MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION

Certificate

This is to certify that Mr. / Ms. **AMARESH BARANWAL** Roll No. **07** of Sixth. Semester of Diploma in **COMPUTER ENGINEERING** of Institute, VES POLYTECHNIC (Code:0004) has attained predefined practical outcomes (PROs) satisfactorily in Subject **WEB BASED APPLICATION DEVELOPMENT WITH PHP** (22619) for the academic year 2020 - 2021 as prescribed in the curriculum.

Place: CHEMBUR, MUMBAI Enrollment No: 1800040245

Date: …… Exam Seat No: 102849

Subject Teacher **Head of the Department** **Principal**

Seal of Institution

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2	Write a PHP program to demonstrate the use of Decision making control structures using - a. If statement b. If-else statement c. Switch statement	12/04	19/04		
3	Write a PHP program to demonstrate the use of Looping structures using – a. While statement b. Do – while statement c. For statement d. For each statement	19/04	26/04		
4	a. Write a PHP program to – i. Calculate length of string. ii. Count the number of words in string without using string functions b. Write a simple PHP program to demonstrate use of various built in string functions.	26/04	26/04		
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Total Marks		**/600**			
Average		**/50**			

EXPERIMENT NO. 01

TITLE: a. Install and Configure PHP, web server, MYSQL.
b. Write a program to print “Welcome to PHP”.
c. Write a simple PHP program using expression and operators.

D.O.P.: 5/04/21

D.O.S.: 12/04/21

Marks Obtained			Dated Signature of Teacher
Process Related (15)	**Product Related (10)**	**Total (25)**	

Experiment No: 1

Theory Questions

1. History and advantage of php.

Ans :-

PHP was conceived sometime in the fall of 1994 by Rasmus Lerdorf. Early non-released versions were used on his home page to keep track of who was looking at his online resume. The first version used by others was available sometime in early 1995 and was known as the Personal Home Page Tools.

Advantages:-

1. Most important advantage of PHP is that it's open source and freed from cost. It are often downloaded anywhere and readily available to use for event of web applications.
2. It is platform independent. PHP based applications can run on any OS like UNIX, Linux and windows, etc.
3. Application can easily be loaded which are based on PHP and connected to database. it's mainly used due to its faster rate of loading over slow internet and speed than another programing language.
4. It has less learning curve, because it is straightforward and straightforward to use. If a private knows C programming can easily work on PHP.

2. Write a syntax of PHP

A PHP script starts with <?php and ends with ?>:

```
<?php
    // PHP code goes here
?>
```

eg :-

```
<!DOCTYPE html>
<html>
<body>

<h1>My first PHP page</h1>
<?php
    echo "Hello World!";
?>

</body>
</html>
```

Practical Question.

1. **Install and configure PHP, web server, MYSQL. -Write down steps**

Step 1: Install MySQL
Step 2: Install Apache
Step 3: Install PHP
Step 4: Configure Apache and PHP
Step 5: Test your install
Step 6: Install Git
Step 7: Install Moodle
Step 8: Upgrading Moodle

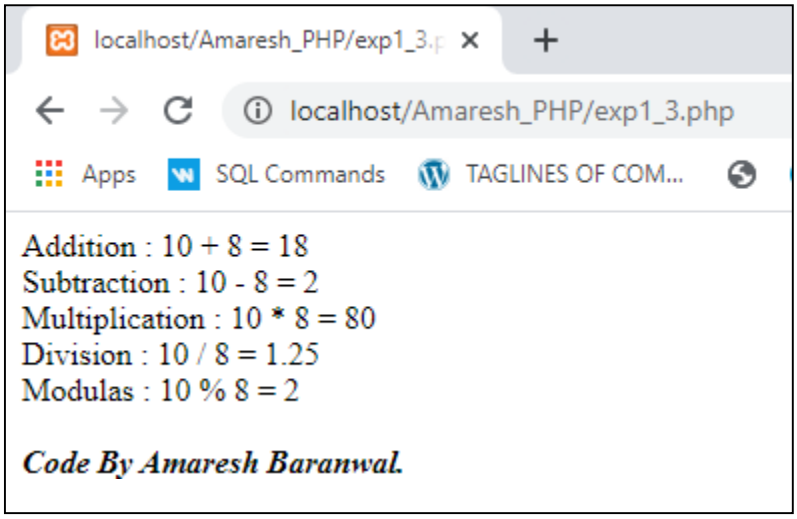
2. **WAP to print "Welcome to VESP,Chembur"**

Ans :-

```
<?php
        echo "Welcome to VESP,Chembur <br><br>";
        echo "<i><b>Code By Amaresh Baranwal.</b><i>";
?>
```

3. WAP a simple PHP Program using Expression and operator

```
<?php
        $a = 10;
        $b = 8;
         echo "Addition : $a + $b = ", $a + $b , "<br>";
        echo "Subtraction : $a - $b = ", $a - $b , "<br>";
        echo "Multiplication : $a * $b = ", $a * $b , "<br>";
        echo "Division : $a / $b = ", $a / $b , "<br>";
        echo "Modulas : $a % $b = ", $a % $b , "<br><br>";
        echo "<i><b>Code By Amaresh Baranwal.</b><i>";
?>
```



EXPERIMENT NO. 02

TITLE: Write a PHP program to demonstrate the use of Decision making control structures using -

a. If statement
b. If-else statement
c. Switch statement

D.O.P.: 12/04/21

D.O.S.: 19/04/21

Marks Obtained			Dated Signature of Teacher
Process Related (15)	**Product Related (10)**	**Total (25)**	

Experiment No: 2

Aim: Write a php program to demonstrate the use of decision making control structure using.

Theory Question.

1. **Explain Data type in php.**

Ans :- Variables can store data of different types, and different data types can dodifferent things. PHP supports the following data types:

1. String
2. Integer
3. Float (floating point numbers - also called double)
4. Boolean
5. Array
6. Object
7. NULL
8. Resource

2. **Explain operator in php.**

Ans :- Operators are used to perform operations on variables and values. PHP divides the operators in the following groups:
Arithmetic operators.

1. Assignment operators
2. Comparison operators
3. Increment/Decrement operators
4. Logical operators
5. String operators
6. Array operators
7. Conditional assignment operators

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

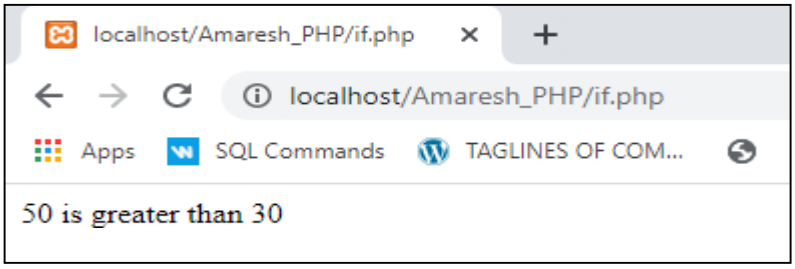
3. Differentiate between For loop and For each loop.

BASIS FOR COMPARISON	FOR	FOREACH
Implemented over	Variable/s	Numerical and associative arrays
Working	At the end of the given condition	At the end of the array count
Types of implementation	Single	Two
Syntax	for(expr1; expr2; expr3) {//If expr2 is true, do this}	foreach ($array as $value) {//Do Something} //Another form, for key & values foreach ($array as $key => $value) {//Do Something}

1. **Write a php program to demonstrate the use of decision making control structure using.**

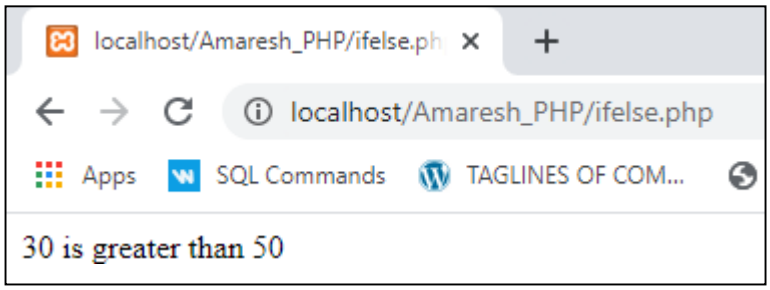
a. If –statement

```
<?php
        $a = 50;
        $b = 30;
         if($a > $b){
                echo "$a is greater than $b <br><hr>";
          }
?>
```



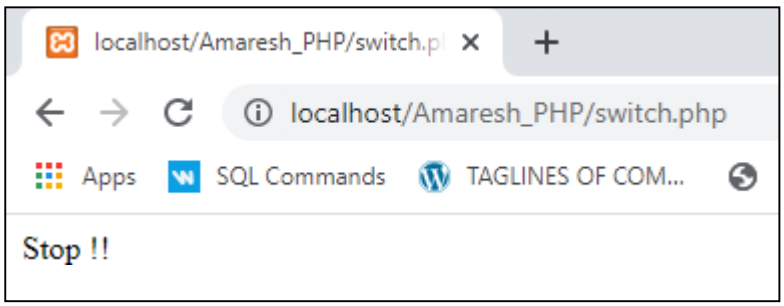
b. If-else statement

```
<?php
        $a = 50;
        $b = 30;
        if($a < $b){
                echo "$a is greater than $b <br>";
        }else{
                 echo "$b is greater than $a <br>";
        }
?>
```



c. Switch statement.

```
<?php
    $signal = "Red";
    switch ($signal) {
        case "Red":
            echo "Stop !!";
            break;
        case "Yellow":
            echo "Get Ready !!";
            break;
        case "Green":
            echo "Go !!";
            break;
        default:
            echo "Invalid Color Signal !!";
    }
?>
```



EXPERIMENT NO. 03

TITLE: Write a PHP program to demonstrate the use of Looping structures using –

a. While statement
b. Do – while statement
c. For statement
d. For each statement

D.O.P.: 19/04/21

D.O.S.: 26/04/21

Marks Obtained			Dated Signature of Teacher
Process Related (15)	**Product Related (10)**	**Total (25)**	

Experiment No: 3

Aim:-Write a php program to demonstrate use of looping

statementTheory:

Write a Syntax of.
a. While loop.
Ans.
The while loop - Loops through a block of code as long as the specified condition is true.
SYNTAX:
while (*condition is true*) {
  code to be executed;
}

b. Do___While loop
Ans.
PHP do-while loop can be used to traverse set of code like php while loop. The PHP do-while loop is guaranteed to run at least once.
SYNTAX:
do {
  code to be executed;
} while (*condition is true*);

c. For loop
Ans.
PHP for loop can be used to traverse set of code for the specified number of times.It should be used if the number of iterations is known otherwise use while loop. This means for loop is used when you already know how many times you want to execute a block of code.
SYNTAX:
for (*init counter; test counter; increment counter*) {
  code to be executed for each iteration;
}

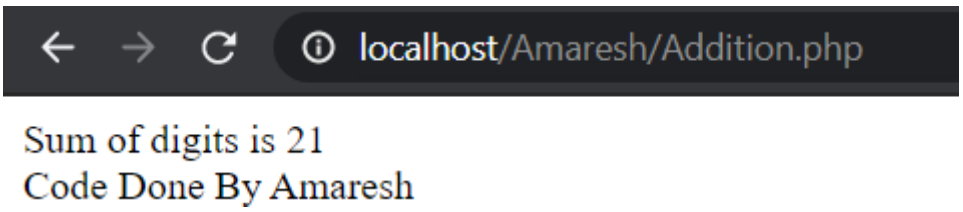
d. Foreach loop
Ans.
The foreach loop though iterates over an array of elements, the execution is simplified and finishes the loop in less time comparatively
SYNTAX:
foreach ($*array* as $*value*) {
  code to be executed;
}

Program:
WAP a php program demonstrate use of looping statement

1) WAP do addition nos (123456) using while loop
Ans.

```php
<?php
$num=123456;
$sum=0;
$rem=0;
$i=0;
while ($i<=strlen($num))
{
    $rem=$num%10;
    $sum = $sum + $rem;
    $num=$num/10;
    $i++;
}
echo "Sum of digits is " ,$sum , "<br/> Code Done By Amaresh";
?>
```

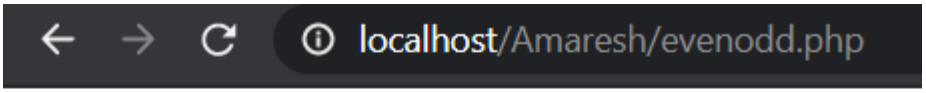
Output:



2) WAP to simply find even and odd no from 1 to 10 .
Ans.

```php
<?php
$num=1;
do
{
    if ($num % 2 == 0) {
        echo $num , " is Even " , "<br/>";
      }
      else {
        echo $num , " is Odd " , "<br/>";
      }
  $num++;
} while($num<=10)
?>
```

Output:

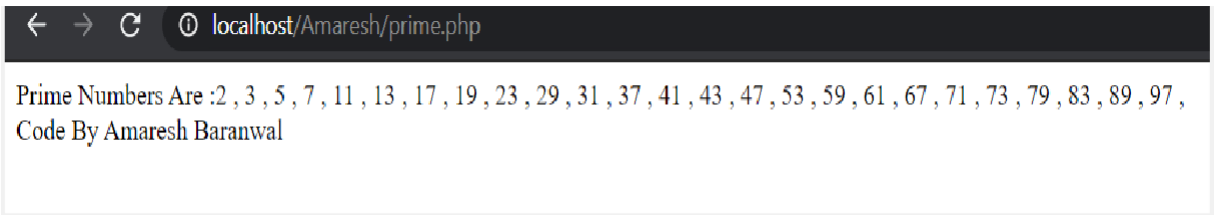


1 is Odd
2 is Even
3 is Odd
4 is Even
5 is Odd
6 is Even
7 is Odd
8 is Even
9 is Odd
10 is Even

3) WAP to simply find Prime no given 0 to 100 nos.
Ans.

```php
<?php
echo "Prime Numbers Are :";
$num = 2 ;
while ($num < 100 )
{
$count=0;
for ( $i=1;$i<=$num;$i++)
    {
        if (($num%$i)==0)
        {
        $count++;
        }
    }
        if ($count<3)
        {
        echo $num." , ";
        }
    $num=$num+1;
}
echo " <br/> Code By Amaresh Baranwal";
?>
```

Output.

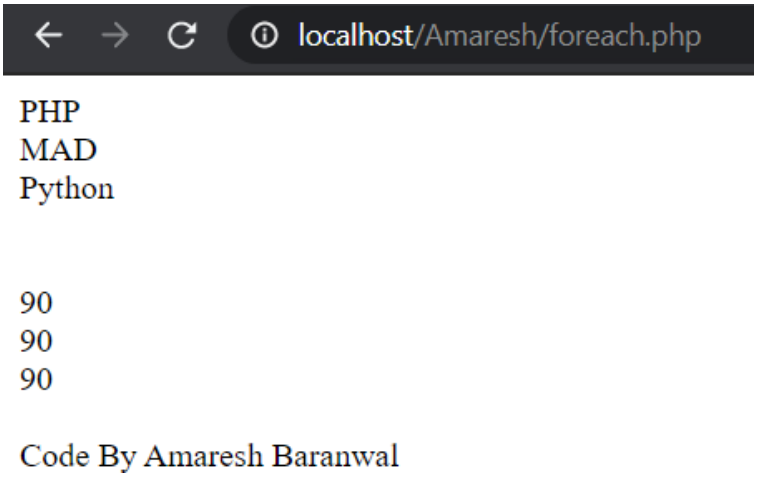


4) WAP to access array using foreach loop

Ans.

```php
<?php

    $subject = array ("PHP","MAD","Python");

     foreach ($subject as $element) {
        echo "$element";
        echo "</br>";
    }
    echo "</br>";
    echo "</br>";
    $percent[0]=90;
    $percent[1]=90;
    $percent[2]=90;;
    foreach ($percent as $ele) {
        echo "$ele";
        echo "</br>";
    }
        echo "<br/> Code By Amaresh Baranwal";
?>
```

Output:



EXPERIMENT NO. 04

TITLE: a. Write a PHP program to –

i. Calculate length of string.

ii. Count the number of words in string without using string functions

b. Write a simple PHP program to demonstrate use of various built in string functions.

D.O.P.: 26/04/21

D.O.S.: 26/04/21

Marks Obtained			Dated Signature of Teacher
Process Related (15)	**Product Related (10)**	**Total (25)**	

Experiment No: 04

Aim:- Understand the concept of various string functions in Php

Theory question:-

A. Syntax of String function

1. **str_word_count()**

Ans. str_word_count(string, **return**, char)

2. **strlen()**

Ans. strlen(string);

3. **strrev()**

Ans. strrev(*string*)

4. **strpos()**

Ans. strpos(string, find, start)

5. **str_replace()**

Ans. str_replace(*find ,replace ,string ,count*)

6. **ucwords()**

Ans. ucwords(*string*, *delimiters*)

7. **strcmp()**

Ans. strcmp(*string1*,*string2*)

8. **strtoupper()**

Ans. strtoupper(*string*)

9. **strtolower()**

Ans. strtolower(*string*).

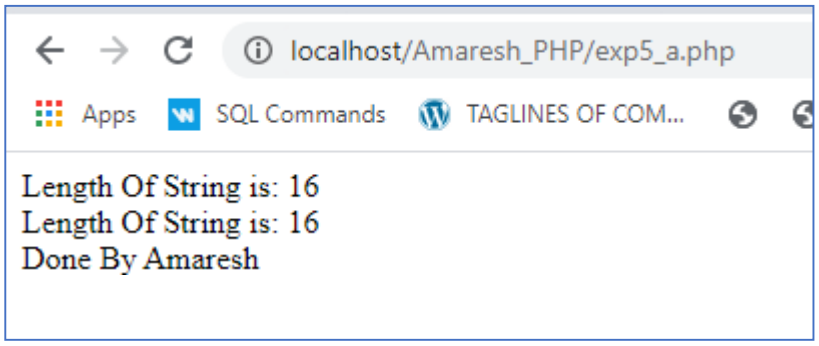
B)

a. WAP to calculate the length of string
Code and Output

Ans.

```
<?php
        $str1 = "Amaresh Baranwal";
        echo "Length Of String is: " ,strlen($str1);
        echo "<br>";

        $str2 = 'Amaresh.Baranwal';
        echo "Length Of String is: " ,strlen($str2);
        echo "<br>";
        echo "Done By Amaresh";
?>
```

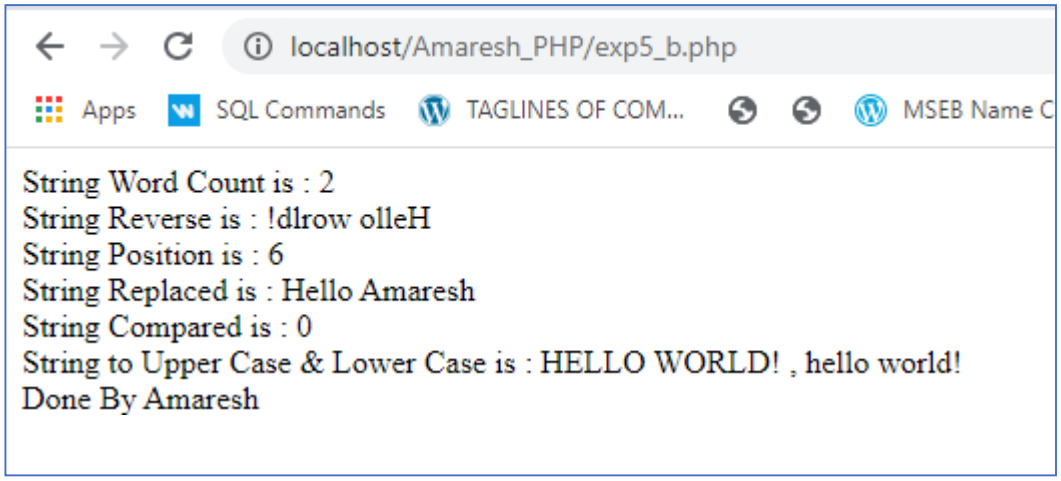
Output :



b. WAP to demonstrate use of various built in string function
Ans.

```
<?php
        $str ="Hello world!";
        echo "String Word Count is : ", str_word_count($str);
        echo "<br/>" ;
        echo "String Reverse is : ", strrev($str);
        echo "<br/>";
        echo "String Position is : ", strpos("Hello Amaresh ","Amaresh");
        echo "<br/>";
        echo "String Replaced is : ", str_replace("World" ,"Amaresh", "Hello World");
        echo "<br/>";
        echo "String Compared is : ", strcmp("Hello world ","Hello world ");
        echo "<br/>";
        echo "String to Upper Case & Lower Case is : ",strtoupper($str), " ,   ",    strtolower($str);
        echo "<br/>";
        echo "Done By Amaresh";
?>
```

Output :



EXPERIMENT NO. 05

TITLE: Write a program to –

a. Inherit members of super class in subclass.
b. Create constructor to initialize object of class - by using object oriented concepts.

D.O.P.: 26/04/21

D.O.S.: 3/05/21

Marks Obtained			Dated Signature of Teacher
Process Related (15)	**Product Related (10)**	**Total (25)**	

Experiment No: 05

Aim: Apply the concept of class, object using constructor.

Theory:

1. Syntax of creating class and object. Ans.

Syntax of Class:

```
class Name{
   //class information
}
```

Syntax of Object:

```
Object=new className();
```

2. Constructor and destructor syntax.
Ans.

Syntax of Constructor:

```
function____construct()
{
        // initialize the object and its properties by assigning
        //values
}
```

Syntax of Destructor:

```
function____destruct()
{
        // destroying the object or clean up resources here
}
```

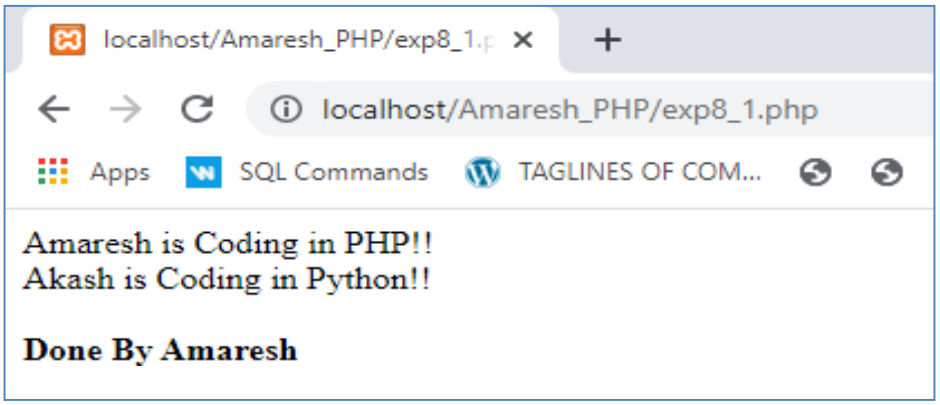
Program:

1. Write a PHP program to inherit members of superclass in subclass.

Ans.

```
<?php
// parent class
class Human {

public function php() {
echo $this->name. " is Coding in PHP!!<br/>";
}

public function python() {
echo $this->name. " is Coding in Python!!<br/>";
}
}
// child class
class Human1 extends Human {

}
// child class
class Human2 extends Human {

}
$Human1 = new Human1();
$Human1->name = "Amaresh";
$Human2 = new Human2();
$Human2->name = "Akash";


$Human1->php();
$Human2->python();
echo "<br><b>Done By Amaresh</b><br>";
?>
```

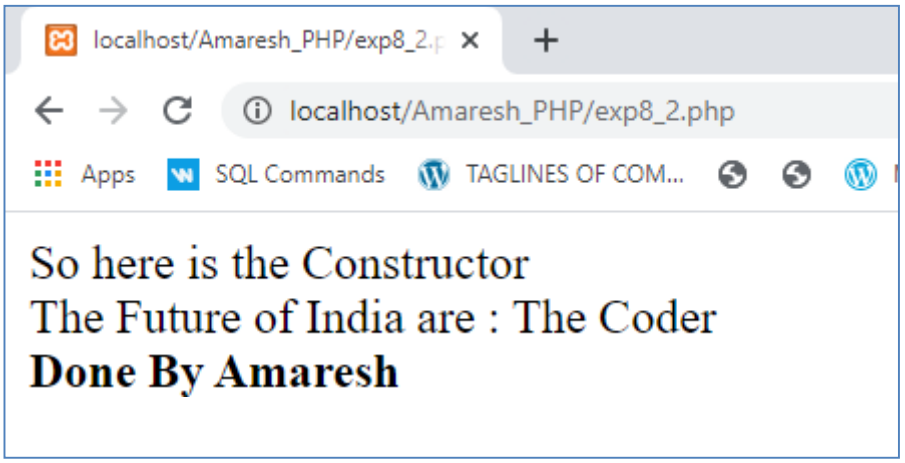
Output:



2. Create constructor to initialize objects of class -by using object oriented concepts.
Ans.

```
<?php
    class Person {
        // first name of person
        public $fname;
        // last name of person
        public $lname;

        // Constructor
        public function_construct($fname, $lname) {
            echo "So here is the Constructor<br/>";
            $this->fname = $fname;
            $this->lname = $lname;
        }

        // public method to show name
        public function showName() {
            echo "The Future of India are : " . $this->fname . " " . $this->lname;
        }
    }

    // creating class object
    $xyz = new Person("The", "Coder");
    $xyz ->showName();
    echo "</br><b>Done By Amaresh</b>";
?>
```

Output:



EXPERIMENT NO. 06

TITLE: Design a webpage using following form controls:

a. Text Box
b. Radio Button
c. Check Box
d. Buttons

D.O.P.: 3/05/21

D.O.S.: 10/05/21

Marks Obtained			Dated Signature of Teacher
Process Related (15)	**Product Related (10)**	**Total (25)**	

Experiment No: 06

Aim: Design a web page using form controls.

Theory:

1. **Difference between get and post methods. Ans.**

GET Method	POST Method
In GET method, values are visible in the URL.	In POST method, values are not visible in the URL.
GET has a limitation on the length of the values, generally 255 characters.	POST has no limitation on the length of the values since they are submitted via the body of HTTP.
GET performs are better compared to POST because of the simple nature of appending the values in the URL.	It has lower performance as compared to GET method because of time spent in including POST values in the HTTP body.
GET results can be bookmarked.	POST results cannot be bookmarked.
GET request is often cacheable.	The POST request is hardly cacheable.

Program:

Design a web page using following form controls:

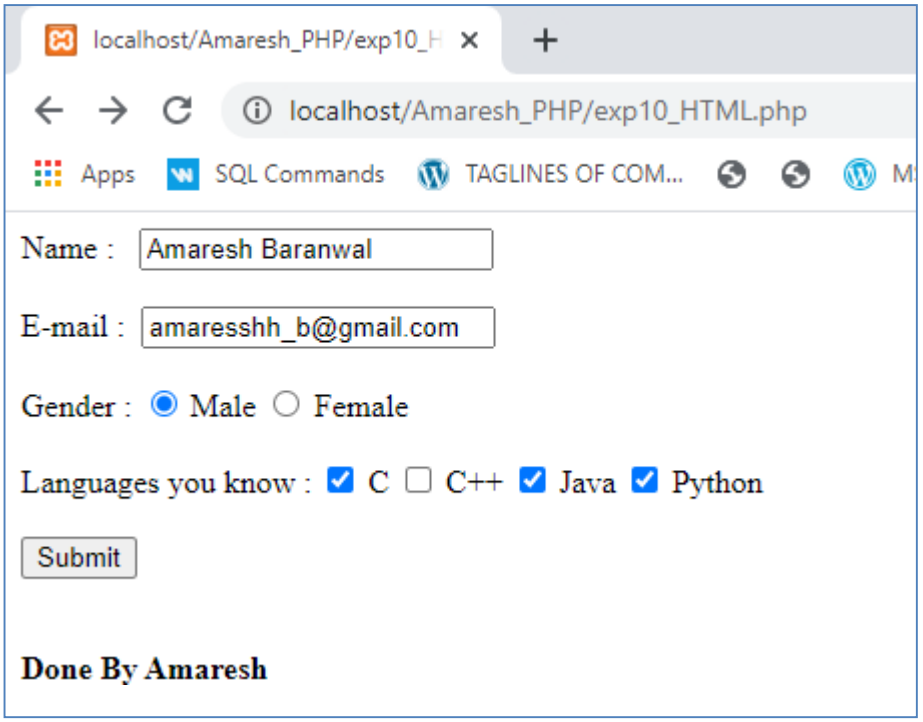
a) **Text box**
b) **Radio button**
c) **Check box**
d) **Button**

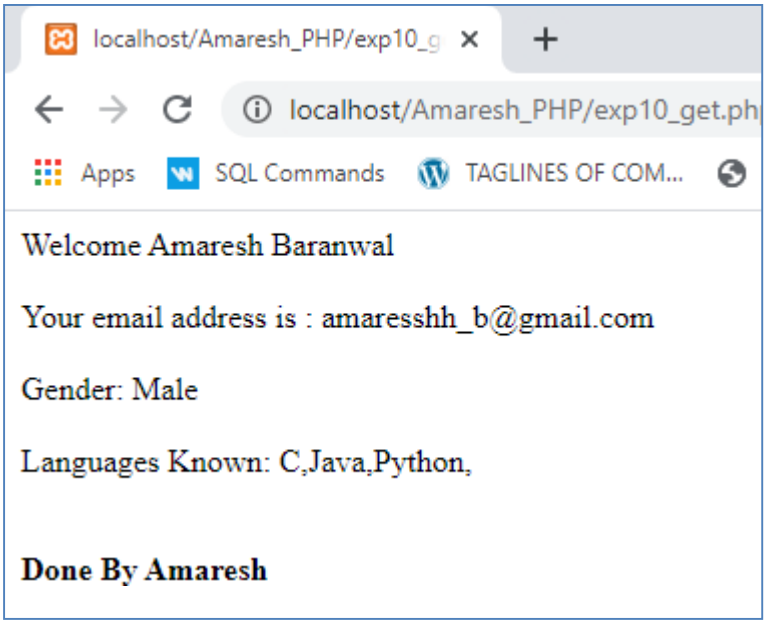
Ans.

```
<html>
<body>
<form action="exp10_get.php" method="get">
        Name : &amp;nbsp;&amp;nbsp;<input type="text" name="name"><br><br>
        E-mail : &amp;nbsp;<input type="text" name="email"><br><br>
        Gender :
                <input type="radio" name="gen" value="Male"> Male
                <input type="radio" name="gen" value="Female"> Female <br><br>
        Languages you know :
                <input type="checkbox" name="Lang[]" value="C"> C
                <input type="checkbox" name="Lang[]" value="C++"> C++
                <input type="checkbox" name="Lang[]" value="Java"> Java
                <input type="checkbox" name="Lang[]" value="Python"> Python
                <br><br>
        <input type="submit">
        <br><br><br><b>Done By Amaresh</b>
</form>
</body>
</html>
```

```
<html>
<body>
	Welcome <?php echo $_GET["name"]; ?><br><br>
	Your email address is : <?php echo $_GET["email"]; ?><br><br> Gender:
	<?php
		if ($_GET["gen"] == "Male"){
			echo "Male";
		}
		else{
			echo "Female";
		}
	?>
	<br><br> Languages Known:
	<?php
		foreach ($_GET["Lang"] as $language) {
			echo "$language",",";
		}
		echo "<br><br><br><b>Done By Amaresh<b>";
	?>
</body>
</html>
```

Output:




localhost/Amaresh_PHP/exp10_g
localhost/Amaresh_PHP/exp10_get.ph
Apps
SQL Commands
TAGLINES OF COM...
Welcome Amaresh Baranwal
Your email address is : amaresshh_b@gmail.com
Gender: Male
Languages Known: C,Java,Python,
Done By Amaresh

EXPERIMENT NO. 07

TITLE: Design a webpage using following form controls:

a. List Box
b. Combo Box
c. Hidden field Box

D.O.P.: 10/05/21

D.O.S.: 10/05/21

Marks Obtained			Dated Signature of Teacher
Process Related (15)	**Product Related (10)**	**Total (25)**	

Experiment No: 07

Aim: Design a web page using following form control

.

Theory:

1. Syntax of creating class and Constructor and inheritance

Ans.

Syntax of Class:

```
class Name{
//class information
}
```

Syntax of Constructor:

```
<?php
class <CLASS_NAME>
{

        // constructor
        function__construct() {
        // initialize the object properties
        }
}
```

Syntax of Inheritance:

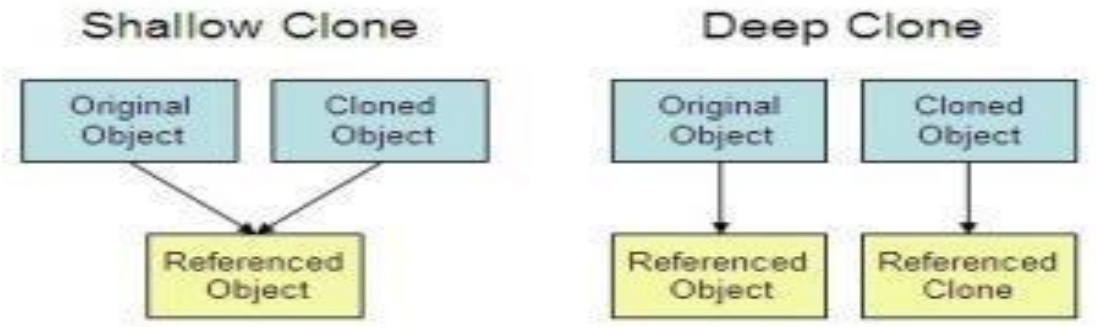
```
Class A(Parent Class) {
\\code
}

class B(Child Class) extends A
 {
 //code
 }
```

2. Difference between shallow clone and deep clone
Ans.
Shallow Clone

- In shallow copy a new object is created.
- The new object is an exact copy of the value in the original object.
- It calls the object's "__clone()" method.
- It simply makes a copy of the reference to A to B.
- It is copy of A's address.
- The addresses of A and B will be same ie. they will be pointing to the same memory location.

Deep Clone

- In this the data is actually completely copies.
- In this everything is duplicated and all values are copies into a new instances.
- Advantage of deep copy is that the A & B do not depend on each other but the process is relatively slower and more expensive.
- In shallow copy B points to object A's memory location whereas in deep copy all things in object A's memory location get copied to object B's location.



Program
a) List box
b) Combo box
c) Hidden field box

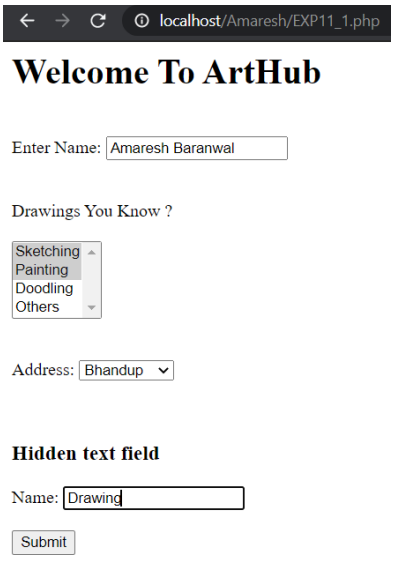
Ans.

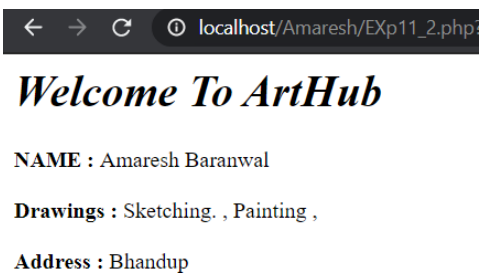
11_1

```
<html>

<body>
<form action="EXp11_2.php" method="get">
<b><h1>Welcome To ArtHub</h1></b><br>
Enter Name:  <input type="text" name="name" Placeholder="Enter Name"/>
<br>  <br> <br>

<label><b></b>Drawings You Know ? </b></label><br><br>
<select name="draw[]" size="4" multiple="multiple">
<option value="Sketching.">Sketching</option>
<option value="Painting">Painting</option>
<option value="Doodling">Doodling</option>
<option value="Others">Others</option>
</select><br>
<br><br>

<label> Address: </label>
<select id="make" name="Make">
   <option value="Select Place">Address</option>
   <option value="Kurla">Kurla</option>
   <option value=">Ghatkopar">Ghatkopar</option>
   <option value="Bhandup">Bhandup</option>
   <option value="Vikroli">Vikroli</option>
</select><br>
<br><br>
<h3> Hidden text field</h3>
<input type="hidden" name="f" />
 Name: <input type="text"> <br><br>
<input type="submit" name="submit" value="Submit"/>
</form>
</body>
</html>
```

11_2

```
<html>
<body>
<b><i><h1>Welcome To ArtHub</h1></b></i>
<b>NAME : </b><?php echo $_GET["name"]; ?><br><br>
<?php
$choices= $_GET['draw'];
if(isset($choices)) {
echo '<b> Drawings : </b>' ;
foreach ($choices as $key => $value)
{
echo $value . ' , ';
}
}
else
{
echo "You haven't selected any Drawing. </br></br>";
}
$cho= $_GET['Make'];
if (isset($cho)) {
echo '</br></br><b>Address :  </b> '. $cho;
}
else {
echo "You have not selected Address.";
}
'<br><br><br>';
echo('</br></br>'.$_GET['f']);
?>
</body></html>
```





EXPERIMENT NO. 08

TITLE: Develop webpage with data validation.

D.O.P.: 10/05/21

D.O.S.: 17/05/21

Marks Obtained			Dated Signature of Teacher
Process Related (15)	**Product Related (10)**	**Total (25)**	

Experiment No: 08

Aim:-Develop Web page with Data Validation.

Theory: Short note following function and variables

1.$_SERVER

Ans.

$_SERVER is a superglobal that holds information regarding HTTP headers, path and script location etc. All the server and execution environment related information is available in this associative array. Most of the entries in this array are populated by web server.

$_SERVER is a PHP super global variable **Superglobal variables** are predefined variables in PHP that do not need to be declared by the user.. The entries in this array are created by the web server.

The example below shows how to use some of the elements in $_SERVER:

```
<?php
echo $_SERVER['PHP_SELF'];
echo "<br>";
echo $_SERVER['SERVER_NAME'];
echo "<br>";
echo $_SERVER['HTTP_HOST'];
echo "<br>";
echo $_SERVER['HTTP_REFERER'];
echo "<br>";
echo $_SERVER['HTTP_USER_AGENT'];
echo "<br>";
echo $_SERVER['SCRIPT_NAME'];
?>
```

2.$_POST

Ans.

PHP $_POST is a PHP super global variable which is used to collect form data after submitting an HTML form with method="post". $_POST is also widely used to pass variables.

The $_POST variable is an array of variable names and values sent by the HTTP POST method.The $_POST variable is used to collect values from a form with method="post". Information sent from a form with the POST method is invisible to others and has no limits on the amount of information to send.

- Variables sent with HTTP POST are not shown in the URL
- Variables have no length limit

However, because the variables are not displayed in the URL, it is not possible to bookmark the page.

Example:

```
<html>
<body>

<form method="post" action="<?php echo $_SERVER['PHP_SELF'];?>">
  Name: <input type="text" name="fname">
  <input type="submit">
</form>

<?php
if ($_SERVER["REQUEST_METHOD"] == "POST") {
  // collect value of input field
  $name = $_POST['fname'];
  if (empty($name)) {
    echo "Name is empty";
  } else {
    echo $name;
  }
}
?>
</body>
</html>
```

3. $_GET

Ans.

PHP $_GET is a PHP super global variable which is used to collect form data after submitting an HTML form with method="get".

The GET method sends the encoded user information appended to the page request. The page and the encoded information are separated by the **?** character.

$_GET can also collect data sent in the URL.

- The GET method produces a long string that appears in your server logs, in the browser's Location: box.
- The GET method is restricted to send upto 1024 characters only.
- Never use GET method if you have password or other sensitive information to be sent to the server.
- GET can't be used to send binary data, like images or word documents, to the server.
- The data sent by GET method can be accessed using QUERY_STRING environment variable.
- The PHP provides **$_GET** associative array to access all the sent information using GET method.

Examlple

```
<html>
<body>
<a href="test_get.php?subject=PHP&web=W3schools.com">Test $GET</a>
</body>
</html>
```

```
<html>
<body>
<?php
echo "Study " . $_GET['subject'] . " at " . $_GET['web'];
?>
</body>
</html>
```

4. filter_var()

Ans.

The filter_var() function filters a variable with the specified filter. This function is used to both validate and sanitize the data.

The filter_var() function filters a variable with the specified filter

Syntax :-

filter_var(var, filtername, options)

Parameters: This function accepts three parameters and are described below:

1. **var** : It is the required field. It denotes the variable to filter.
2. **filtername** : It is used to specify the ID or name of the filter to use. Default is FILTER_DEFAULT, which results in no filtering. It is optional field.
3. **options** : It is used to specify one or more flags/options to use. Check each filter for possible options and flags. It is also optional field.

Return Value: It returns the filtered data on success, or FALSE on failure.

Example

```
<?php
$email = "john.doe@example.com";

if (filter_var($email, FILTER_VALIDATE_EMAIL)) {
  echo("$email is a valid email address");
} else {
  echo("$email is not a valid email address");
}
?>
```

5. preg_match()
Ans.

This function searches string for pattern, returns true if pattern exists, otherwise returns false. Usually search starts from beginning of subject string. The optional parameter offset is used to specify the position from where to start the search.

Syntax:
int preg_match($pattern, $input, $matches, $flags, $offset)

Parameters: This function accepts five parameters as mentioned above and described below:

- **pattern:** This parameter holds the pattern to search for, as a string.
- **input:** This parameter holds the input string.
- **matches:** If matches exists then it contains results of search. The $matches[0] will contain the text that matched full pattern, $matches[1] will contain the text that matched the first captured parenthesized subpattern, and so on.
- **flags:** The flags can be following flags:
    - **PREG_OFFSET_CAPTURE:** If this flag is passed, for every match the append string offset will be returned.
    - **PREG_UNMATCHED_AS_NULL:** If this flag is passed, subpatterns which are not matched reports as NULL; otherwise they reports as empty string.
- **offset:** Usually, search starts from the beginning of input string. This optional parameter offset is used to specify the place from where to start the search (in bytes).

Return value: It returns true if pattern exists, otherwise false.

Example

```
?php
$str = "Visit W3Schools";
$pattern = "/w3schools/i";
echo preg_match($pattern, $str);
?>
```

2. Write a program to use validation for following controls

1. username 2.Email address3.Comment box4.Radio button. 5. Website URL

Ans.

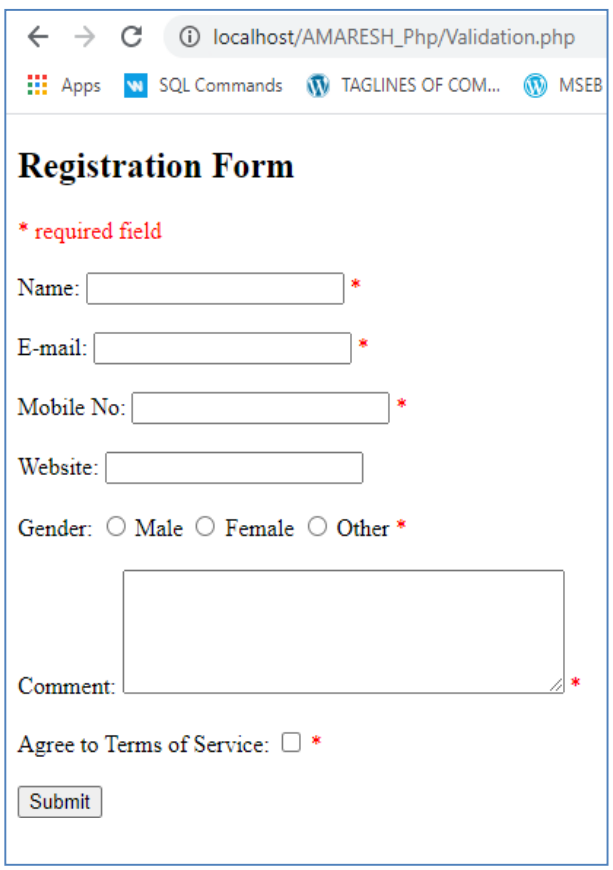
```
<!DOCTYPE html>
<html>
<head>
<style>
.error {color: #FF0001;}
</style>
</head>
<body>

<?php
// define variables to empty values
$nameErr = $emailErr = $mobilenoErr = $genderErr = $websiteErr = $agreeErr = $c
omment= "";
$name = $email = $mobileno = $gender = $website = $agree = $commentErr = "";

//Input fields validation
if ($_SERVER["REQUEST_METHOD"] == "POST") {

//String Validation
    if (empty($_POST["name"])) {
         $nameErr = "Name is required";
    } else {
        $name = input_data($_POST["name"]);
            // check if name only contains letters and whitespace
            if (!preg_match("/^[a-zA-Z ]*$/",$name)) {
                $nameErr = "Only alphabets and white space are allowed";
            }
    }

    //Email Validation
    if (empty($_POST["email"])) {
            $emailErr = "Email is required";
    } else {
            $email = input_data($_POST["email"]);
            // check that the e-mail address is well-formed
            if (!filter_var($email, FILTER_VALIDATE_EMAIL)) {
                $emailErr = "Invalid email format";
            }
     }

    //Number Validation
    if (empty($_POST["mobileno"])) {
            $mobilenoErr = "Mobile no is required";
    } else {
            $mobileno = input_data($_POST["mobileno"]);
            // check if mobile no is well-formed
            if (!preg_match ("/^[0-9]*$/", $mobileno) ) {
            $mobilenoErr = "Only numeric value is allowed.";
```

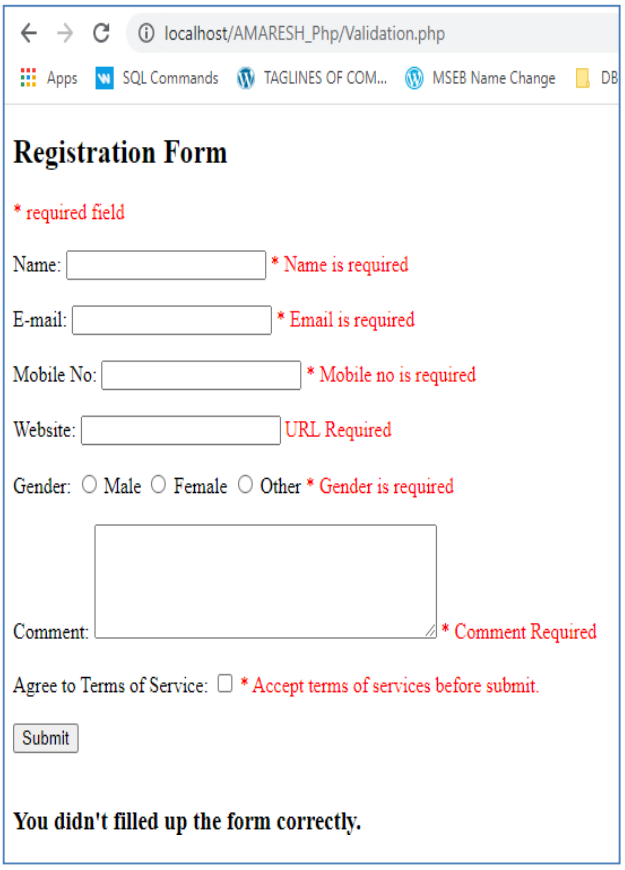
```
            }
        //check mobile no length should not be less and greator than 10
        if (strlen ($mobileno) != 10) {
            $mobilenoErr = "Mobile no must contain 10 digits.";
            }
    }

    //URL Validation
    if (empty($_POST["website"])) {
        $website = "";
        $websiteErr = " URL Required";
    } else {
            $website = input_data($_POST["website"]);
            // check if URL address syntax is valid
            if (!preg_match("/\b(?:(?:https?|ftp):\/\/|www\.)[-a-z0-
9+&@#\/%?=~_|!:,.;]*[-a-z0-9+&@#\/%=~_|]/i",$website)) {
                $websiteErr = "Invalid URL";
            }
    }

    //Empty Field Validation
    if (empty ($_POST["gender"])) {
            $genderErr = "Gender is required";
    } else {
            $gender = input_data($_POST["gender"]);
    }

   if (empty($_POST["comment"])) {
        $comment = "";
        $commentErr = " Comment Required";
      } else {
        $comment = input_data($_POST["comment"]);
        if (!preg_match("/^[a-zA-Z ]*$/",$comment)) {
          $commentErr = "Only alphabets and white space are allowed in comment";
        }
    }

  //Checkbox Validation
    if (!isset($_POST['agree'])){
            $agreeErr = "Accept terms of services before submit.";
    } else {
            $agree = input_data($_POST["agree"]);
    }
}
function input_data($data) {
  $data = trim($data);
  $data = stripslashes($data);
  $data = htmlspecialchars($data);
  return $data;
}
?>
```

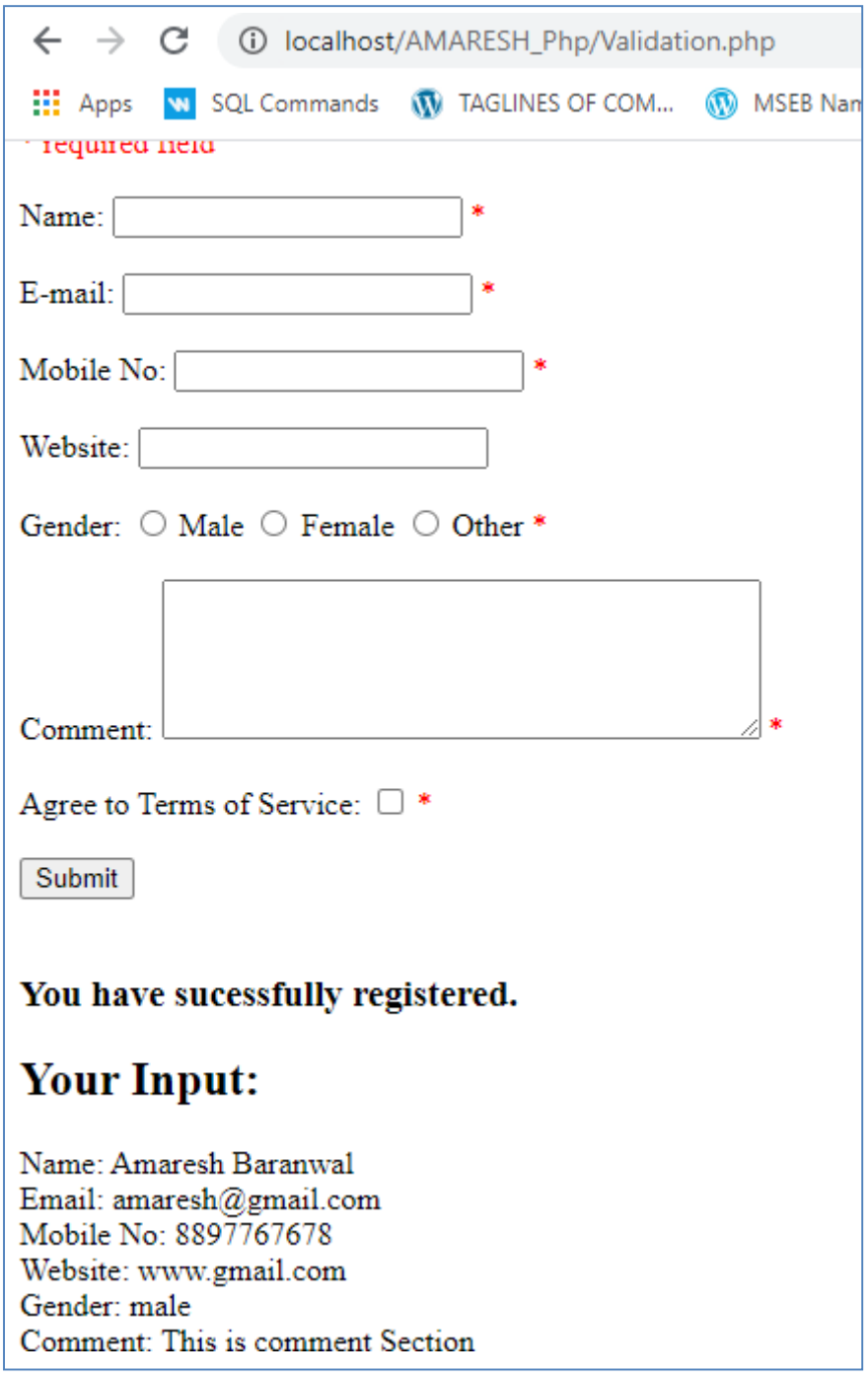
```
<h2>Registration Form</h2>
<span class = "error">* required field </span>
<br><br>
<form method="post" action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]); ?>" >
    Name:
    <input type="text" name="name">
    <span class="error">* <?php echo $nameErr; ?> </span>
    <br><br>
    E-mail:
    <input type="text" name="email">
    <span class="error">* <?php echo $emailErr; ?> </span>
    <br><br>
    Mobile No:
    <input type="text" name="mobileno">
    <span class="error">* <?php echo $mobilenoErr; ?> </span>
    <br><br>
    Website:
    <input type="text" name="website">
    <span class="error"><?php echo $websiteErr; ?> </span>
    <br><br>
    Gender:
    <input type="radio" name="gender" value="male"> Male
    <input type="radio" name="gender" value="female"> Female
    <input type="radio" name="gender" value="other"> Other
    <span class="error">* <?php echo $genderErr; ?> </span>
    <br><br>
    Comment: <textarea name="comment" rows="5" cols="40"></textarea>

  <span class="error">* <?php echo $commentErr; ?> </span>
    <br><br>
    Agree to Terms of Service:
    <input type="checkbox" name="agree">
    <span class="error">* <?php echo $agreeErr; ?> </span>
    <br><br>
    <input type="submit" name="submit" value="Submit">
    <br><br>
</form>
<?php
    if(isset($_POST['submit'])) {
    if($nameErr == "" && $emailErr == "" && $mobilenoErr == "" && $genderErr == "" && $websiteErr == "" && $agreeErr == "") {
      echo "<h3 color = #FF0001> <b>You have sucessfully registered.</b> </h3>";
        echo "<h2>Your Input:</h2>";
        echo "Name: " .$name;
        echo "<br>";
        echo "Email: " .$email;
        echo "<br>";
        echo "Mobile No: " .$mobileno;
        echo "<br>";
        echo "Website: " .$website;
```

```
        echo "<br>";
echo "Gender: " .$gender;
echo "<br>";
 echo "Comment: " .$comment;
    } else {
        echo "<h3> <b>You didn't filled up the form correctly.</b> </h3>";
    }
    }
?>
 </body>  </html>
```

OUTPUT:






localhost/AMARESH_Php/Validation.php
Apps
SQL Commands
TAGLINES OF COM...
MSEB Nan
* required field
Name: *
E-mail: *
Mobile No: *
Website:
Gender: Male Female Other *
Comment: *
Agree to Terms of Service: *
Submit
You have sucessfully registered.
Your Input:
Name: Amaresh Baranwal
Email: amaresh@gmail.com
Mobile No: 8897767678
Website: www.gmail.com
Gender: male
Comment: This is comment Section

EXPERIMENT NO. 09

TITLE: Write simple PHP program to –

a. Set cookies and read it

b. Demonstrate session Management

D.O.P.: 17/05/21

D.O.S.: 17/05/21

Marks Obtained			Dated Signature of Teacher
Process Related (15)	**Product Related (10)**	**Total (25)**	

Experiment No. 09

THEORY

1. Syntax:
   Setcookie()
   Ans. setcookie(*name,* value, expire, path, domain, secure, httponly);

2. What is the $_COOKIE variable?

Ans.
The **PHP $_COOKIE** super global **variable** is used to retrieve a **cookie** value. It typically an associative array that contains a list of all the **cookies values** sent by the browser in the current request, keyed by **cookie** name.
Every time a browser is connected to the server, the cookie variable's value is sent to the server. Hence, only the relevant cookies are sent to the domain. Cookies are a suitable method of linking a page for the user's interaction with a website. The cookies sent by the client will be included in $_COOKIE global variabl

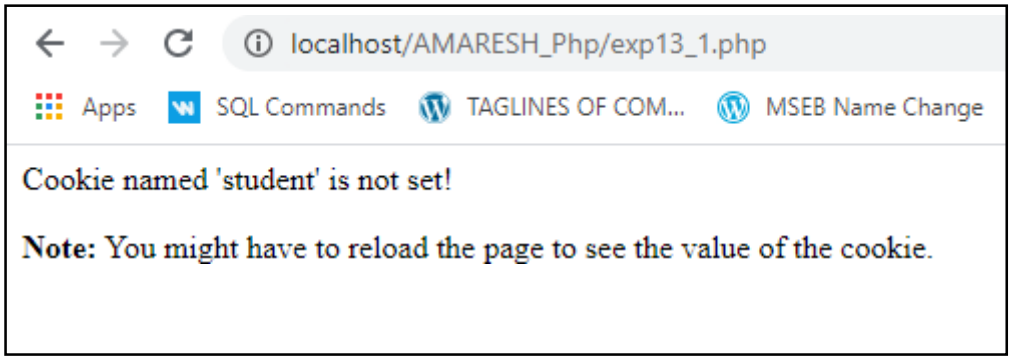
Write a simple PHP program to-

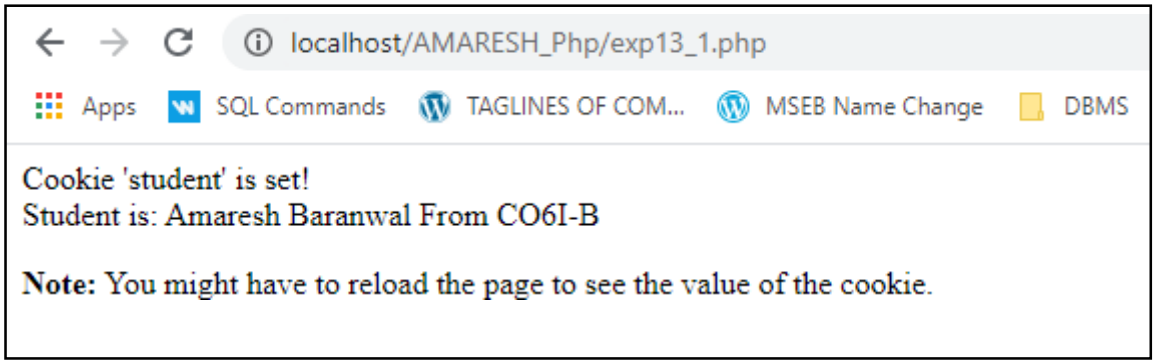
1. Write a program to set cookies, update and destroy cookies.

Ans.

```
<?php
  $cookie_name = "student";
  $cookie_value = "Amaresh Baranwal From CO6I-B";
  setcookie($cookie_name, $cookie_value, time() + (86400 * 30),
?>

<html>
<body>
  <?php
    if(!isset($_COOKIE[$cookie_name])) {
      echo "Cookie named '" . $cookie_name . "' is not set!";
    } else {
      echo "Cookie '" . $cookie_name . "' is set!<br>";
      echo "Student is: " . $_COOKIE[$cookie_name];
    }
  ?>

  <p>
    <strong>Note:</strong>
    You might have to reload the page to see the value of the cookie.
  </p>
</body>
</html>
```

OUTPUT:


localhost/AMARESH_Php/exp13_1.php
Apps
SQL Commands
TAGLINES OF COM...
MSEB Name Change
Cookie named 'student' is not set!
Note: You might have to reload the page to see the value of the cookie.


localhost/AMARESH_Php/exp13_1.php
Apps
SQL Commands
TAGLINES OF COM...
MSEB Name Change
DBMS
Cookie 'student' is set!
Student is: Amaresh Baranwal From CO6I-B
Note: You might have to reload the page to see the value of the cookie.

2. Write a program to create a session, update, and destroy a session.

Ans:

```
<?php
   session_start();

   if( isset( $_SESSION['counter'] ) ) {
      $_SESSION['counter'] += 1;
   }else {
      $_SESSION['counter'] = 1;
   }

   $msg = "Hello Amaresh From CO6IB. You have visited this page ".
           $_SESSION['counter'];
   $msg .= "in this session.";
?>

<html>
<head>
  <title>Setting up a PHP session</title>
</head>

<body>
  <?php echo( $msg ); ?>
</body>
</html>
```

OUTPUT:

EXPERIMENT NO. 10

TITLE: Write a simple PHP program for sending and receiving plain text message (e-mail).

D.O.P.: 17/05/21

D.O.S.: 24/05/21

Marks Obtained			Dated Signature of Teacher
Process Related (15)	**Product Related (10)**	**Total (25)**	

Experiment No.10

THEORY

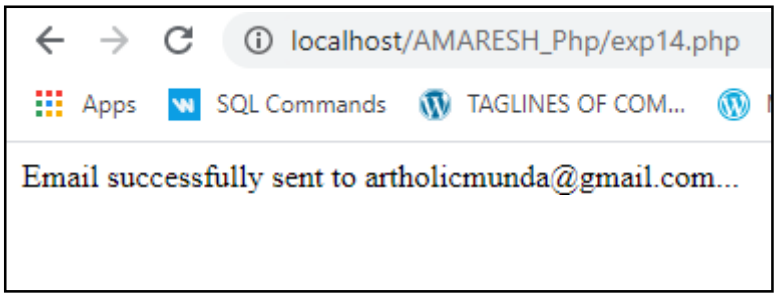
Syntax:- Mail()
Ans. mail(to, subject, message, headers, parameters);

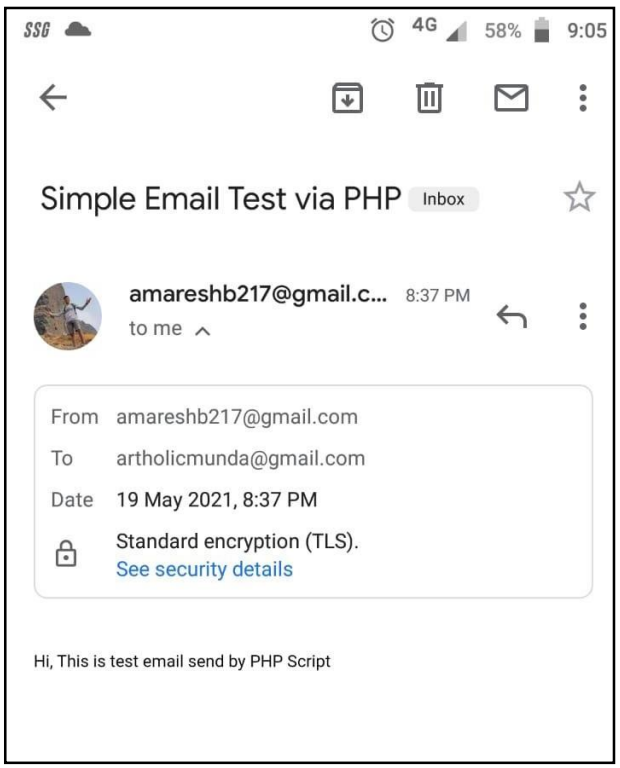
PROGRAM

Write a simple PHP program for sending and receiving plain text messages(e-mail).
Ans.

```
<?php
  $to_email = "artholicmunda@gmail.com";
  $subject = "Simple Email Test via PHP";
  $body = "Hi, This is test email send by PHP Script";
  $headers = "From: amareshb217@gmail.com";

  if (mail($to_email, $subject, $body, $headers)) {
    echo "Email successfully sent to $to_email...";
  } else {
    echo "Email sending failed...";
  }
?>
```

OUTPUT





EXPERIMENT NO. 11

TITLE: Develop a simple application to -

a. Enter data into database.

b. Retrieve and present data from database.

D.O.P.: 24/05/21

D.O.S.: 31/05/21

Marks Obtained			Dated Signature of Teacher
Process Related (15)	**Product Related (10)**	**Total (25)**	

Experiment No: 11

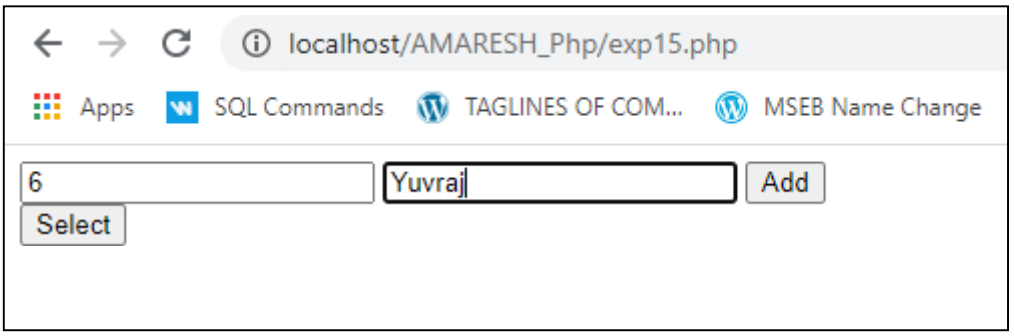
Develop simple application

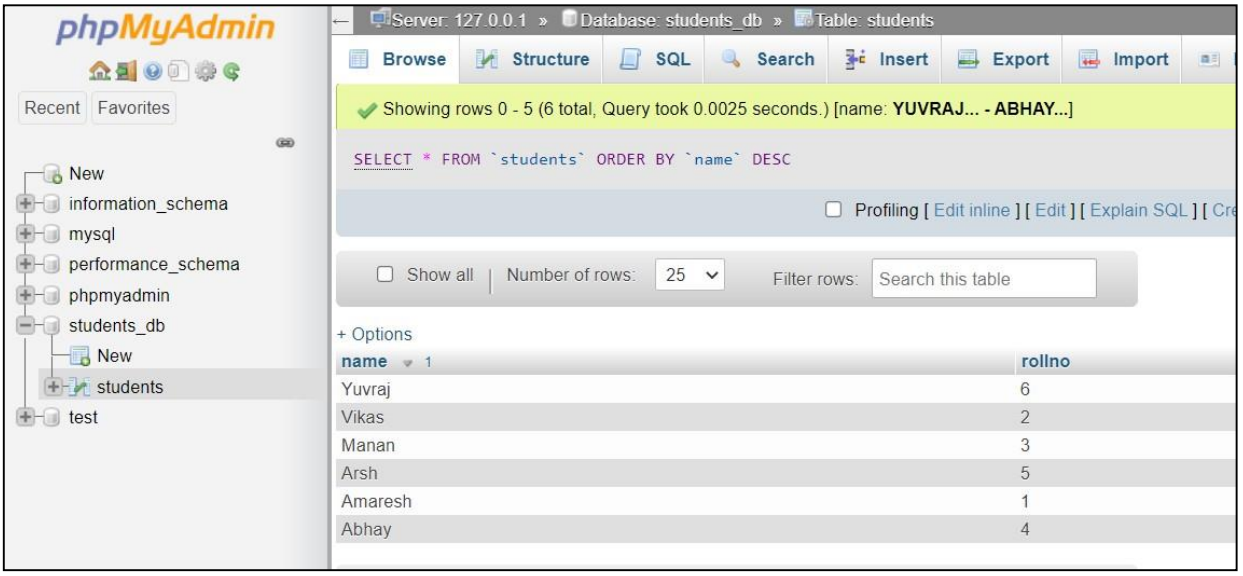
1. Enter the data into DBAns.
2. Select data from DBAns.

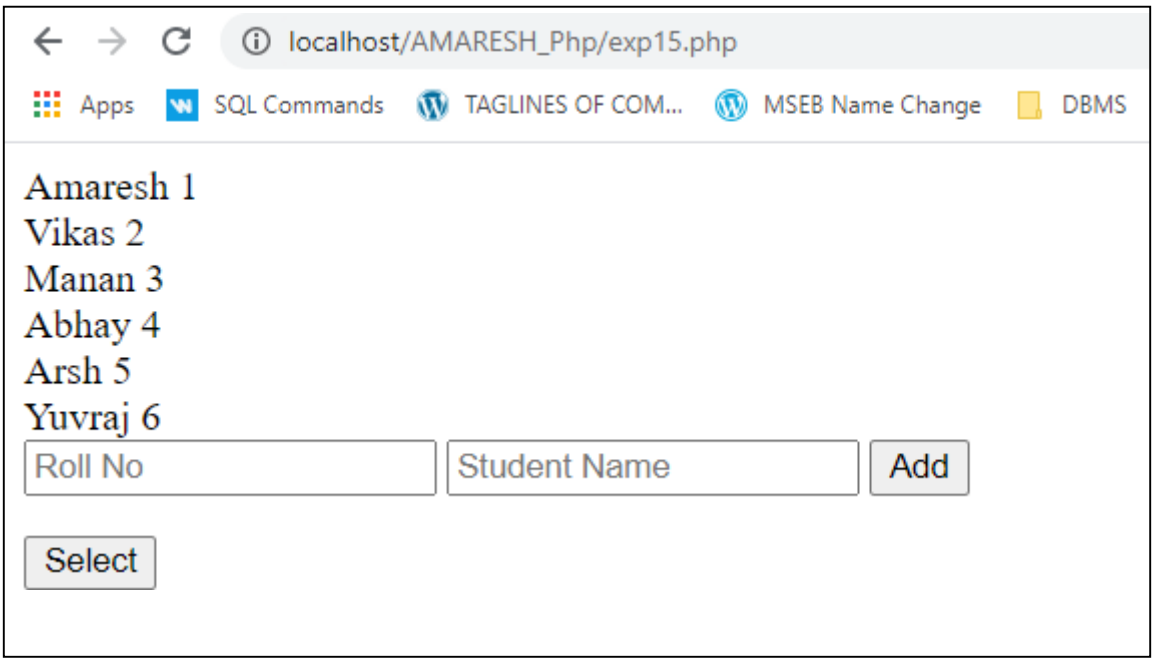
```
<?php
   $dbhost = "localhost";
   $dbuser = "root";
   $dbpassword = "";
   $dbname = "students_db";

   if(!$con = mysqli_connect($dbhost,$dbuser,$dbpassword,$dbname)){
      die("Failed to connect");
   }

   if($_SERVER["REQUEST_METHOD"] == "POST"){
      if(isset($_POST["add_student"])){
         $name = $_POST["student"];
         $rollno = $_POST["rollno"];
         $query = "insert into students (name,rollno) values ('$name','$rollno')";
         mysqli_query($con,$query);
      }
      if(isset($_POST["select_data"])){

         $select_query = "select * from students";
         $result = mysqli_query($con,$select_query);
         while($student_data = mysqli_fetch_array($result,MYSQLI_ASSOC)){
            echo $student_data["name"] . " " . $student_data["rollno"] . "<br>";
         }
      }
   }
?>

<!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>
   <form method="POST" >
      <input name="student" type="text" placeholder="Student Name"  />
      <input name="rollno" type="number" placeholder="Roll No"  />
      <input type="submit" value="Add" name="add_student" />
   </form>
```

```
    <form method="POST">
      <input type="submit" value="Select" name="select_data" />
    </form>
</body>
</html>
```

OUTPUT:







EXPERIMENT NO. 12

TITLE: Develop a simple application to Update, Delete table data from database.

D.O.P.: 31/05/21

D.O.S.: 07/06/21

Marks Obtained			Dated Signature of Teacher
Process Related (15)	**Product Related (10)**	**Total (25)**	

Experiment No: 12

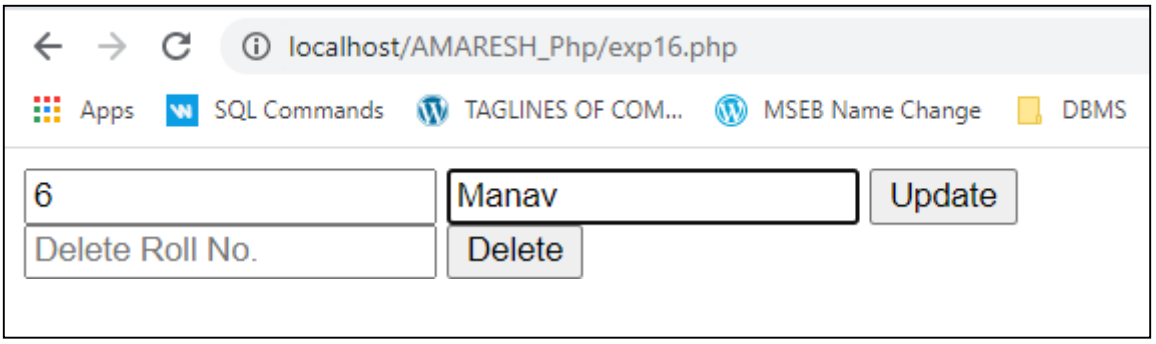
Simple application on Update and Delete operation into DB.

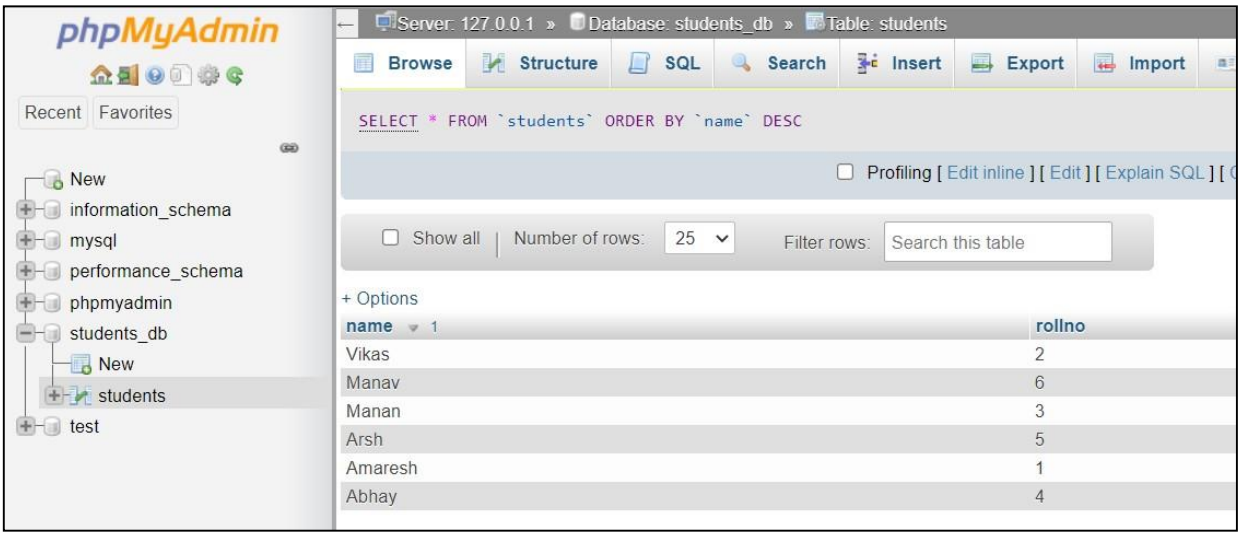
Ans

```
<?php
 $dbhost = "localhost";
 $dbuser = "root";
 $dbpassword = "";
 $dbname = "students_db";
 if(!$con = mysqli_connect($dbhost,$dbuser,$dbpassword,$dbname)){
 die("Failed to connect");
 }
 if($_SERVER["REQUEST_METHOD"] == "POST"){
 if(isset($_POST["update_student"])){
 $roll = $_POST["update_roll"];
 $update_name = $_POST["update_name"];
 $update_query = "update students set name ='$update_name' where rollno = '$roll' ";
 mysqli_query($con,$update_query);
 }
 if(isset($_POST["delete_student"])){
 $del_roll = $_POST["delete_roll"];
 $delete_query = "delete from students where rollno = '$del_roll'";
 mysqli_query($con,$delete_query);
 }
 }
?>
<!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>
 <form method="POST">
 <input name="update_roll" type="number" placeholder="Update Roll No." />
 <input name="update_name" type="text" placeholder="Update Name" />
 <input type="submit" value="Update" name="update_student" />
 </form>
 <form method="POST">
 <input name="delete_roll" type="number" placeholder="Delete Roll No." />
 <input type="submit" value="Delete" name="delete_student" />
 </form>
</body>
</html>
```

OUTPUT

Update:





Delete: