3>";
echo "<h4> Before function:</h4>";
$a4=40.23;
$b4=19.75;
$d=18;
```

```
$e=72;
$f=9;
$g=23;
echo "$a4,$b4</br>";
echo "$d,$e</br>";
echo "$f,$g</br>";
echo "<h4> After function:</h4>";
echo fmod($a4,$b4)."</br>";
echo fmod($d,$e)."</br>";
echo fmod($f,$g)."</br>";

echo "<h3> min() </h3>";
echo "<h4> Before function:</h4>";
$a5=40;
$b5=72;
$d2=19;
$e1=18;
$f1=80;
$g1=01;
echo "$a5,$b5 </br>";
echo "$d2,$e1 </br>";
echo "$f1,$g1 </br>";
echo "<h4> After function:</h4>";
echo min($a5,$b5)."</br>";
echo min($d2,$e1)."</br>";
echo min($f1,$g1)."</br>";

echo "<h3> max() </h3>";
echo "<h4> Before function:</h4>";
$a6=40;
$b6=72;
$d3=19;
$e2=18;
$f2=80;
$g2=01;
echo "$a6,$b6 </br>";
echo "$d3,$e2 </br>";
echo "$f2,$g2 </br>";
echo "<h4> After function:</h4>";
echo max($a6,$b6)."</br>";
echo max($d3,$e2)."</br>";
echo max($f2,$g2)."</br>";

echo "<h3> pow() </h3>";
echo "<h4> Before function:</h4>";
echo "2,3</br>";
echo "-2,3</br>";
echo "-3,2</br>";
echo "<h4> After function:</h4>";
echo pow(2,3)."<br/>";
echo pow(-2,3)."<br/>";
echo pow(3,-2)."<br/>";
```

```
echo "<h3> sqrt() </h3>";
echo "<h4> Before function:</h4>";
echo "64</br>";
echo "49</br>";
echo "121</br>";
echo "<h4> After function:</h4>";
echo sqrt(40)."<br/>";
echo sqrt(64)."<br/>";
echo sqrt(484)."<br/>";

echo "<h3> rand() </h3>";
$a7=rand();
echo "$a7<br>";
echo (rand(1000,9999));
?>
```
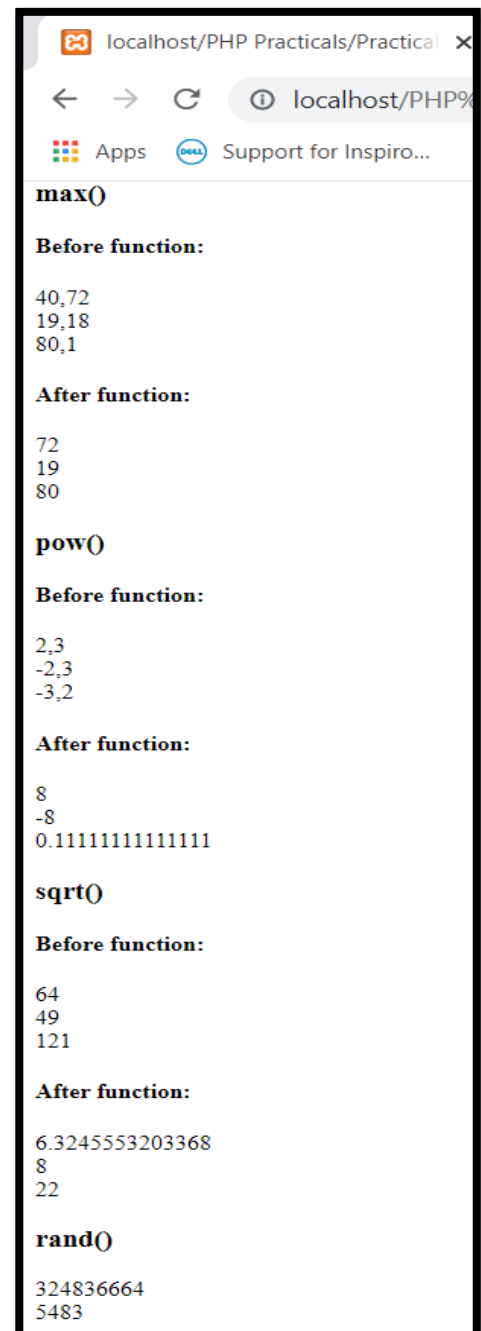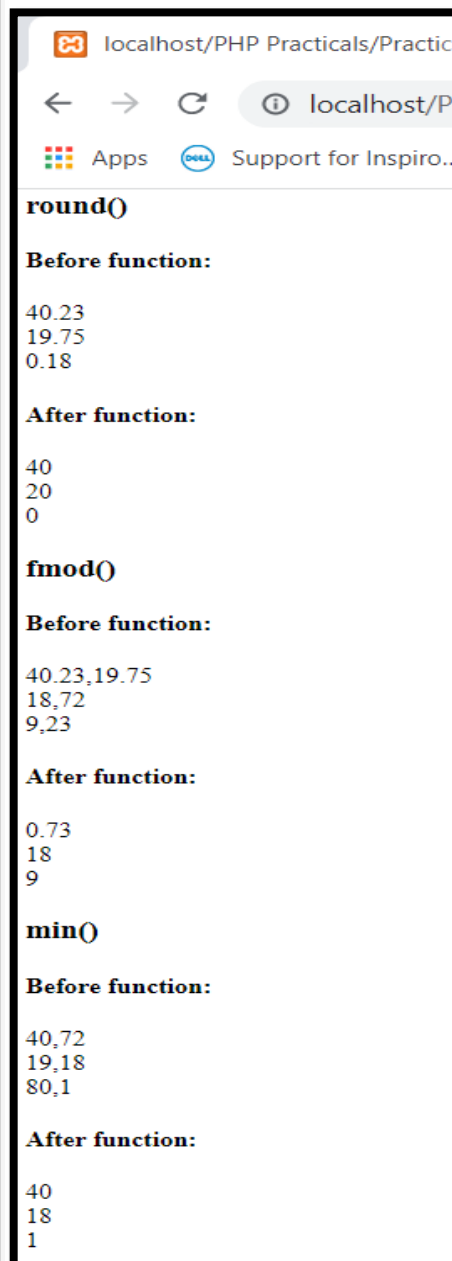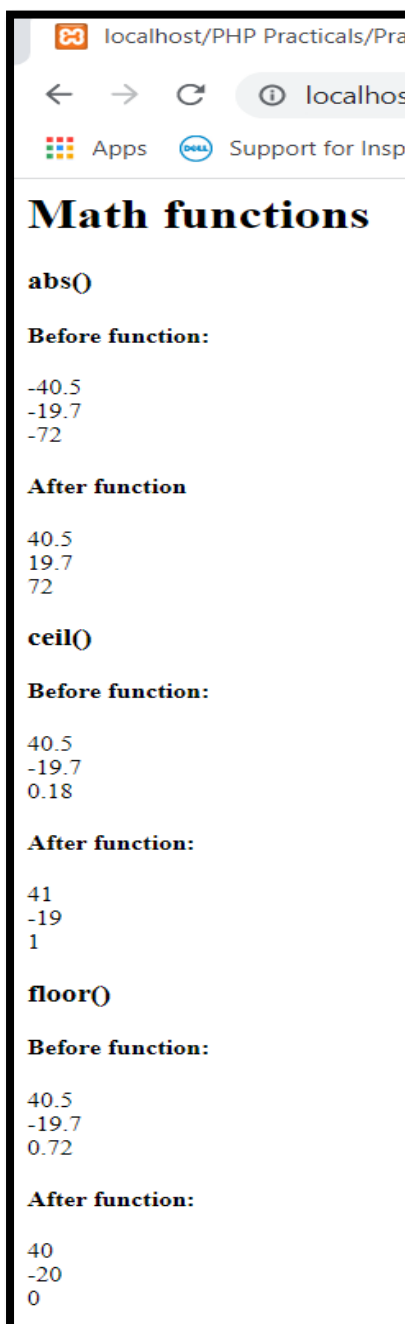
Output:

Questions:

1. List out math functions.

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2. Describe use of rand () function in PHP.

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Aim:

2.10 Write PHP script to demonstrate Array functions.

2.11 Write a PHP script to demonstrate sort (), asort (), ksort () on associative array.

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

Pre-requisite: Basic knowledge of editor

Theory/Logic:

❑ **ARRAY FUNCTION:**

❑ It allows you to manipulate Arrays in Various Ways in One dimensional as well as multi dimensional arrays.

❑ Following table shows array function with its syntax and description.

Name	Syntax	Description
count()	count(Array Name, mode);	Accepts an array as an argument and returns Number of elements in an array.
list()	list(Variable1,Variabl 2,....,VariableN)=Arra yName;	Accepts one or more variables as an argument and assigns them values from an array.
in_array()	in_array(Search Value, ArrayName,SearchTy pe);	It is used to search specific value from an array.
current()	current(Array Name);	Accepts an array as an argument and returns value of current element in an array.
next()	next(Array Name);	Accepts an array as an argument and moves internal pointer position ahead so that it points to next element in array from current pos.
prev()	prev(Array Name);	Accepts an array as an argument and moves internal pointer position down so that it points to prev element in array from current pos.
end()	end(Array Name);	Accepts an array as an argument and moves internal pointer pos last so that it points to last element in array from current pos.
each()	each(Array Name);	Accepts an array as an argument and Returns the key and value of current element and then it will moves the internal point forward to the next element.
sort()	sort(Array Name, sortType);	Accepts an array as an argument and sorts elements of an array in ascending order.
array_mer ge()	array_merge(Array Name1, Array Name2, Array NameN);	Accepts one or more than one array as an argument and merges them and returns a single array that contains all the elements.

array_rev erse()	array_reverse(Array Name, Preserve);	Accepts an array as an argument and returns an array that contains elements in reverse order.
reset()	reset(Array Name);	Used to move the array's internal pointer to the first element.

Program/Solution:
Pr2.10 file code: -

```php
<?php
  echo "count() :-<br>";
  $arr=array(1,2,3,4,5,6,7,8,9);
  echo "Count of elements in array : ". count($arr);
?>
<hr>
<?php
echo "list() :-<br>";
list($a,$b,$c)=$arr;
echo "$a<br>";
echo "$b<br>";
echo "$c<br>";
?>
<hr>
<?php
   echo "no in_array working";
?>
<hr>
<?php
echo "current() :-<br>";
$arr1=array("Abhishek","Dhruv","Nilesh","Kaushik");
echo "Current element is ".current($arr1);
?>
<hr>
<?php
echo "next() :-<br>";
echo "Next element is ".next($arr1);
?>
<hr>
<?php
echo "prev() :-<br>";
echo "Previous element is ".prev($arr1);
?>
<hr>
<?php
echo "end() :-<br>";
echo "End element is ".end($arr1);
?>
<hr>
<?php
echo "each() :-<br>";
```

```php
    print_r(each($arr1));
    ?>
    <hr>
    <?php
    echo "array_merge() :-<br>";
    $merge=array_merge($arr,$arr1);
    print_r($merge);
    ?>
    <hr>
    <?php
    echo "array_reverse() :-<br>";
    $merge=array_reverse($arr1);
    echo "Without preserve :-<br>";
    print_r($merge);
    echo "<br>Preserve :-<br>";
    $merge=array_reverse($arr1,true);
    print_r($merge);
    ?>
    <hr>
    <?php
    echo "reset() :-<br>";
    echo "Reseting the array ".reset($arr1);
?>
```
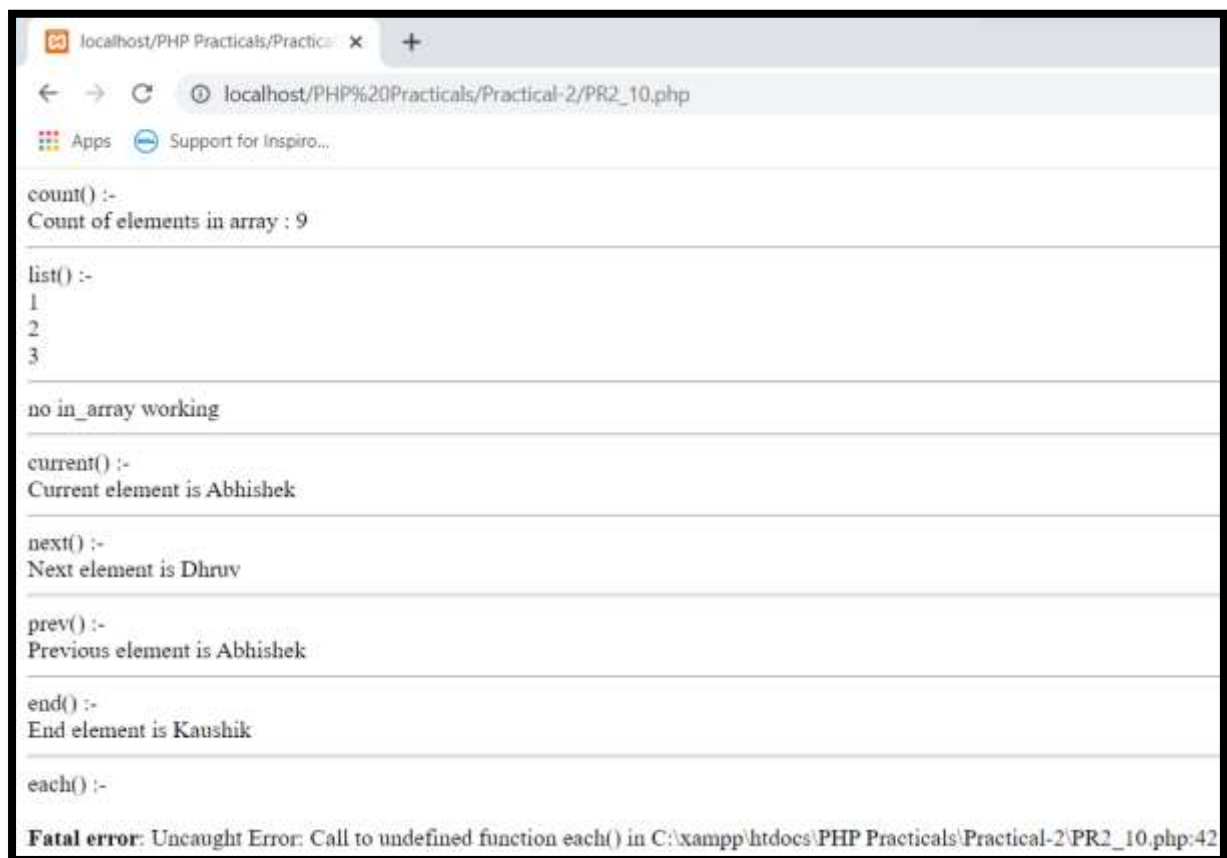
Pr-2.11 file code: -

```php
<?php
    $arr1=array(40,18,72,19);
    $arr2=array("Nilesh","Abhi","Kaushik","Dhruv");
    $arr3=array('z','f','A');
    $arr4=array("Nilesh"=>"20","Kaushik"=>"18","Abhi"=>"19");
    $arr5=array("Vegetables"=>"300","Dal"=>"80","Rice"=>"1050");
    $arr6=array("Shubham"=>"4.1","Chetan"=>"3.5","Utkarsh"=>"4.9");
    echo "sort() function examples:<br>";
    sort($arr1);
    sort($arr2);
    sort($arr3);
    print_r($arr1);
    echo "<br>";
    print_r($arr2);
    echo "<br>";
    print_r($arr3);
    echo "<br><br>";?>
    <hr>
    <?php
    echo "asort() function examples:<br>";
    asort($arr4);
    asort($arr5);
    asort($arr6);
    print_r($arr4);
    echo "<br>";
```
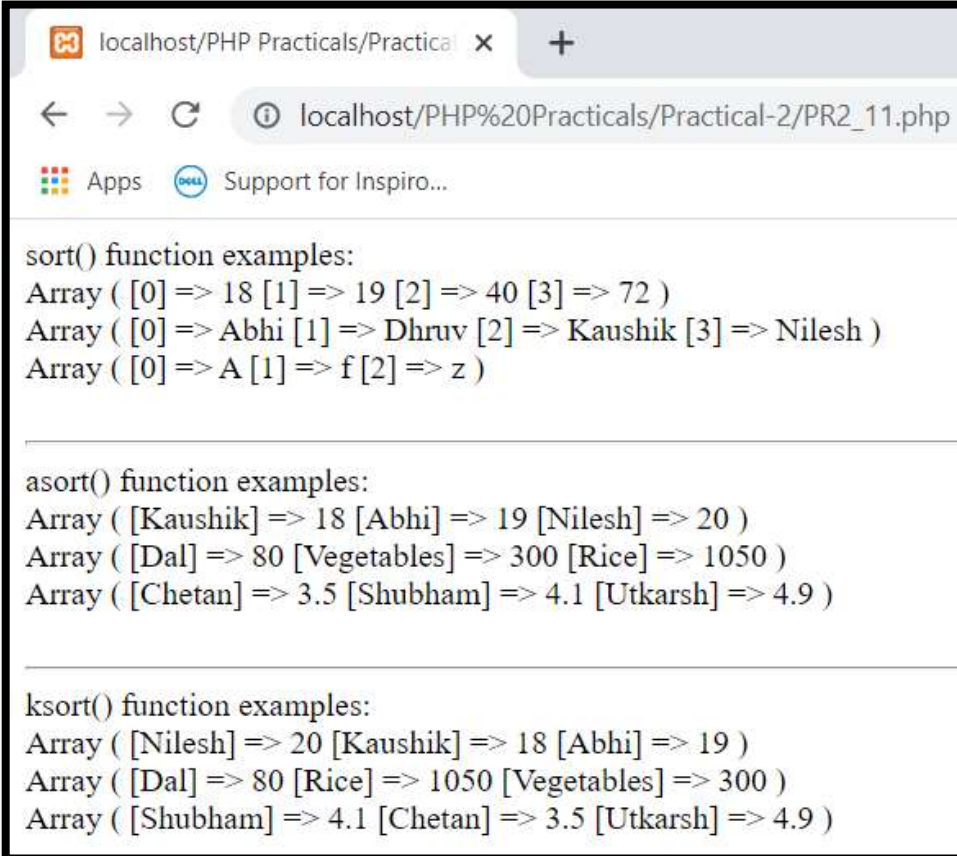
```php
print_r($arr5);
echo "<br>";
print_r($arr6);
echo "<br><br>";?>
<hr>
<?php
$arr7=array("Nilesh"=>"20","Kaushik"=>"18","Abhi"=>"19");
$arr8=array("Vegetables"=>"300","Dal"=>"80","Rice"=>"1050");
$arr9=array("Shubham"=>"4.1","Chetan"=>"3.5","Utkarsh"=>"4.9");
echo "ksort() function examples:<br>";
ksort($arr7,1);
ksort($arr8,2);
ksort($arr9,1);
print_r($arr7);
echo "<br>";
print_r($arr8);
echo "<br>";
print_r($arr9);
echo "<br><br>";
?>
```

Ouput:

2.10

2.11

sort() function examples:
Array ([0] => 18 [1] => 19 [2] => 40 [3] => 72)
Array ([0] => Abhi [1] => Dhruv [2] => Kaushik [3] => Nilesh)
Array ([0] => A [1] => f [2] => z)

asort() function examples:
Array ([Kaushik] => 18 [Abhi] => 19 [Nilesh] => 20)
Array ([Dal] => 80 [Vegetables] => 300 [Rice] => 1050)
Array ([Chetan] => 3.5 [Shubham] => 4.1 [Utkarsh] => 4.9)

ksort() function examples:
Array ([Nilesh] => 20 [Kaushik] => 18 [Abhi] => 19)
Array ([Dal] => 80 [Rice] => 1050 [Vegetables] => 300)
Array ([Shubham] => 4.1 [Chetan] => 3.5 [Utkarsh] => 4.9)

Questions:

1. Describe use of asort () function in PHP.

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2. Describe use of next () function in PHP.

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Aim:

2.12   Write PHP script to demonstrate File functions.

2.13   Write PHP script to count no. of words in a file using file and string handling functions.

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

Pre-requisite: Basic knowledge of editor

Theory/Logic:

❑ FILE FUNCTION

❑ It allows you to create & open file, Reading & Writing contents of file and closing file.

❑ Following table shows file function with its syntax and description.

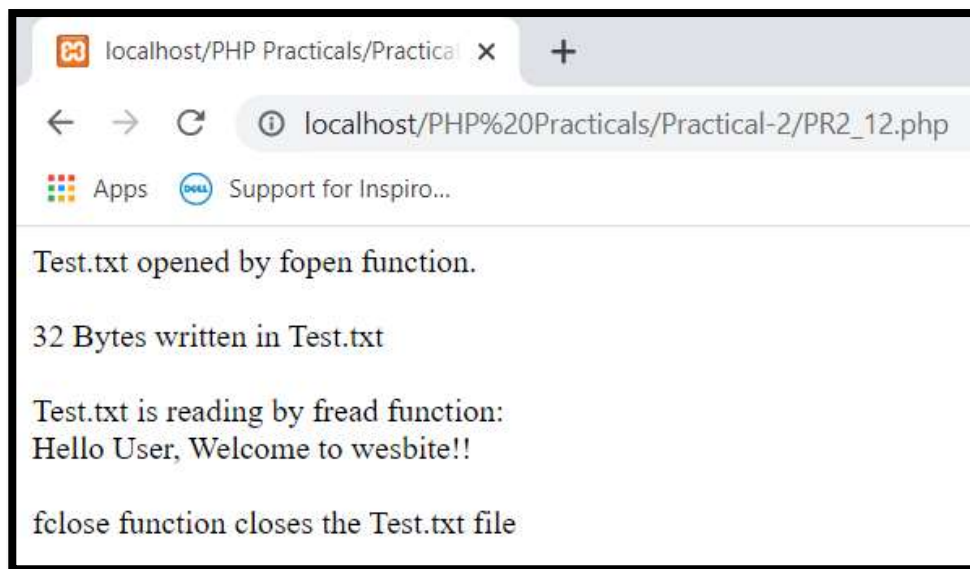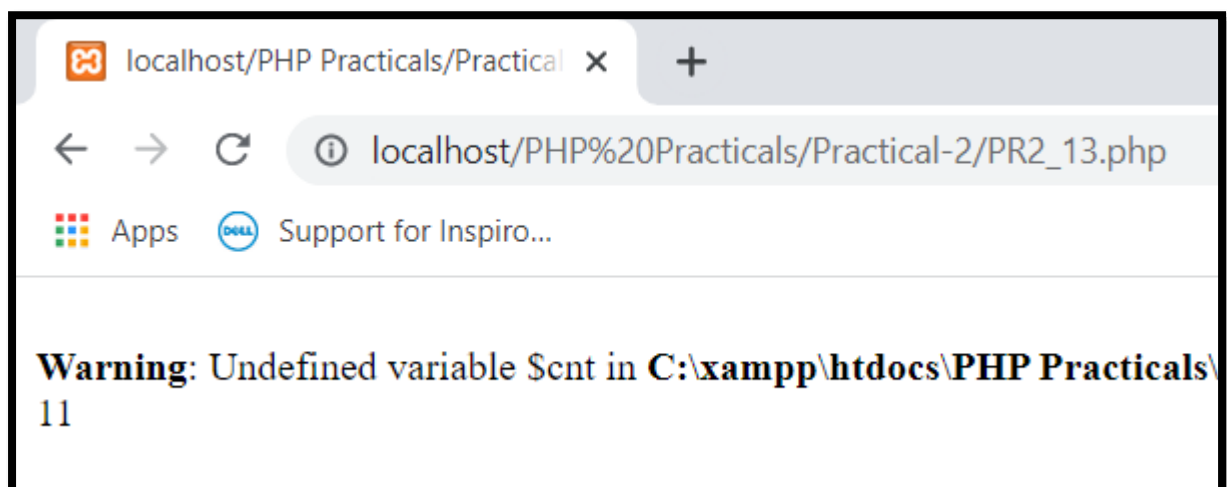| Name	Syntax	Description
fopen()	fopen (FileName ,File Mode, FilePath, Context);	Used to create or open file.
fread()	fread (File ,Maxlength);	Used to read content from specified file.
fwrite()	fwrite (File, string, Max length);	Used to write some text into the file.
fclose()	fclose($File);	Used to close file.

Program/Solution:

Pr-2.12 file code: -

```php
<?php
   $file=fopen("Test.txt","w+");
   echo "Test.txt opened by fopen function.<br><br>";
   $num=fwrite($file,"Hello User, Welcome to wesbite!!",100);
   echo "$num Bytes written in Test.txt<br><br>";
   fclose($file);
   $File="C:/xampp/htdocs/PHP Practicals/Practical-2/Test.txt";
   $handler=fopen($File,"r");
   $contents=fread($handler,filesize($File));
   echo "Test.txt is reading by fread function:<br>$contents<br><br>";
   fclose($handler);
   echo "fclose function closes the Test.txt file";
?>
```

Pr-2.13 file code: -

```php
<?php
  $file=fopen("hello.txt","r");
  while(!feof($file))
  {
    $line = fgets($file,9999);
    $cnt += str_word_count($line);
  }
  echo $cnt;
?>
```

Output:

2.12

Test.txt opened by fopen function.

32 Bytes written in Test.txt

Test.txt is reading by fread function:
Hello User, Welcome to wesbite!!

fclose function closes the Test.txt file

2.13

Warning: Undefined variable $cnt in **C:\xampp\htdocs\PHP Practicals**
11

Questions:

1. Describe use of x+ mode in fopen ().

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2. Describe use of a+ mode in fopen ().

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