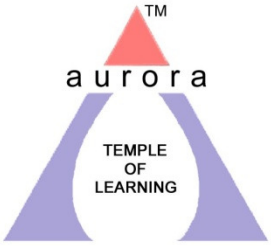
DEPARTMENT OF

COMPUTER SCIENCE AND ENGINEERING



WEB TECHNOLOGIES

LAB MANUAL

B.Tech III Year, II Semester

COMPUTER SCIENCE AND ENGINEERING

WEEK-1

Basic HTML Tags,Table Tags,List Tags,Image Tags, Forms .

WEEK-2

Implement forms using HTML,FRAMES,CSS.

WEEK-3

Install the following on local machine

- Apache web server
- Tomcat application server locally,
- Install MySQL
- PHP and configure it to work with Apache web server and MySQL

WEEK-4

Write an HTML page with Javascript that takes a number from one text field in the range 0-999 and display it in other text field in words.If the number is out of range ,it shold show “out of range” and if it is not a number ,it should show “not a number” message in the result box.

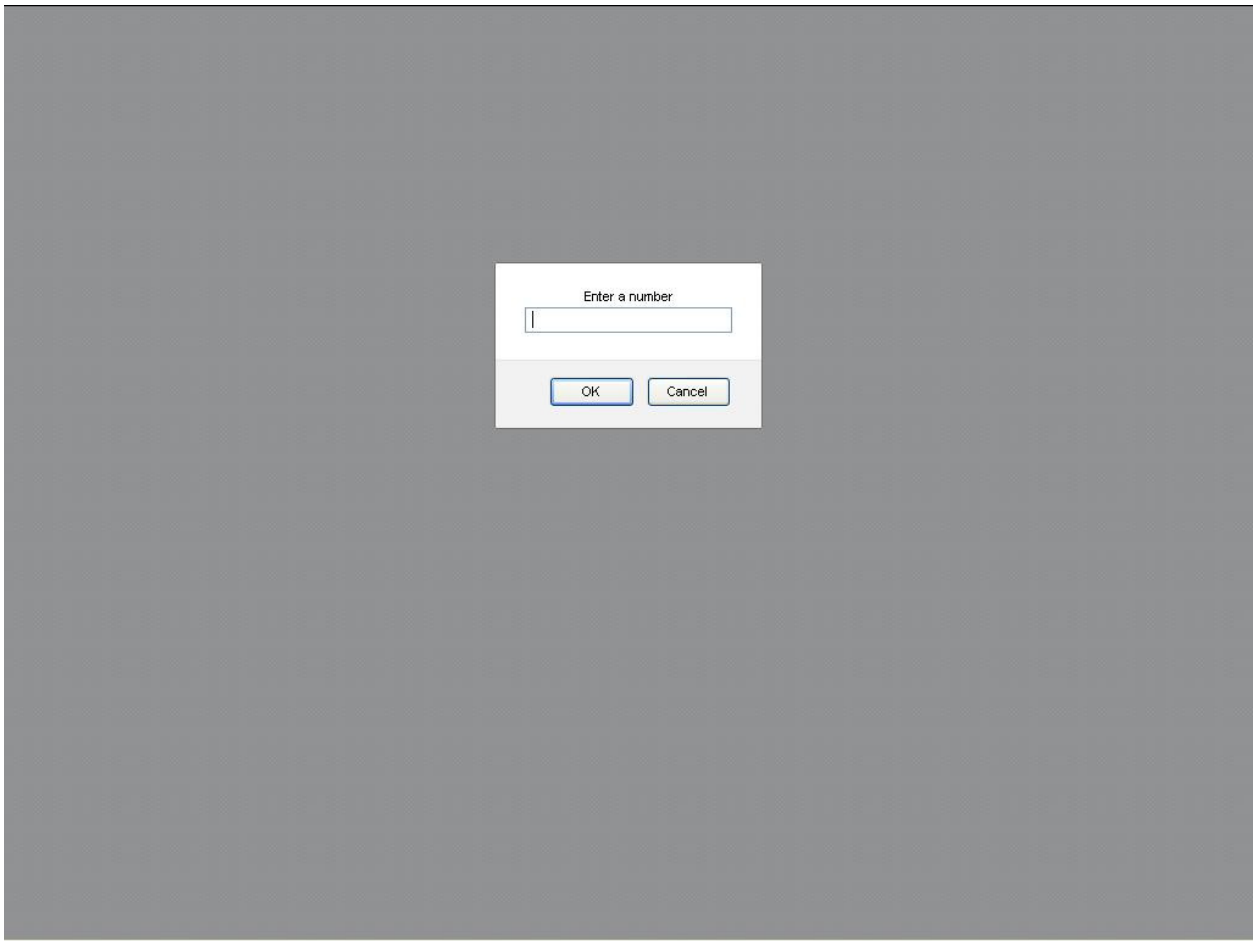
Conver.html

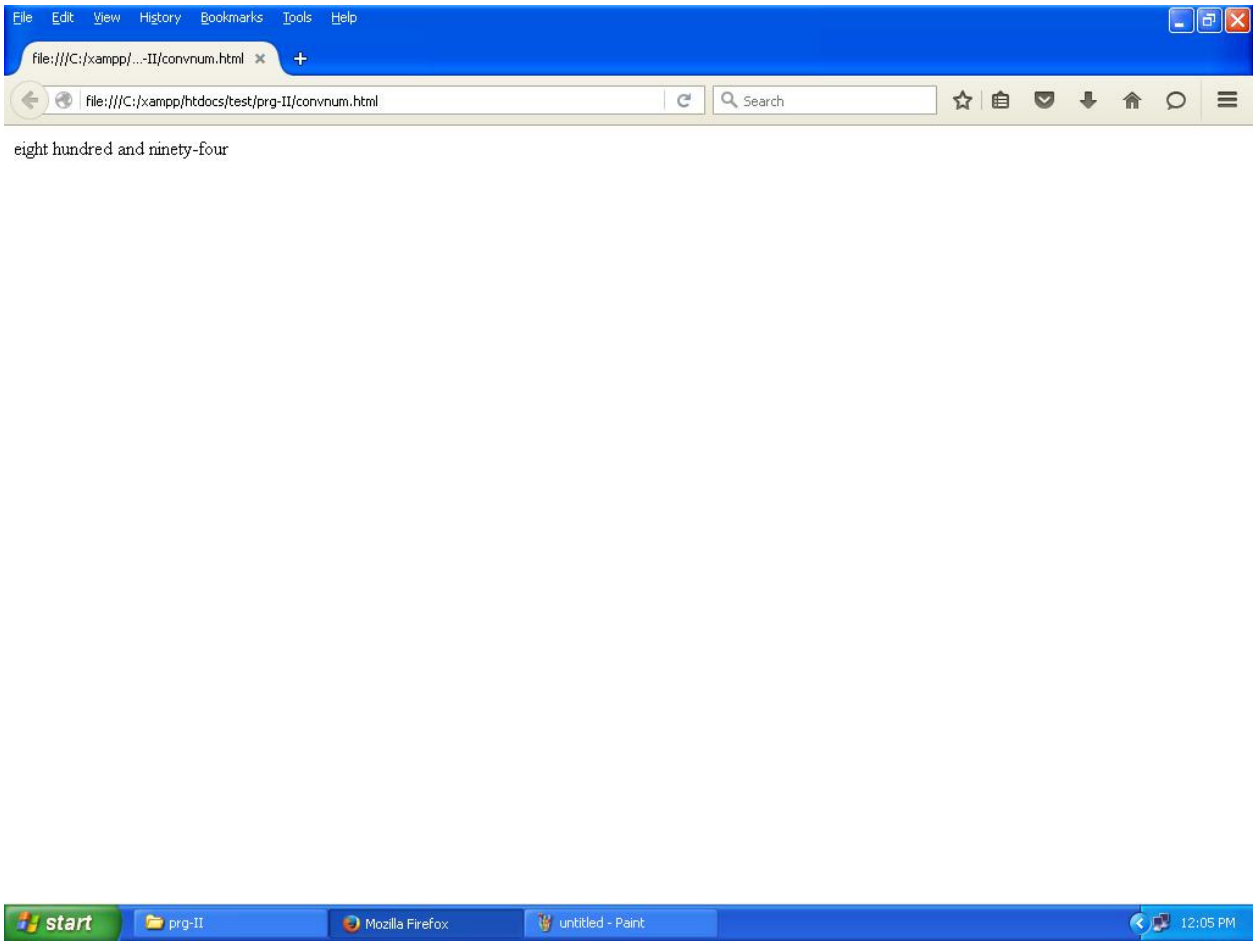
```
<script language="javascript">

function convert_number_to_words(number)

{

   hyphen      = '-';

   conjunction = ' and ';

   separator   = ', ';

   dictionary  = {

      0                : 'zero',

      1                : 'one',

      2                : 'two',

      3                : 'three',
```

```
4          : 'four',
5          : 'five',
6          : 'six',
7          : 'seven',
8          : 'eight',
9          : 'nine',
10         : 'ten',
11         : 'eleven',
12         : 'twelve',
13         : 'thirteen',
14         : 'fourteen',
15         : 'fifteen',
16         : 'sixteen',
17         : 'seventeen',
18         : 'eighteen',
19         : 'nineteen',
20         : 'twenty',
30         : 'thirty',
40         : 'fourty',
50         : 'fifty',
60         : 'sixty',
70         : 'seventy',
80         : 'eighty',
90         : 'ninety',
100        : 'hundred',
```

```
  };
  if (number < 0 || number > 999)
{
    alert("Enter a number range between 0 and 999");
    return "";
  }
  switch (true)
  {
    case (number < 21):
      string = dictionary[number];
      break;
    case (number < 100):
      tens   = parseInt(number / 10) * 10;
      units  = number % 10;
      string = dictionary[tens];
      if (units) {
        string += hyphen + dictionary[units];
      }
      break;
    case (number < 1000):
      hundreds  = parseInt(number / 100);
      remainder = number % 100;
      string = dictionary[hundreds] + ' ' + dictionary[100];
      if (remainder) {
```

```
            string += conjunction + convert_number_to_words(remainder);
        }
        break;
    default:
        break;
  }
  return string;
}
a=prompt("Enter a number");
num=parseInt(a);
document.write(convert_number_to_words(num));
</script>
```


Enter a number
OK
Cancel



WEEK-5

Write an HTML page that has one input, which can take multi-line text and a submit button.Once the user clicks the submit button ,it should show the number of characters ,lines and words in the text entered using an alert message.Words are seperated with white space and lines are seperated with new line character.

Count.html

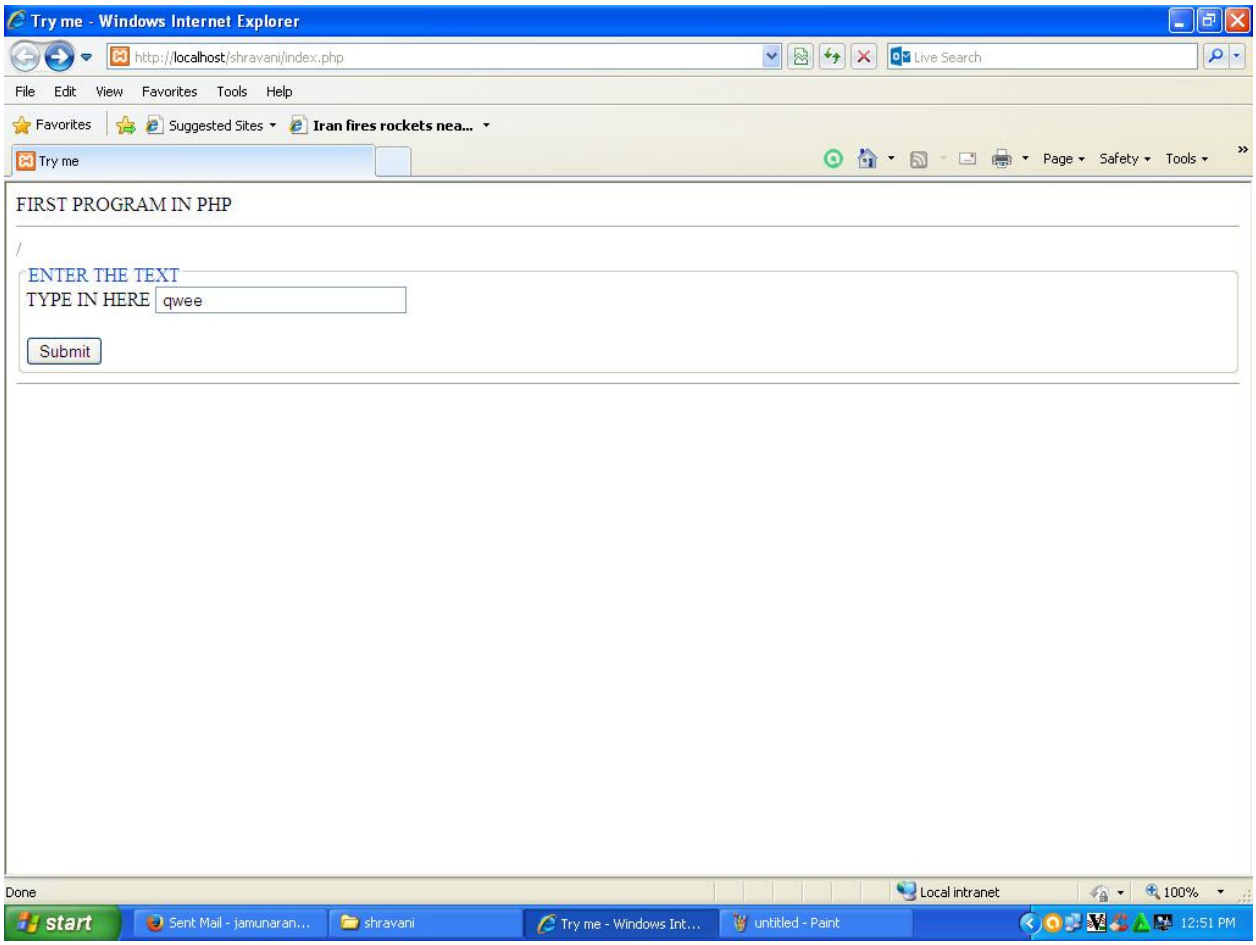
```
<!DOCTYPE html>

<html>

  <head>

    <title>Try me</title>

   </head>

   <body>
```

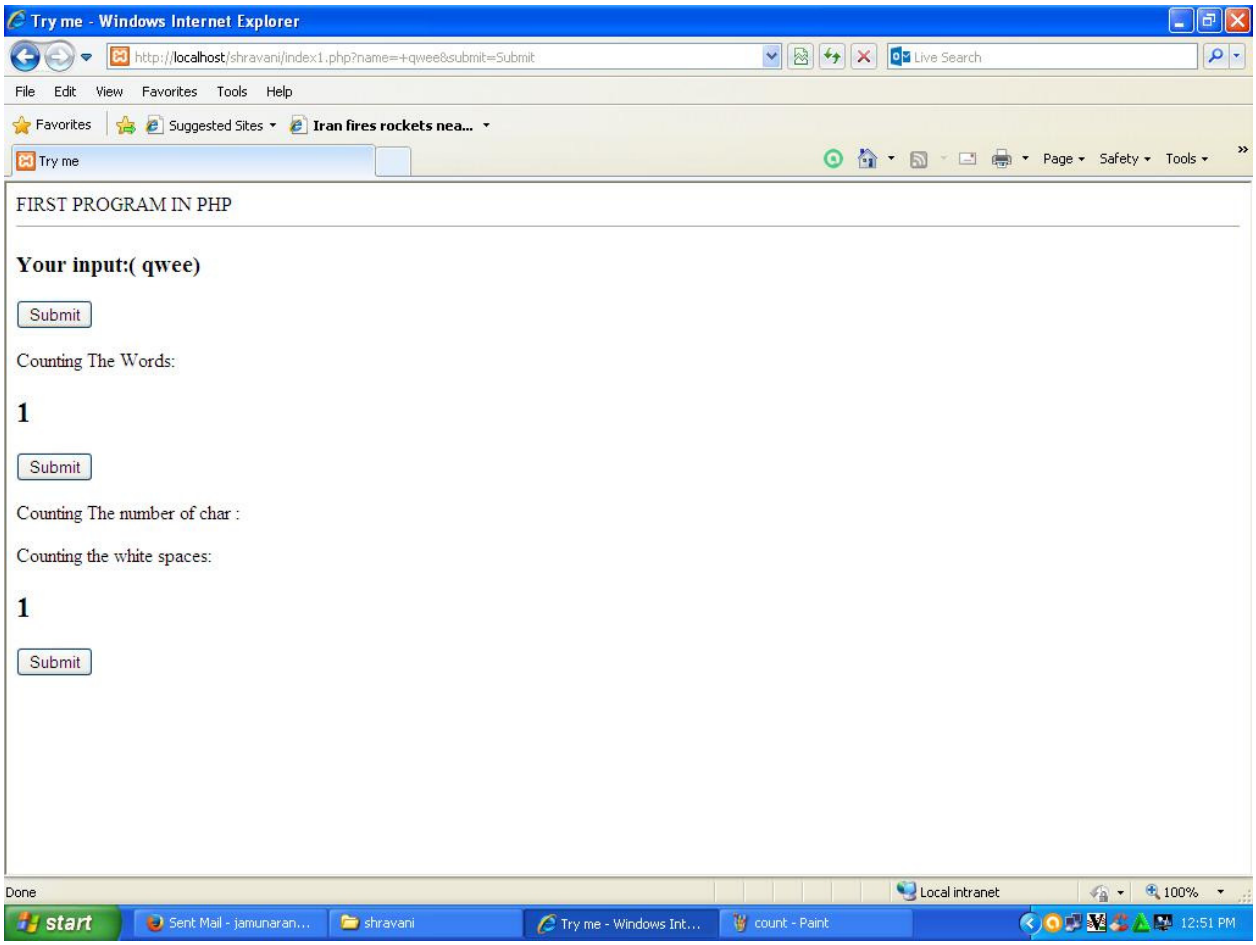
```
      <header>
        FIRST PROGRAM IN PHP
      </header>
  <hr>/
<?php // form field  ?>
<fieldset class>
  <legend>ENTER THE TEXT</legend>
    <form action="index1.php" method="get">
       <labe>TYPE IN HERE</label>
        <input type="text" name="name" value=" " size="30" placeholder="typehere"></br></br>
     <input id="button" type="submit" name="submit" value="Submit" size="10">
   </form>
</fieldset>
 <hr>
     </body>
 <html>
```

Count1.html

```
<!DOCTYPE html>
<html>
   <head>
      <title>Try me</title>
    </head>
    <body>
        <header>
          FIRST PROGRAM IN PHP
```

```
    </header>
  <hr>
    <h3>Your input:(<?php echo $_GET["name"]; ?>) </h3>
    <input id="button" type="submit" name="submit" value="Submit" size="10" onclick="alert('<?php echo ($_GET["name"]);?>')">

    <p>Counting The Words:<h2><?php echo str_word_count($_GET["name"]); ?></h2></p>
    <input id="button" type="submit" name="submit" value="Submit" size="10" onclick="alert('<?php echo str_word_count($_GET["name"]);?>')">
    <p>Counting The number of char :</p>
<p>Counting the white spaces:</p><h2><?php echo substr_count($_GET["name"],' '); ?></h2>
   <input id="button" type="submit" name="submit" value="Submit" size="10" onclick="alert('<?php echo strlen($_GET["name"]);?>')">
   </body>
</html>
```


Try me - Windows Internet Explorer
http://localhost/shravani/index.php
Live Search
File Edit View Favorites Tools Help
Favorites
Suggested Sites
Iran fires rockets nea...
Try me
Page Safety Tools
FIRST PROGRAM IN PHP
/
ENTER THE TEXT
TYPE IN HERE qwee
Submit
Done
Local intranet
100%
start
Sent Mail - jamunaran...
shravani
Try me - Windows Int...
untitled - Paint
12:51 PM



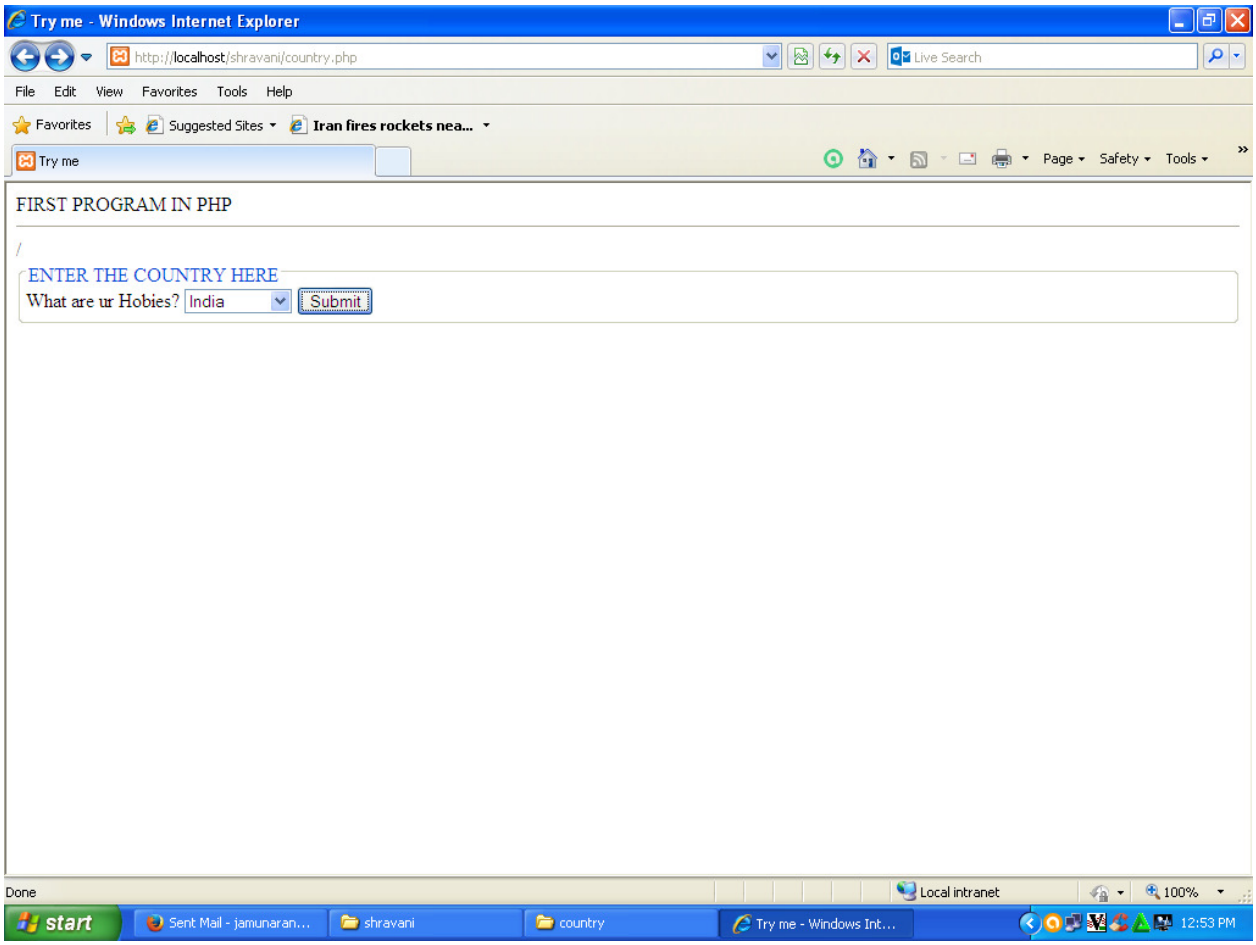
WEEK-6

Write an HTML page that contains a selection box with a list of 5 countries In the above page when the user selects a country, its capital should be printed next to the list, and add CSS to customize the properties of the font of the capital.

Country.html

```
<!DOCTYPE html>

<html>

  <head>

    <title>Try me</title>

   </head>

   <body>
```

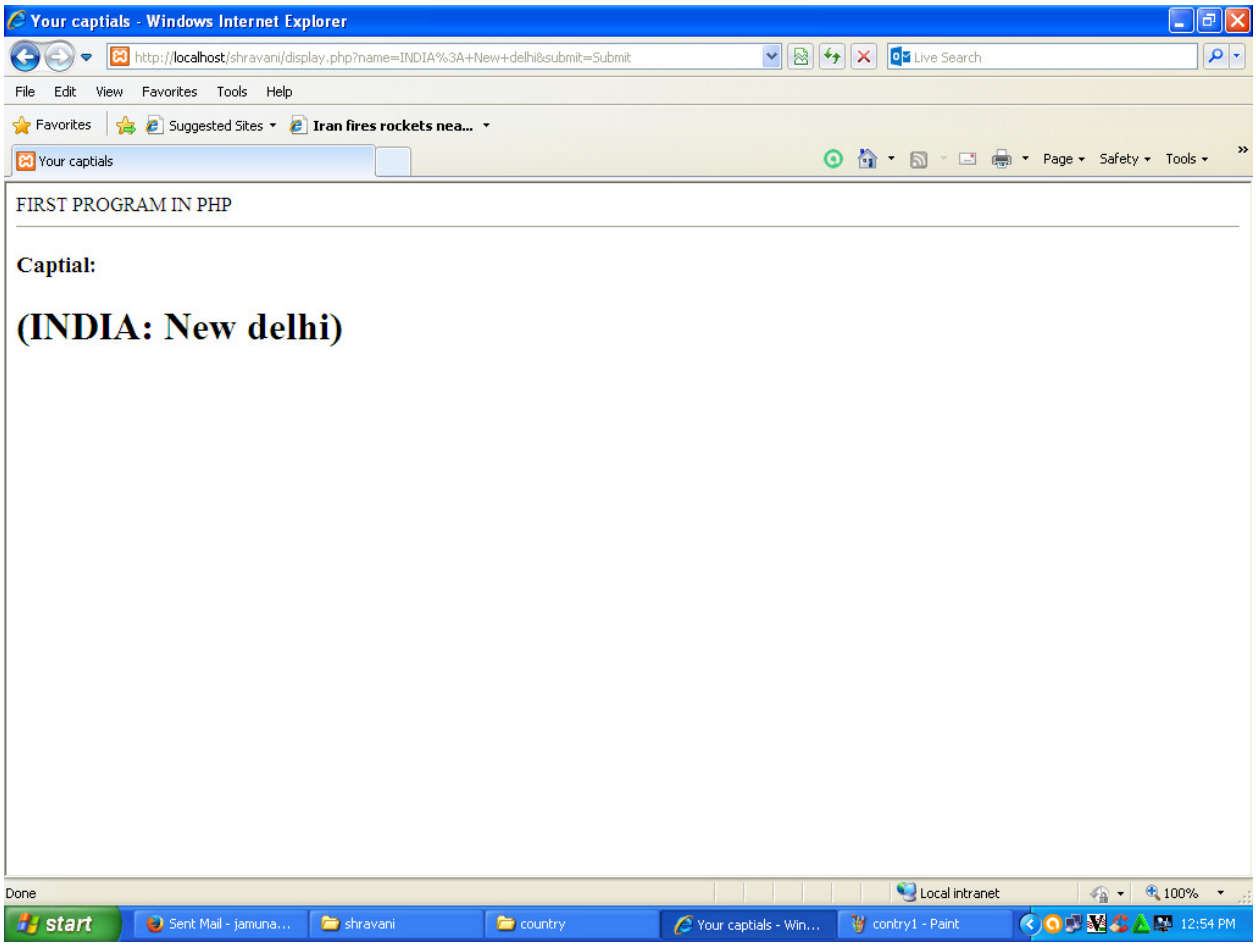
```
      <header>
        FIRST PROGRAM IN PHP
      </header>
  <hr>/
<?php // form field  ?>
<fieldset class>
  <legend>ENTER THE COUNTRY HERE</legend>
    <form action="display.php" method="get">
      <label>What are ur Hobies?</label>
         <select name="name">
           <option value="INDIA: New delhi">India</option>
           <option value="Afganistan: Kabul">Afganistan</option>
           <option value="Sri Lanka: Colombo">Sri Lanka</option>
           <option value="Russia: Moscow">Russia</option>
            <option value="U.S.A: Washiton DC">U.S.A</option>
        </select>
     <input id="button" type="submit" name="submit" value="Submit" size="10">
    </form>
      </fieldset>
    </body>
</html>
```



display.php

```
<!DOCTYPE html>
<html>
  <head>
    <title>Your captials</title>
     <link href="country.css" rel="stylesheet">
  </head>
  <body>
     <header>
```

```
        FIRST PROGRAM IN PHP
      </header>
 <hr>
      <h3> Captial:</h3>
       <h1> (<?php echo $_GET["name"]; ?>)</h1>
   </body>
</html>
```



WEEK-7

Create an XML document that contains 10 users information.Write a java program, which takes user id as input and returns the user details by taking the user information from XML document using

a)DOM parser

b)SAX parser

WEEK-8

Implement the following web application using

a)PHP

b) Servlets

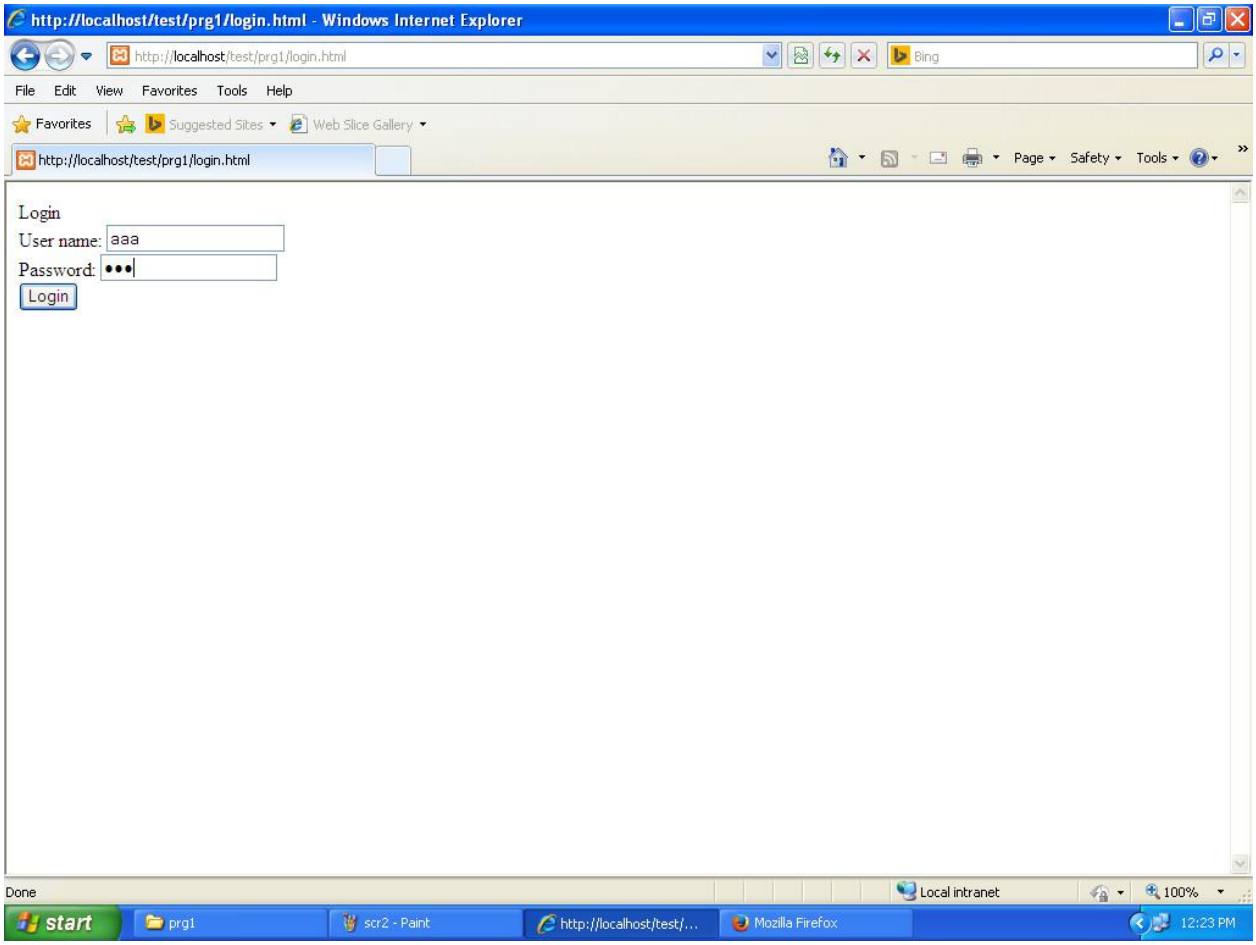
c)JSP

i) A user validation web application, where user submits the login name and password to server. These are checked against the data already available in database and if the data matches a successful login page is returned. Otherwise a failure message is shown to the user.

Login.html

```
<form action='chkusr.php' method='post'>

Login<br>

User name: <input type='text' name='user'><br>

Password:  <input type='password' name='pass'><br>

<input type='submit'value='Login'>
```

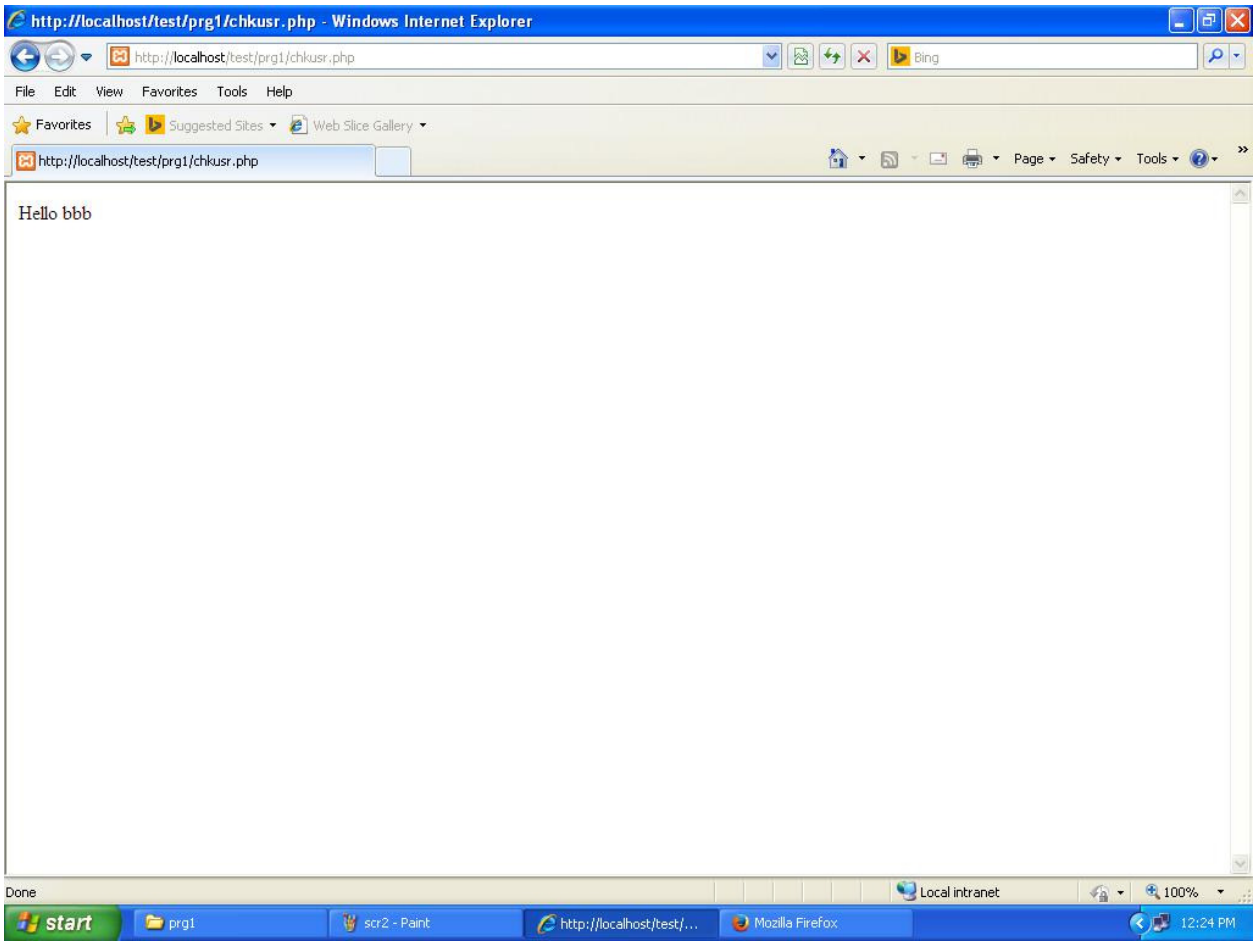
</form>

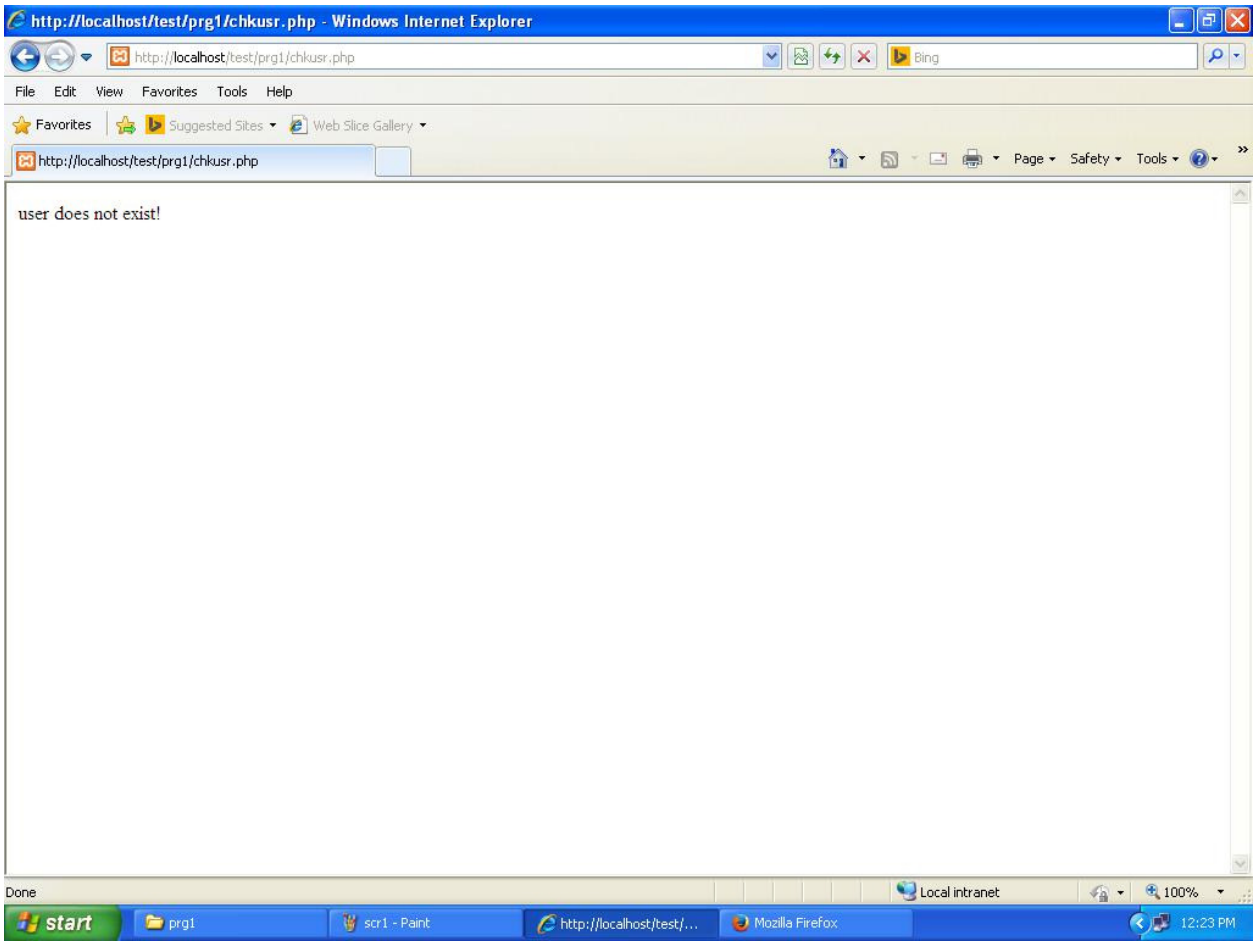


chkusr.php

```
<?php

$user = $_POST['user'];

$pass = $_POST['pass'];

$server = "localhost";

$username = "root";

$password = "mysql";

$database = "users";

$tablename = "user";

if ($user&&$pass)
```

```
{
$connect = mysql_connect($server,$username,$password) or die("not connecting");
mysql_select_db($database) or die("no db :");
$query = mysql_query("SELECT * FROM $tablename WHERE username='$user' and password='$pass'");
$numrows = mysql_num_rows($query);
if ($numrows!=0)
{
 print "Hello " . $user;
}
else
  echo "user does not exist!";
}
else
    die("please enter a username and password!");
?>
```


http://localhost/test/prg1/chkusr.php - Windows Internet Explorer
http://localhost/test/prg1/chkusr.php
File Edit View Favorites Tools Help
Favorites
Suggested Sites
Web Slice Gallery
http://localhost/test/prg1/chkusr.php
Page
Safety
Tools
Hello bbb
Done
Local intranet
100%
start
prg1
scr2 - Paint
http://localhost/test/...
Mozilla Firefox
12:24 PM



WEEK-9

ii)modify the above program to use an xml file instead of database

users.xml

<users>

<user>

<username>aaa</username>

<password>aaa</password>

</user>

<user>

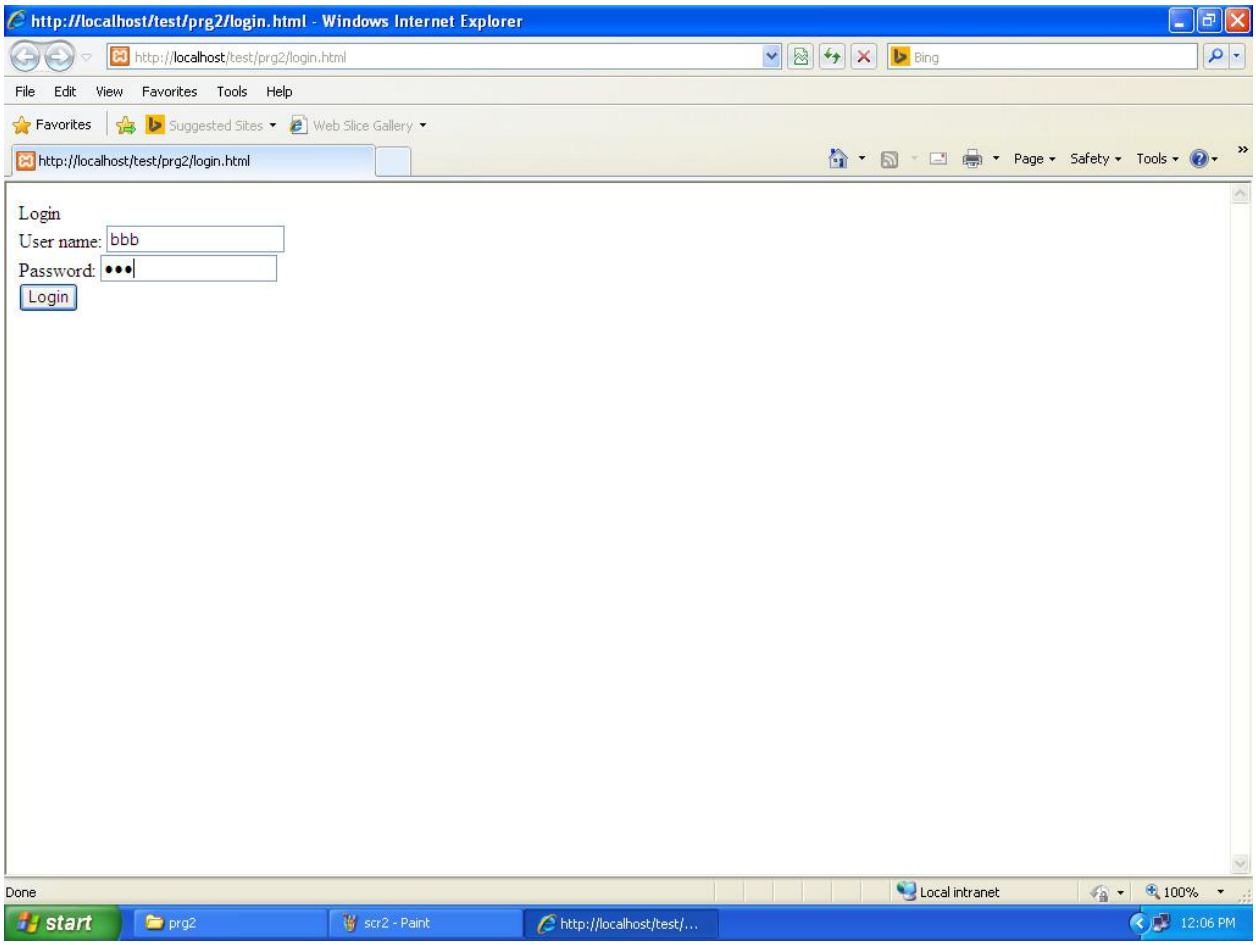
<username>bbb</username>

<password>bbb</password>

```
</user>
<user>
<username>ccc</username>
<password>ccc</password>
</user>
</users>
```

Login.html

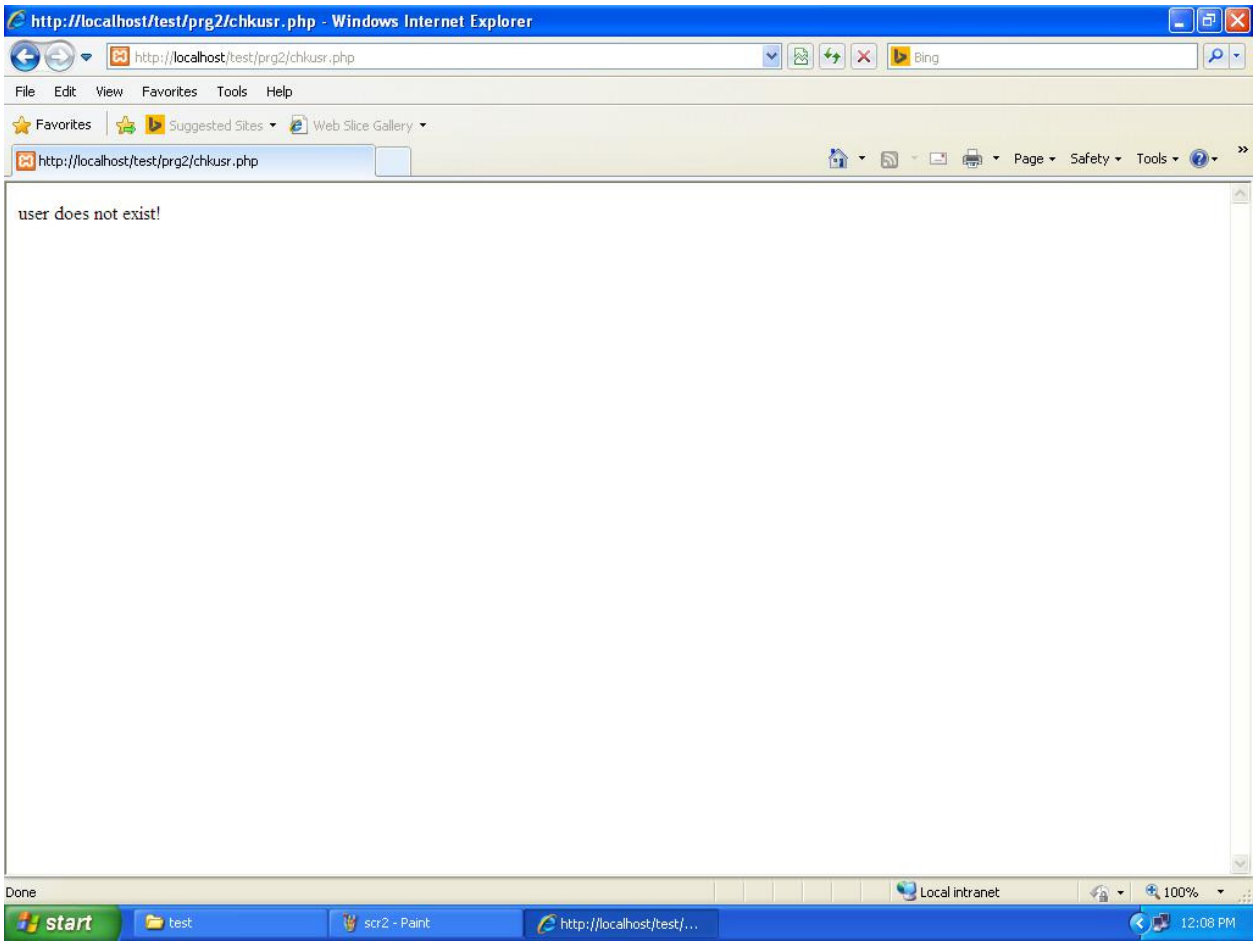
```
<form action='chkusr.php' method='post'>
Login<br>
User name: <input type='text' name='user'><br>
Password:  <input type='password' name='pass'><br>
<input type='submit'value='Login'>
</form>
```

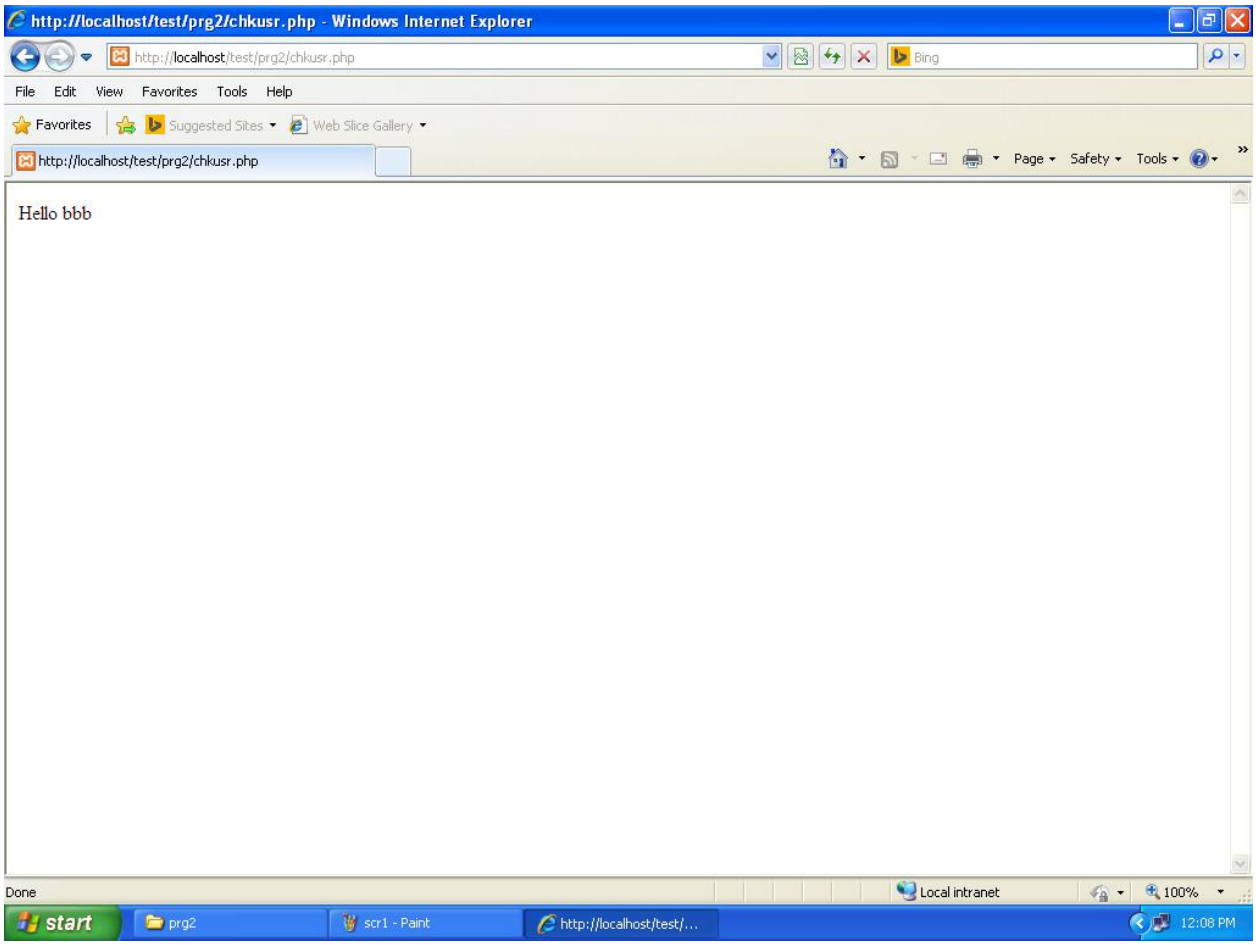


chkusr.php

```
<?php

$user = $_POST['user'];

$pass = $_POST['pass'];

$flag = 0;

if ($user&&$pass)

{

   $xml = simplexml_load_file("users.xml");
```

```
    $cnt = count($xml->user);
    for($i = 0; $i < $cnt; $i++)

    {
      $username = $xml->user[$i]->username;
      $password = $xml->user[$i]->password;
      if ($user == $username && $pass == $password)
      {
          print "Hello " . $user;
          $flag = 0;
                      break;
      }
      else
        $flag = 1;
    }
    if ($flag == 1)
       print "user does not exist!";
}
else
    die("please enter a username and password!");
?>
```


http://localhost/test/prg2/chkusr.php - Windows Internet Explorer
http://localhost/test/prg2/chkusr.php
File Edit View Favorites Tools Help
Favorites
Suggested Sites
Web Slice Gallery
http://localhost/test/prg2/chkusr.php
Page
Safety
Tools
user does not exist!
Done
Local intranet
100%
start
test
scr2 - Paint
http://localhost/test/...
12:08 PM



WEEK-10

iii)modify the above program to use AJAX to show the result on the same page below the submit button.

WEEK-11

iv) A simple calculator web application that takes 2 numbers and an operator (+,-,*,/,%)

from an HTML page and returns the result page with the operation performed on the operands.

Form1.html

<form name='f1' action='add.php' method='post'>

1st Number<input type='text' name='t1'>

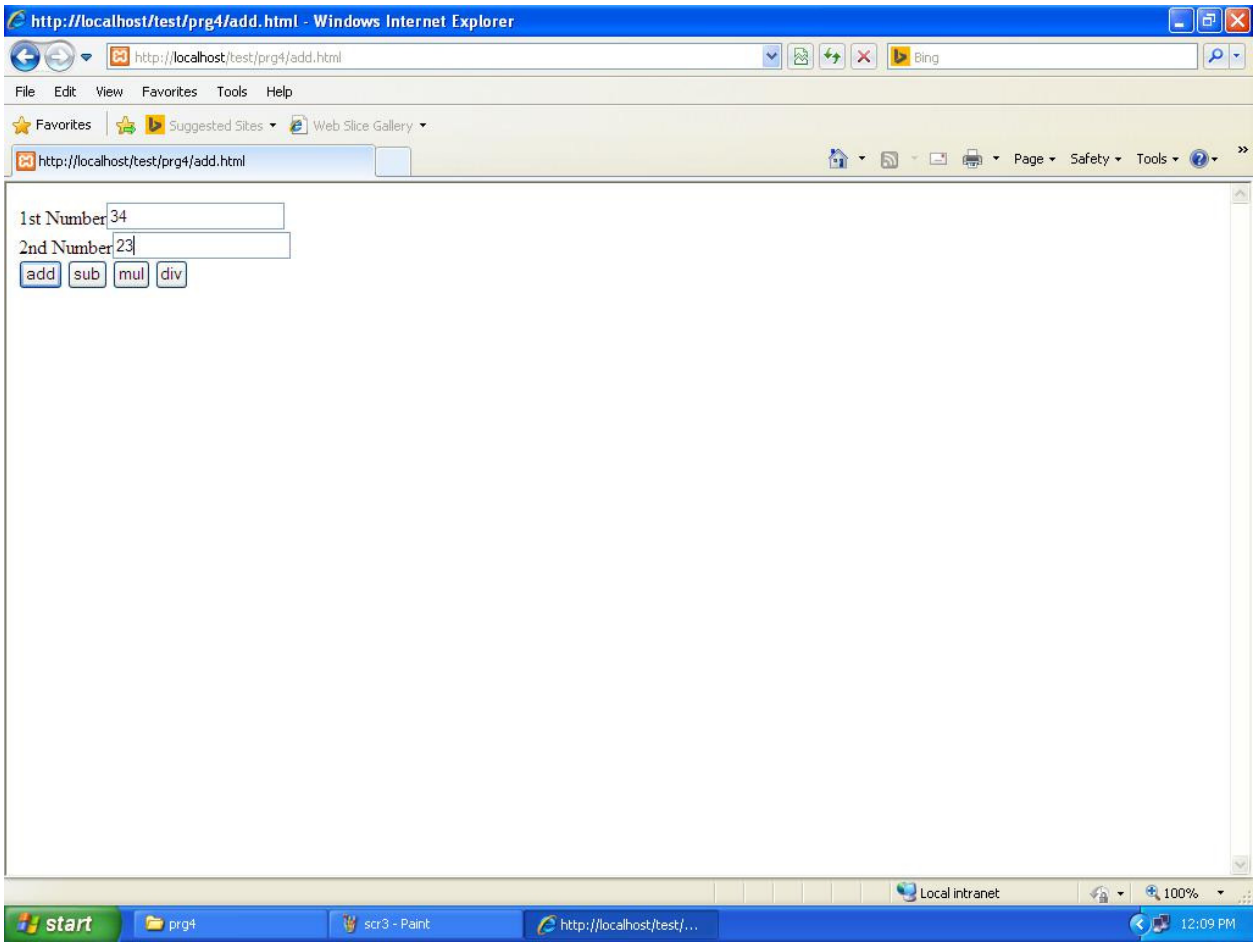
2nd Number<input type='text' name='t2'>

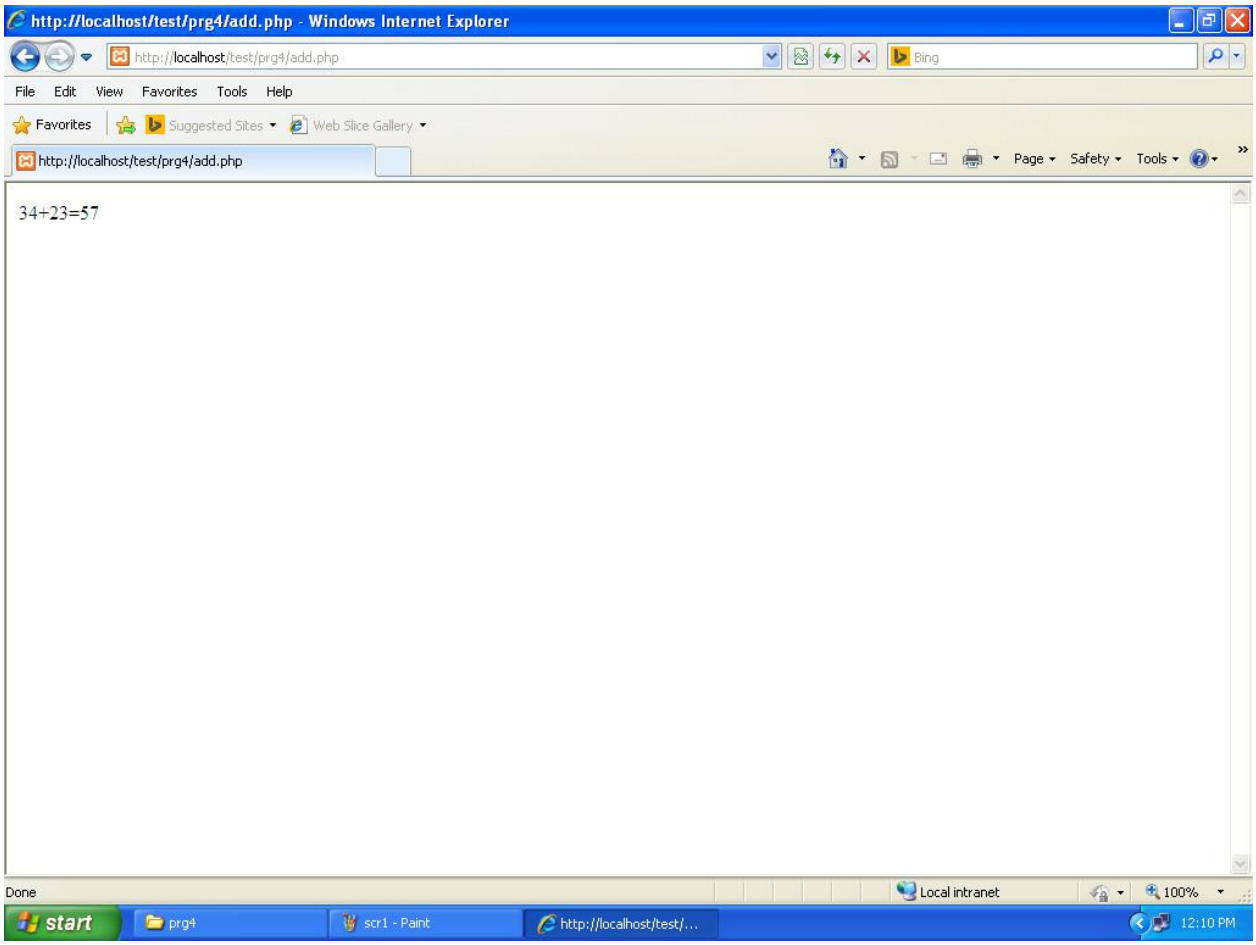
```
<input type='submit' name='add' value='add'>
<input type='submit' name='sub' value='sub'>
<input type='submit' name='mul' value='mul'>
<input type='submit' name='div' value='div'>
</form>
```

add.php

```
<?php
$a = $_POST['t1'];
$b = $_POST['t2'];
if (isset($_POST['add']))
{
$c = $a + $b;
print $a . "+" . $b . "=" . $c;
}
if (isset($_POST['sub']))
{
$c = $a - $b;
print $a . "-" . $b . "=" . $c;
}
if (isset($_POST['mul']))
{
$c = $a * $b;
print $a . "*" . $b . "=" . $c;
}
if (isset($_POST['div']))
```

```
{
$c = $a / $b;
print $a . "/" . $b . "=" . $c;
}
?>
```





WEEK-12

v) Modify the above program such that it stores each query in a database and checks the database first for the results .If the query is already available in the DB,it returns the value that was previously computed (from DB) or it computes the result and returns it after storing the new query and result in DB.

Form1.html

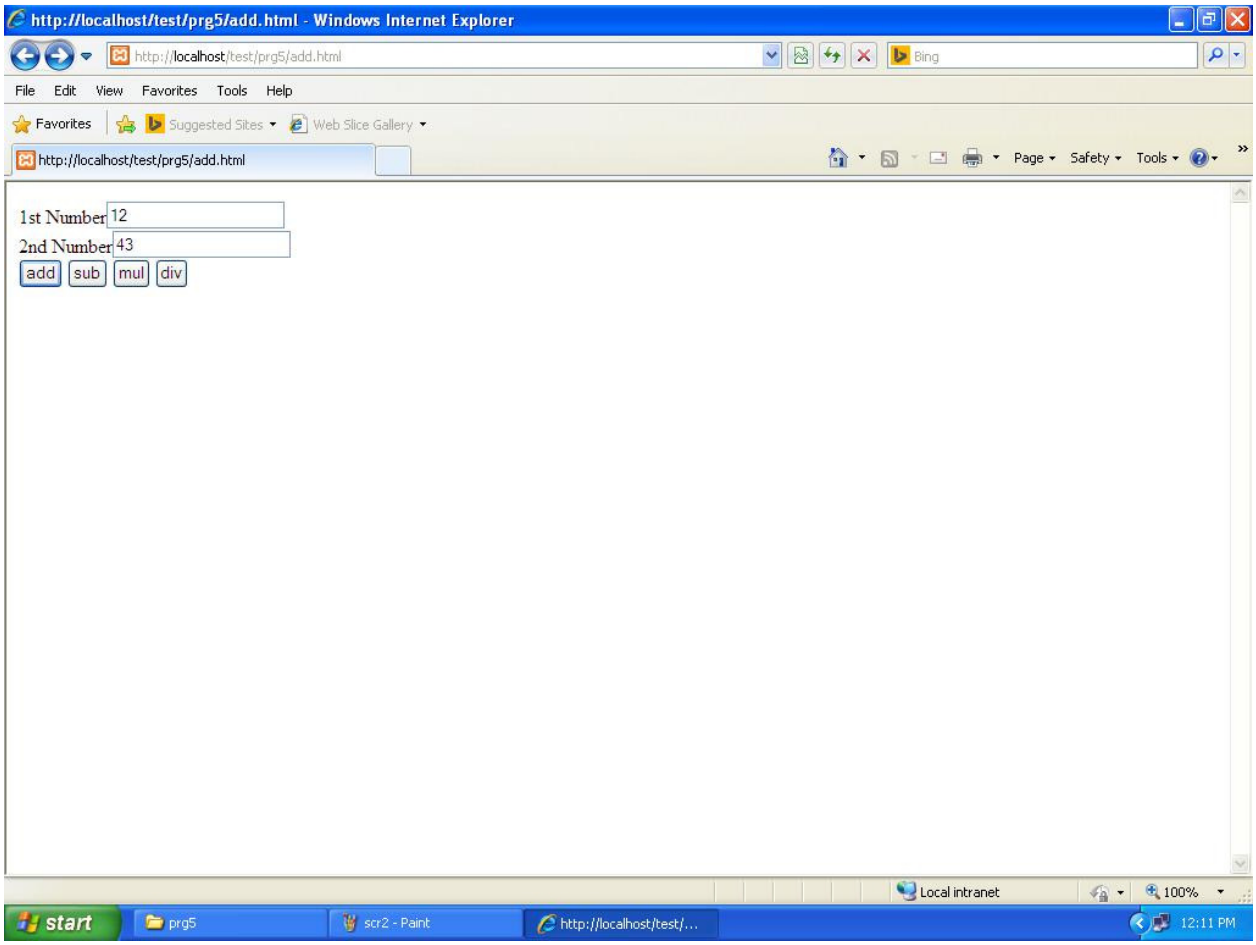
```
<form name='f1' action='addquery.php' method='post'>

1st Number<input type='text' name='t1'><br>

2nd Number<input type='text' name='t2'><br>

<input type='submit' name='add' value='add'>
```

<input type='submit' name='sub' value='sub'>

<input type='submit' name='mul' value='mul'>

<input type='submit' name='div' value='div'>

</form>



addquery.php

<?php

$a = $_POST['t1'];

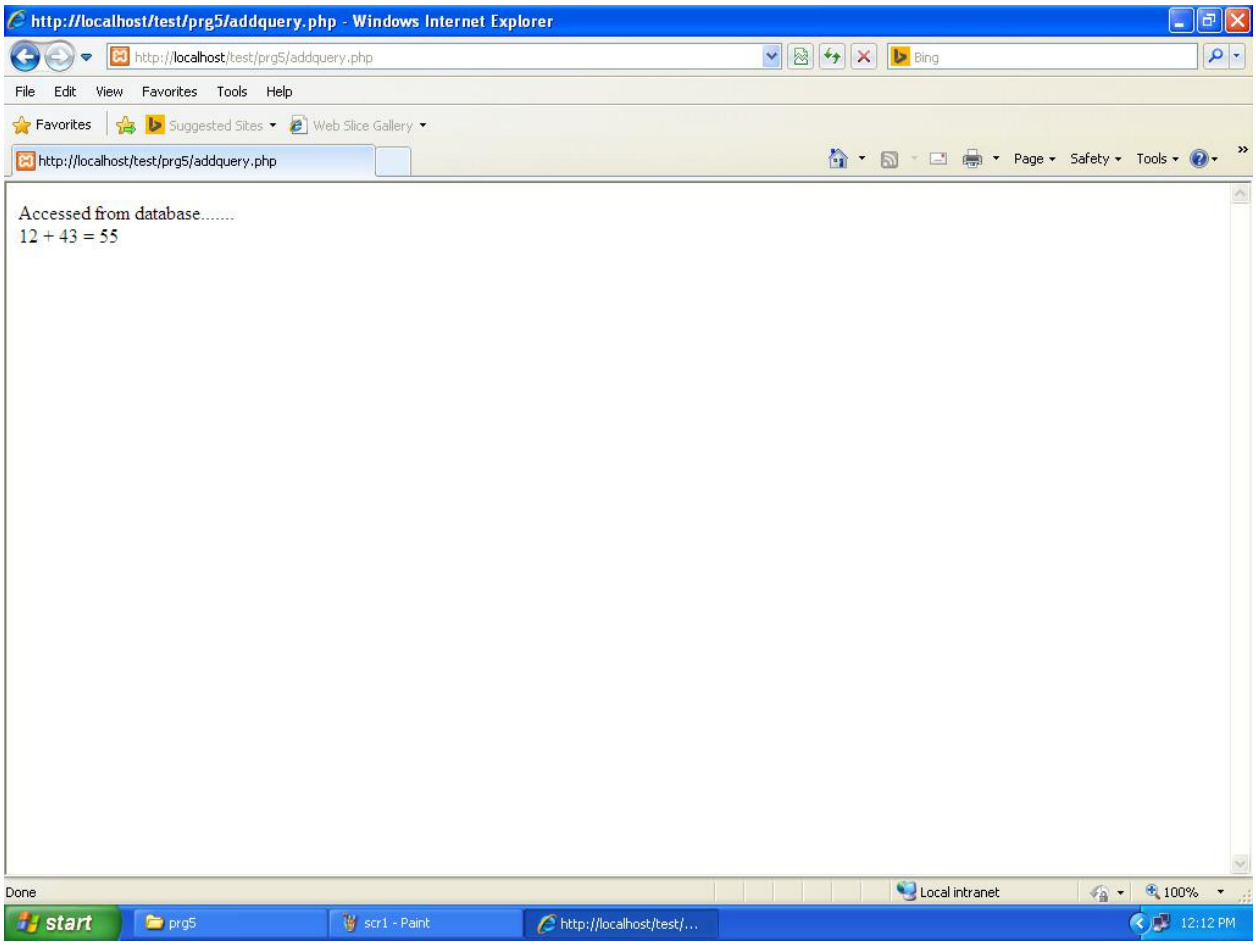
$b = $_POST['t2'];

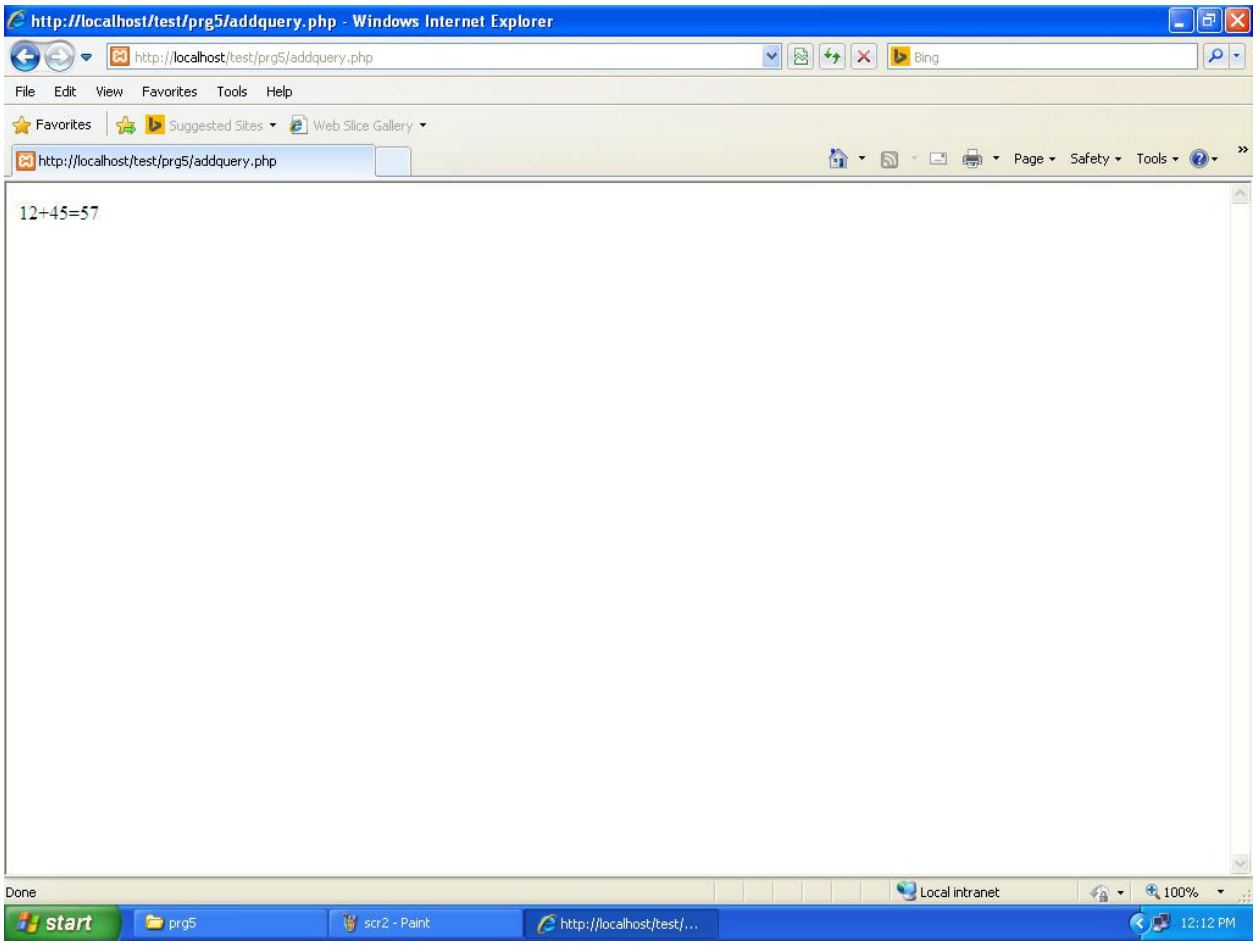
$server = "localhost";

```
$username = "root";
$password = "mysql";
$database = "arth";
$tablename = "plus";
$query = "";
$connect = mysql_connect($server,$username,$password) or die("not connecting");
mysql_select_db($database) or die("no db :");
if ($a && $b)
{
  if (isset($_POST['add']))
  {
    $query = mysql_query("SELECT * FROM $tablename WHERE exp='$a + $b'");
    $numrows = mysql_num_rows($query);
    if ($numrows == 0)
    {
       $c = $a + $b;
       print $a . "+" . $b . "=" . $c;
       mysql_query("insert into plus values('$a + $b',$c)");
    }
  }
  if (isset($_POST['sub']))
  {
    $query = mysql_query("SELECT * FROM $tablename WHERE exp='$a - $b'");
    $numrows = mysql_num_rows($query);
    if ($numrows == 0)
```

```
  {
     $c = $a - $b;
     print $a . "-" . $b . "=" . $c;
     mysql_query("insert into plus values('$a - $b',$c)");
  }
}
if (isset($_POST['mul']))
{
  $query = mysql_query("SELECT * FROM $tablename WHERE exp='$a * $b'");
  $numrows = mysql_num_rows($query);

  if ($numrows == 0)
  {
     $c = $a * $b;
     print $a . "*" . $b . "=" . $c;
     mysql_query("insert into plus values('$a * $b',$c)");
  }
}
if (isset($_POST['div']))
{
  $query = mysql_query("SELECT * FROM $tablename WHERE exp='$a / $b'");
  $numrows = mysql_num_rows($query);

  if ($numrows == 0)
  {
```

```
        $c = $a / $b;
        print $a . "/" . $b . "=" . $c;
        mysql_query("insert into plus values('$a / $b',$c)");
     }
   }
  while ($row = mysql_fetch_assoc($query))
    {
      print("Accessed from database.....<br>");
      print($row['exp'] . " = " . $row['res']);
    }

}
else
    die("please enter a 1st number and 2nd number!");

?>
```


http://localhost/test/prg5/addquery.php - Windows Internet Explorer
http://localhost/test/prg5/addquery.php
File Edit View Favorites Tools Help
Favorites
Suggested Sites
Web Slice Gallery
http://localhost/test/prg5/addquery.php
Page Safety Tools
Accessed from database.....
12 + 43 = 55
Done
Local intranet
100%
start
prg5
scr1 - Paint
http://localhost/test/...
12:12 PM

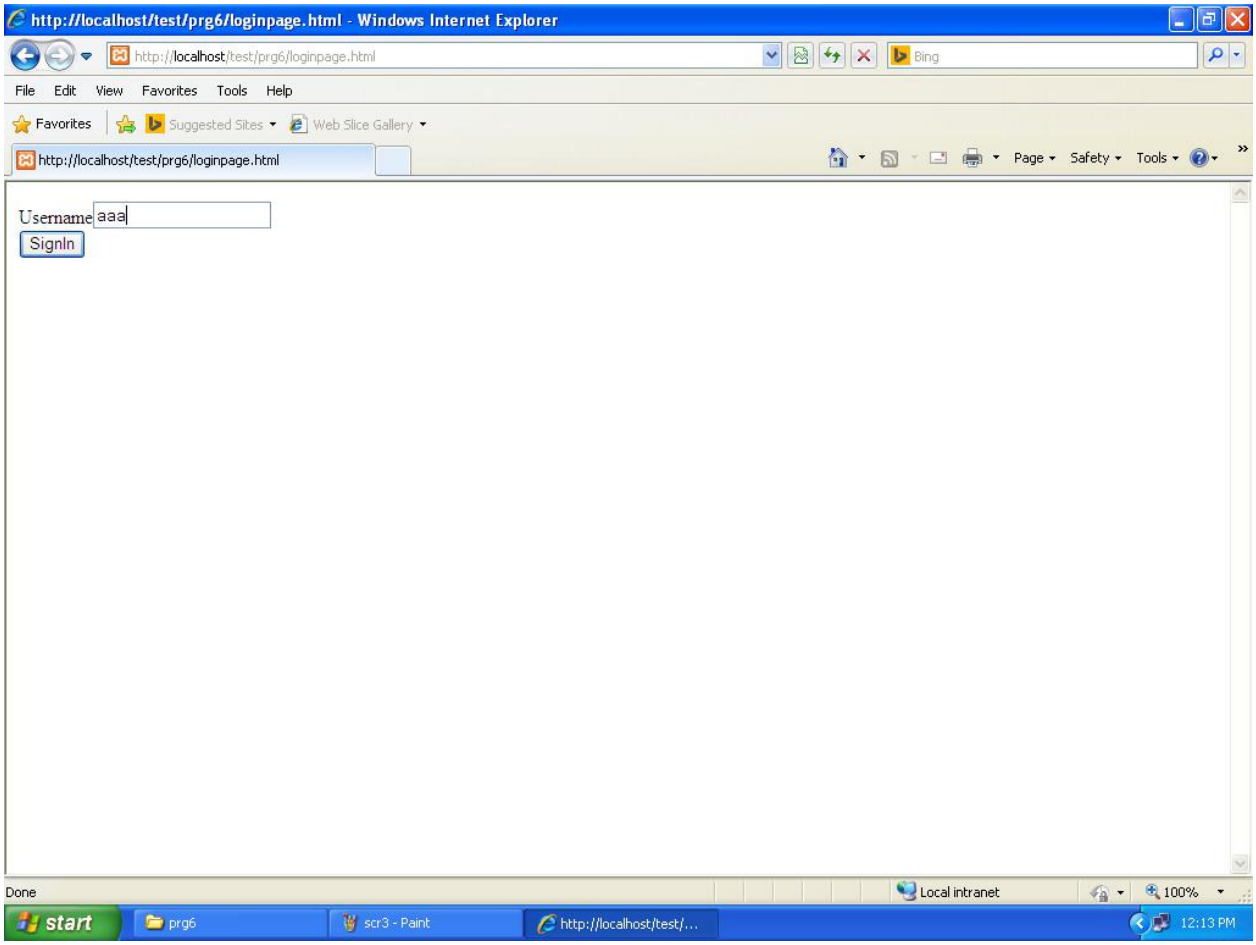


WEEK-13

vi) A web application takes a name as input and on submit it shows a hello<name> page where <name> is taken from the request.and it shows a start time at the right top corner of the page and provides the logout button on clicking this button it should shoe a logout page with thankyou<name> message with the duration of Usage.

Login.html

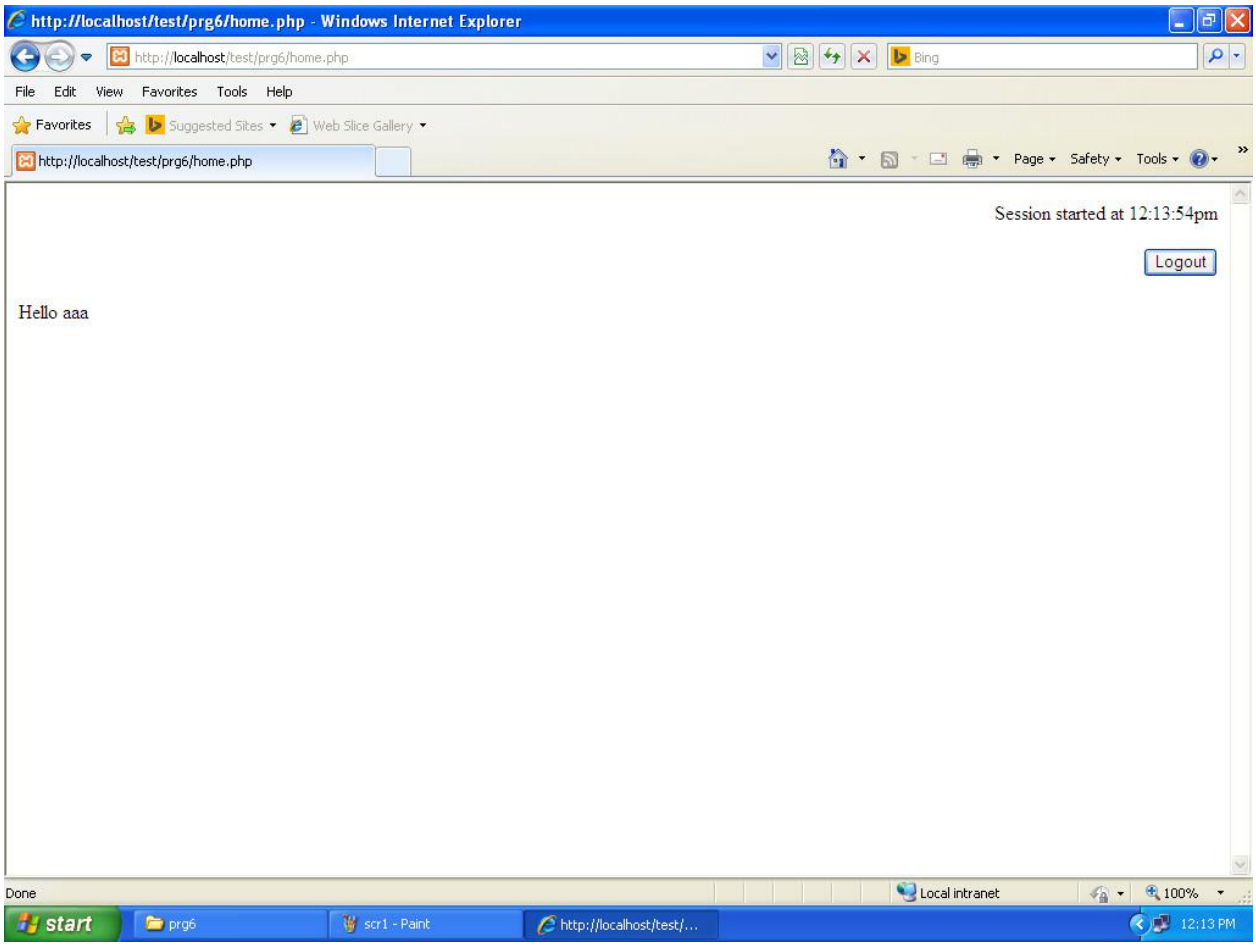
```
<html>

   <form action="home.php" method="post">

Username<input type="text" name="text1"><br>

<input type="submit" value="SignIn" name="submit">

</form>

</html>
```



Home.php

```
<?php
    session_start();
   date_default_timezone_set("Asia/Calcutta");


        $_SESSION['luser'] = $_POST['text1'];
        $_SESSION['start'] = time();
            $tm=$_SESSION['start'];
```

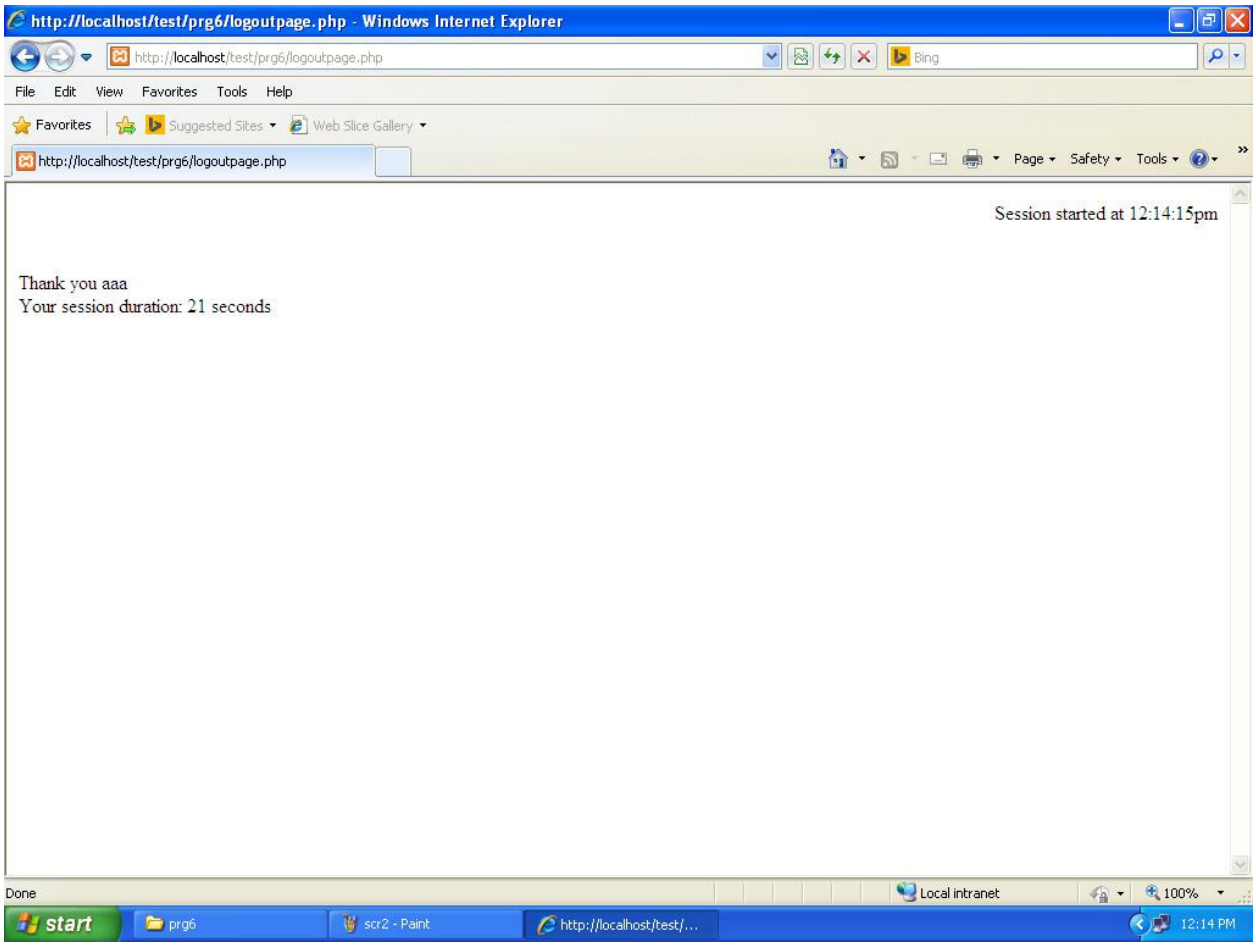
```
print "<p align='right'>Session started at " . date("h:i:sa",$tm) . "<br>";
print "<form action='logoutpage.php' method='post'>";
print "<input type='submit' value='Logout'></p>";
print "</form>";
print "Hello " . $_SESSION['luser'];
?>
```



Logoutpage.php

```
<?php
    session_start();
    date_default_timezone_set("Asia/Calcutta");
    print "<p align='right'>Session started at " . date("h:i:sa",time()) . "</p><br>";
```

```
    print "Thank you " . $_SESSION['luser'];
    $sessiontime = time() - $_SESSION['start'];
    print "<br> Your session duration: " . $sessiontime . " seconds";
    session_destroy();
?>
```

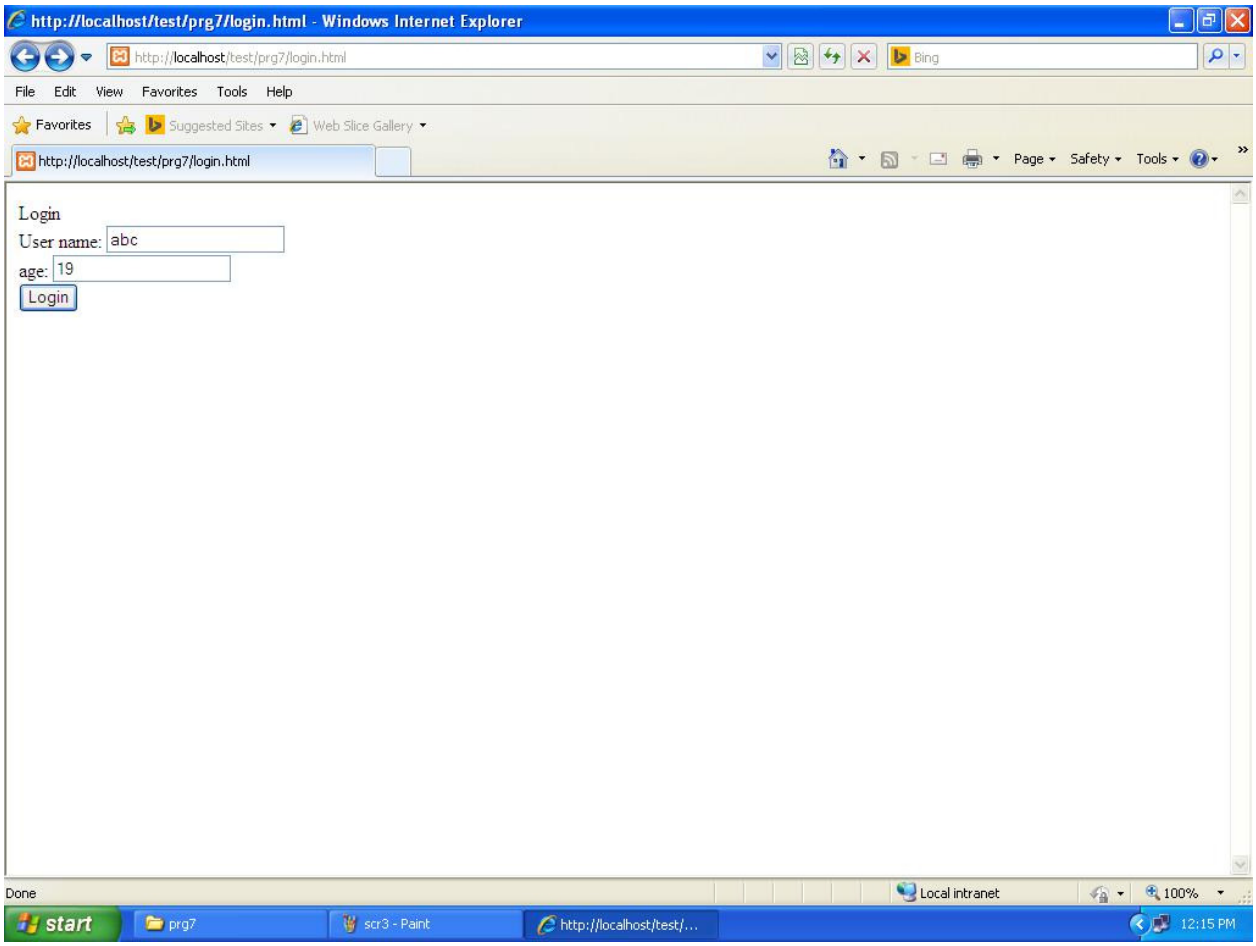


WEEK-14

Vii) A web application that takes name and age from an HTML page. If the age is less than 18, it should send a page with “hello <name>,and u are not authorized to visit this site” otherwise it should send “welcome <name> to this site” message where name should be replaced with the entered name otherwise it should send welcome<name> to the site message.

Form2.html

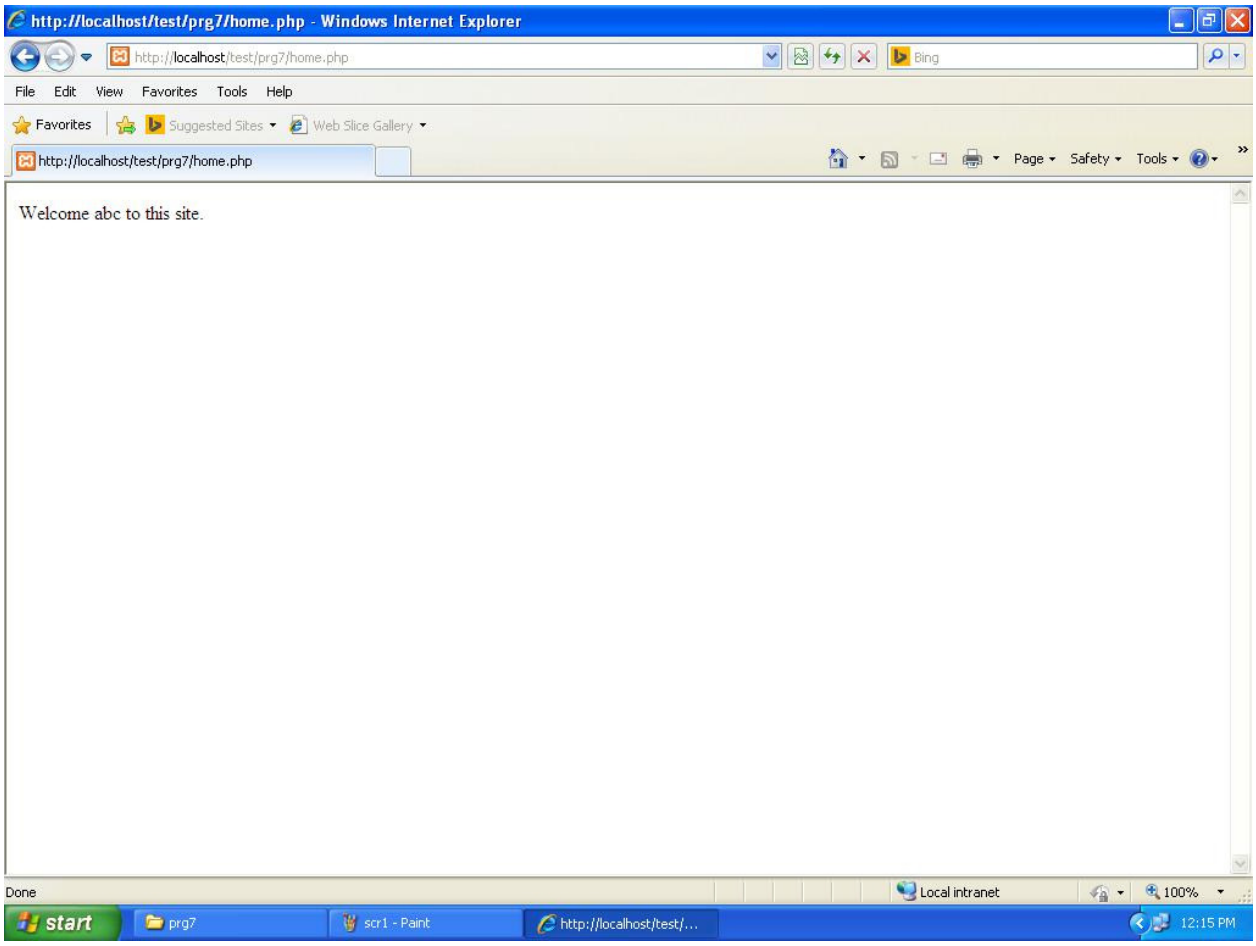
```
<form action='home.php' method='post'>

Login<br>

User name: <input type='text' name='name'><br>

age:  <input type='text' name='age'><br>

<input type='submit'value='Login'>
```

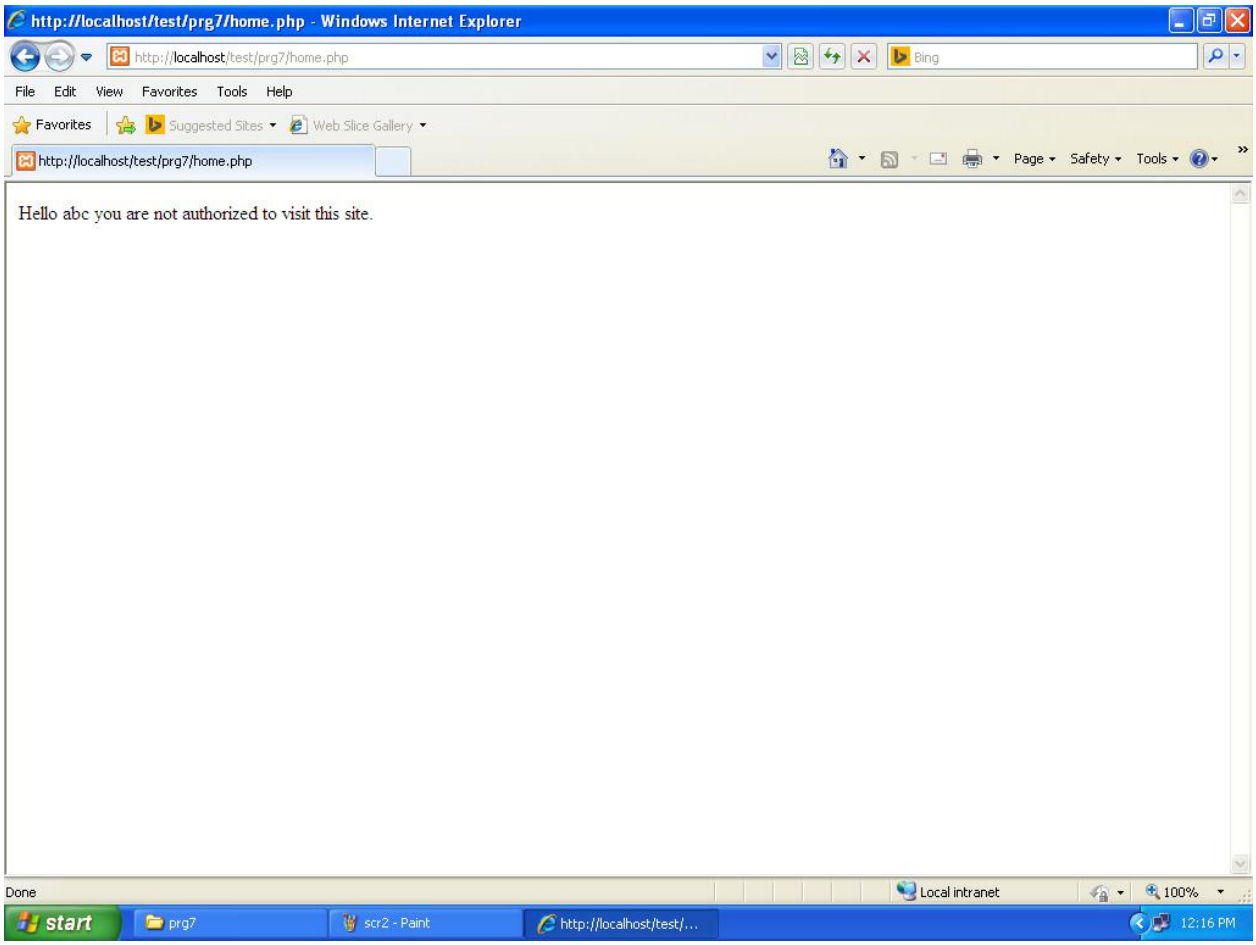


home.php

```
<?php
```

```
$name = $_POST['name'];
$age = $_POST['age'];
if ($age < 18)
    print "Hello " . $name . " you are not authorized to visit this site.";
else
    print "Welcome " . $name . " to this site."
?>
```





WEEK-15

Viii) A web application for implementation

The user is first served a login page which takes users name and password .After submitting the details the server checks these values against the data from a database and takes the following decisions

if name and password matches, serves a welcome page with user's full name

if name matches and password doesn't match then serves password mismatch page

if name not found in database, serves a registration page where users full name is asked and on submitting the full name,it stores ,the login name,password and full name in the database(HINT:Use session for storing the submitted login name and password.)

form3.html

<form action='home.php' method='post'>

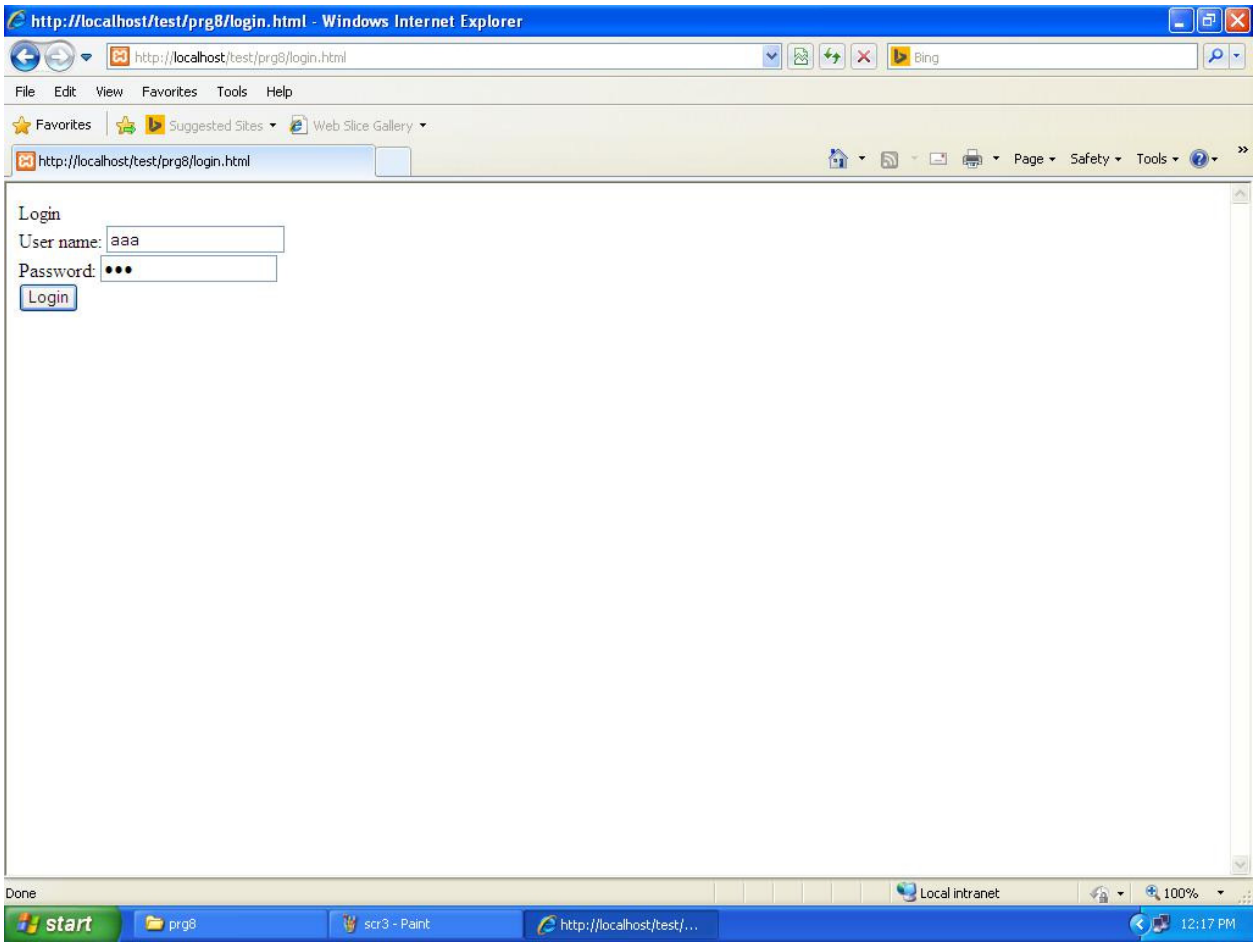
Login

User name: <input type='text' name='user'>

Password: <input type='password' name='pass'>

<input type='submit'value='Login'>

</form>



home.php

<?php

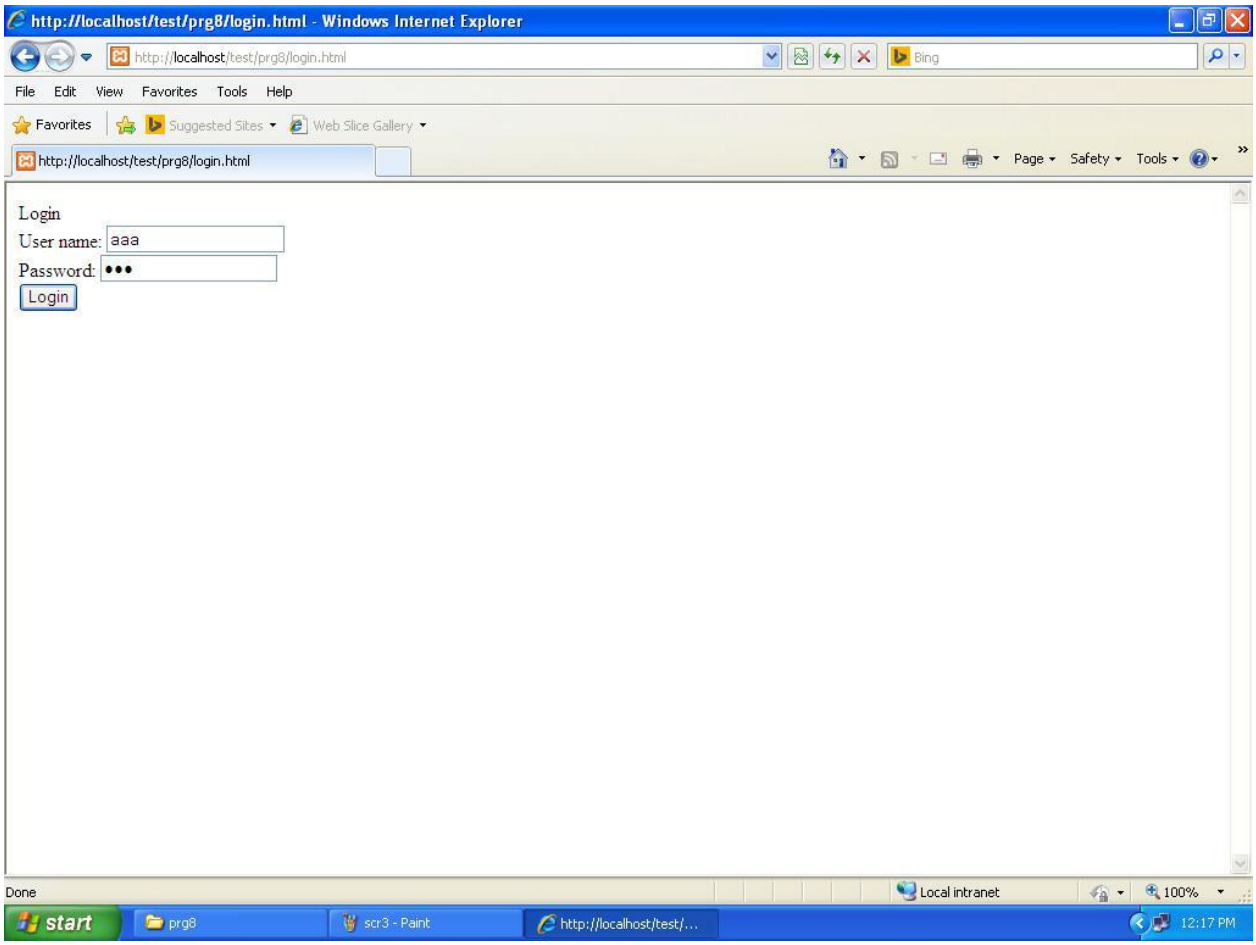
session_start();

$user = $_POST['user'];

$pass = $_POST['pass'];

```
$_SESSION['luser'] = $user;

$_SESSION['lpass'] = $pass;

$server = "localhost";

$username = "root";

$password = "mysql";

$database = "users";

$tablename = "fulluser";



if ($user&&$pass)

{

$connect = mysql_connect($server,$username,$password) or die("not connecting");

mysql_select_db($database) or die("no db :");

$query = mysql_query("SELECT * FROM $tablename WHERE username='$user' and password='$pass'");

$numrows = mysql_num_rows($query);

if ($numrows!=0)

{

  while ($row = mysql_fetch_assoc($query))

    {

      print "Hello " . $row['firstname'] . " " . $row['middlename'] . " " . $row['lastname'];

    }

}

$query = mysql_query("SELECT * FROM $tablename WHERE username='$user' and password!='$pass'");

$numrows = mysql_num_rows($query);
```

```
if ($numrows!=0)
{
  print "Password is wrong";
}
$query = mysql_query("SELECT * FROM $tablename WHERE username='$user'");
$numrows = mysql_num_rows($query);
if ($numrows==0)
{
  header("Location:http://localhost/test/prg8/reg.php");
}
}
else
   die("please enter a username and password!");
?>
```

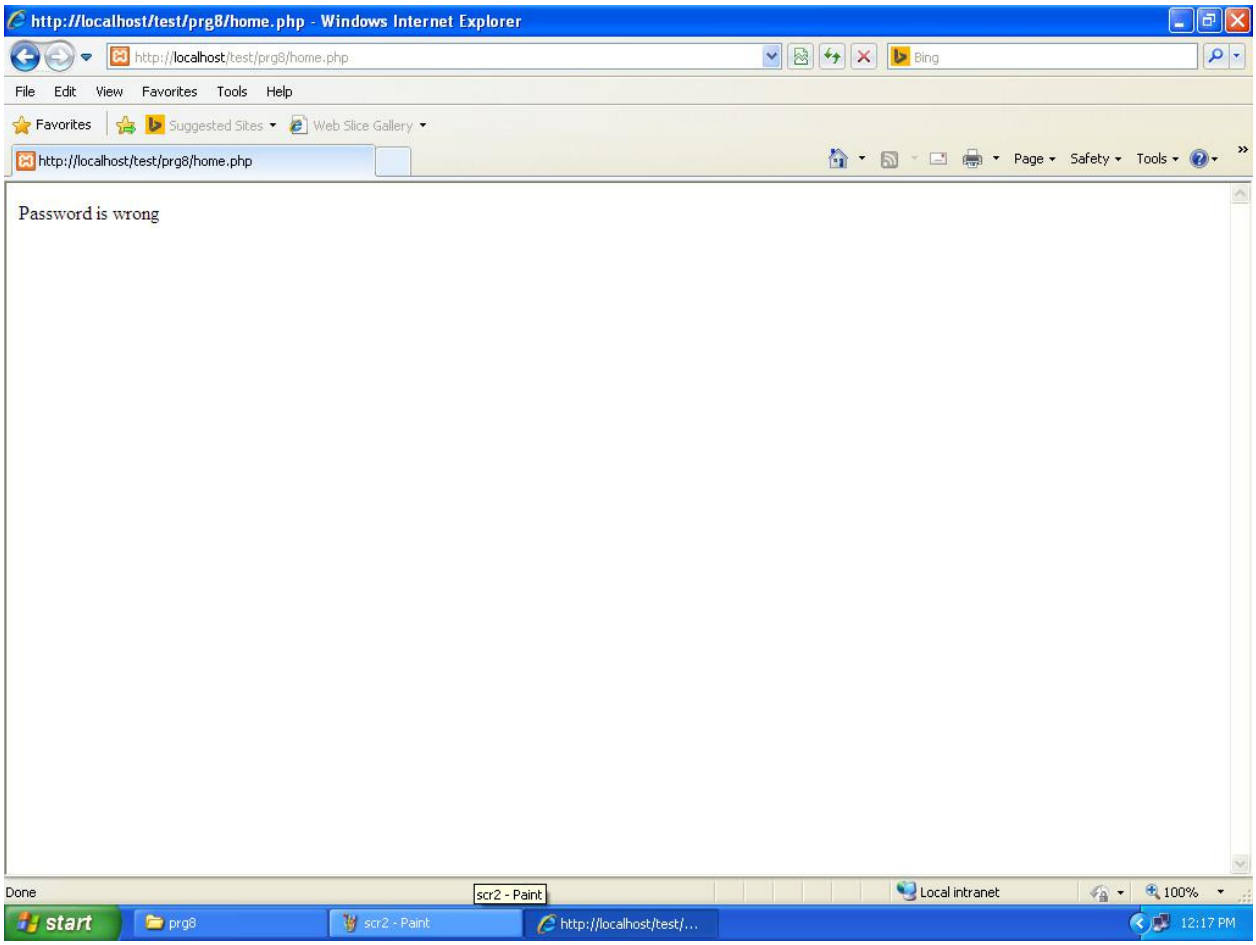


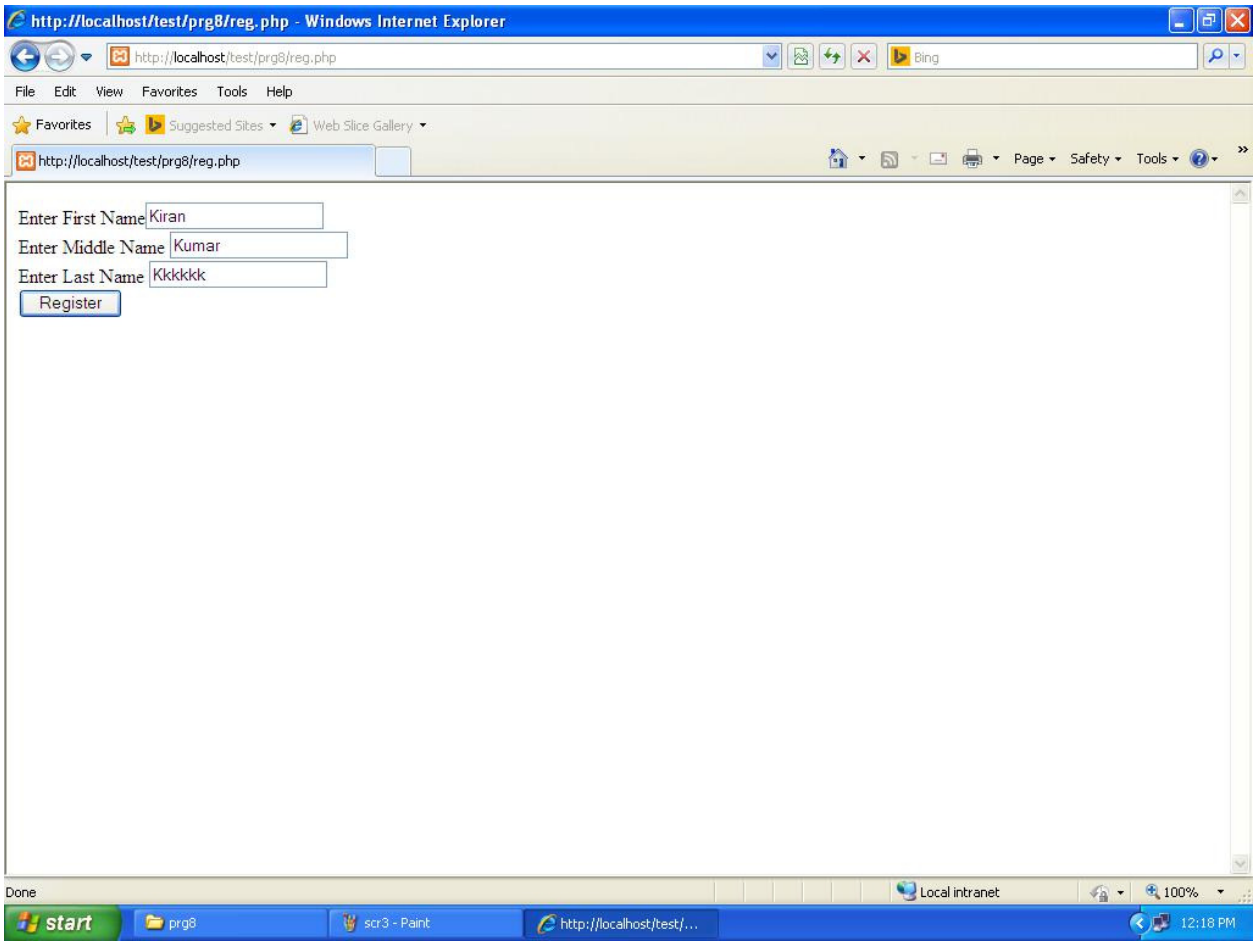
Reg.php

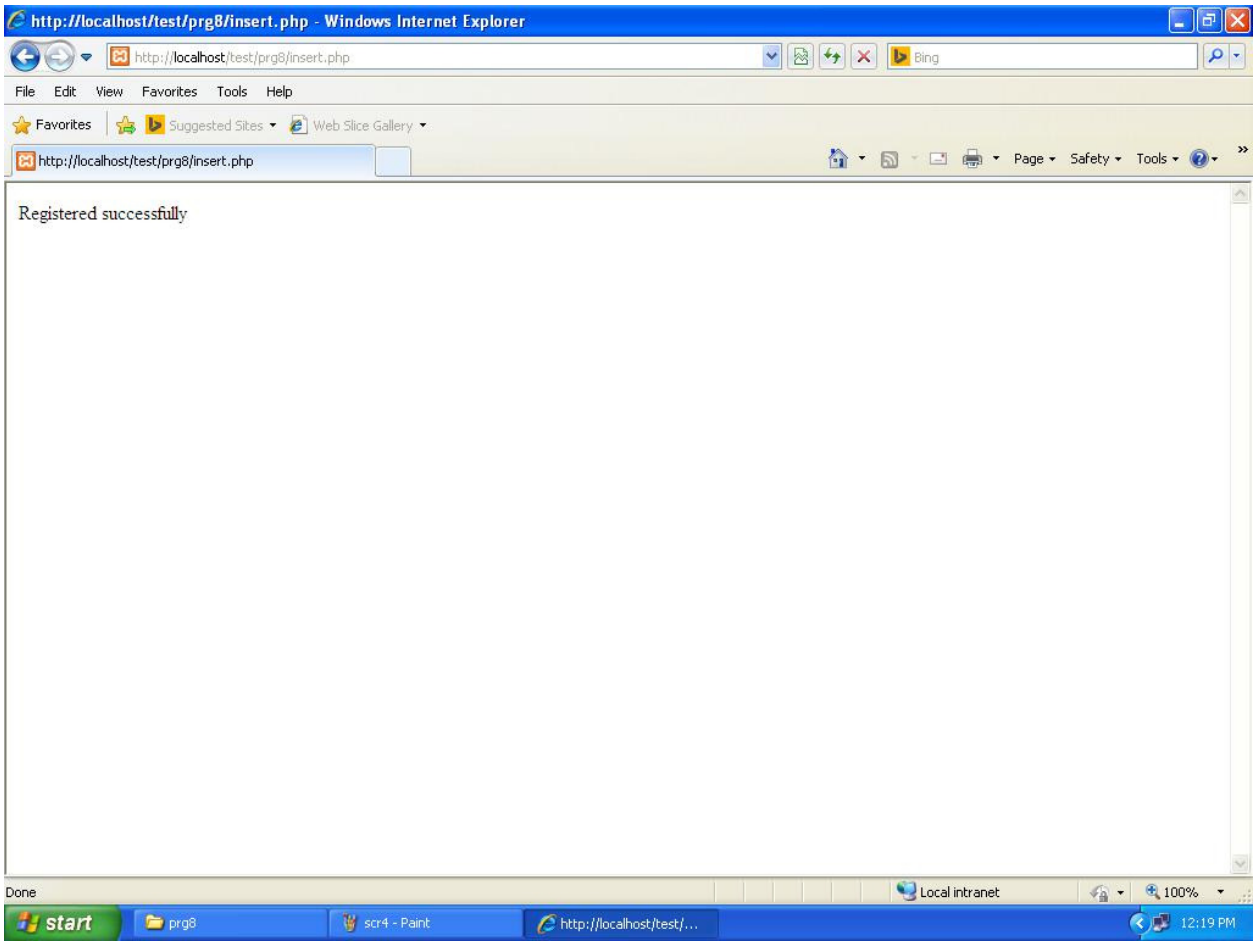
```
<?php
    session_start();
?>
<form action="insert.php" method="post">
Enter First Name<input type="text" name="fn"><br>
Enter Middle Name <input type="text" name="mn"><br>
Enter Last Name <input type="text" name="ln"><br>
<input type="submit" value=" Register ">
</form>
```

insert.php

```
<?php
   session_start();
$user = $_SESSION['luser'];
$pass = $_SESSION['lpass'];
$server = "localhost";
$username = "root";
$password = "mysql";
$database = "users";
$tablename = "fulluser";
     $firstname = $_POST['fn'];
     $middlename = $_POST['mn'];
     $lastname = $_POST['ln'];
     $connect = mysql_connect($server,$username,$password) or die("not connecting");
     mysql_select_db($database) or die("no db :");

mysql_query("insert into $tablename values('$user','$pass','$firstname','$middlename','$lastname')");
     print "Registered successfully";
     session_destroy();
?>
```


http://localhost/test/prg8/home.php - Windows Internet Explorer
http://localhost/test/prg8/home.php
File Edit View Favorites Tools Help
Favorites
Suggested Sites
Web Slice Gallery
http://localhost/test/prg8/home.php
Page
Safety
Tools
Password is wrong
Done
scr2 - Paint
Local intranet
100%
start
prg8
scr2 - Paint
http://localhost/test/...
12:17 PM


http://localhost/test/prg8/reg.php - Windows Internet Explorer
http://localhost/test/prg8/reg.php
File Edit View Favorites Tools Help
Favorites
Suggested Sites
Web Slice Gallery
http://localhost/test/prg8/reg.php
Page Safety Tools
Enter First Name Kiran
Enter Middle Name Kumar
Enter Last Name Kkkkkk
Register
Done
Local intranet
100%
start
prg8
scr3 - Paint
http://localhost/test/...
12:18 PM



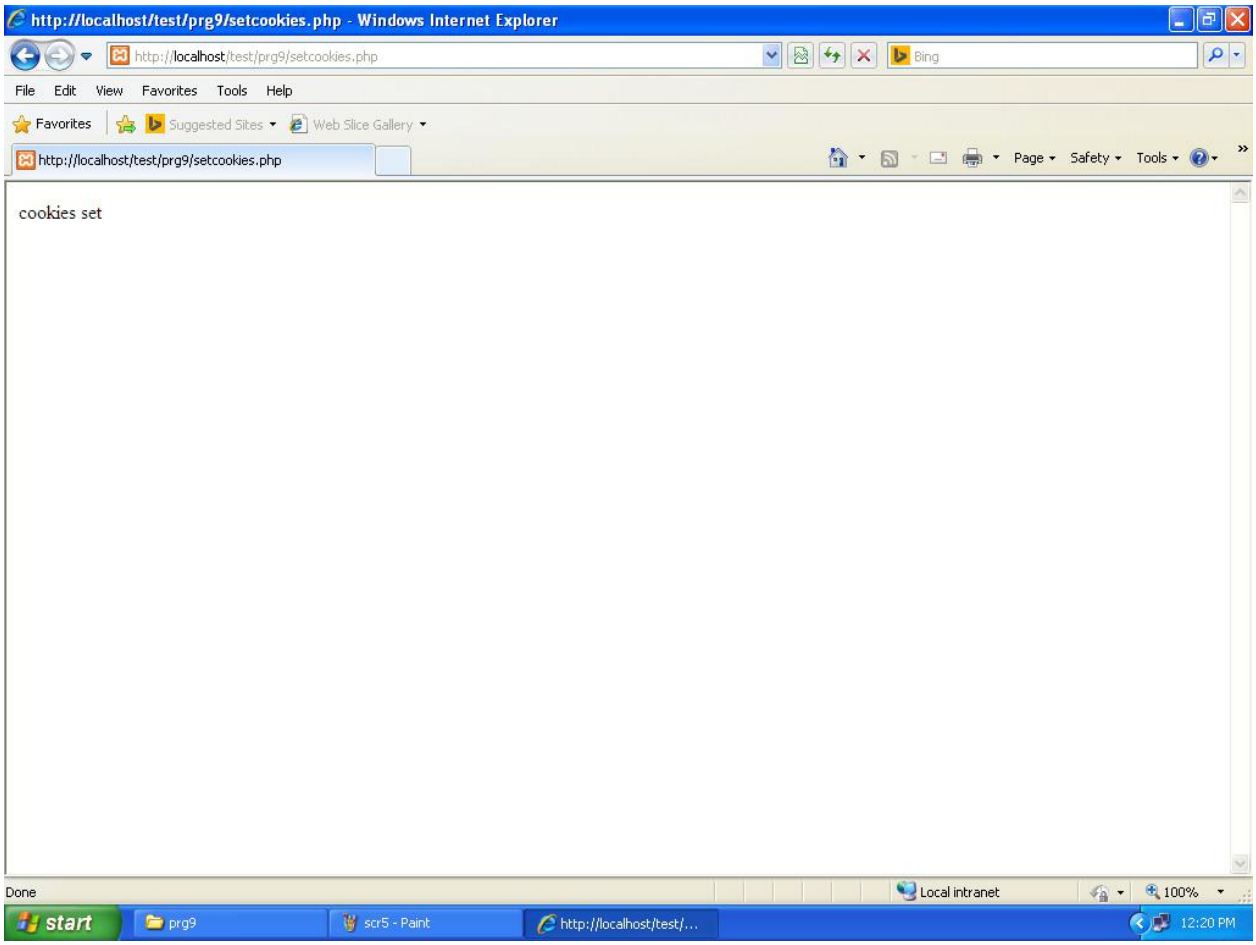
WEEK-16

ix) A web application that lists all cookies stored in thebrowser on clicking “list cookies” button, add cookies if necessary

setcookies.php

```
<?php

$firstname = 'aaa';

$middlename = 'bbb';

$lastname = 'ccc';

setcookie('first_name',$firstname,time() + 86400);

setcookie('middle_name',$middlename,time() + 86400);
```

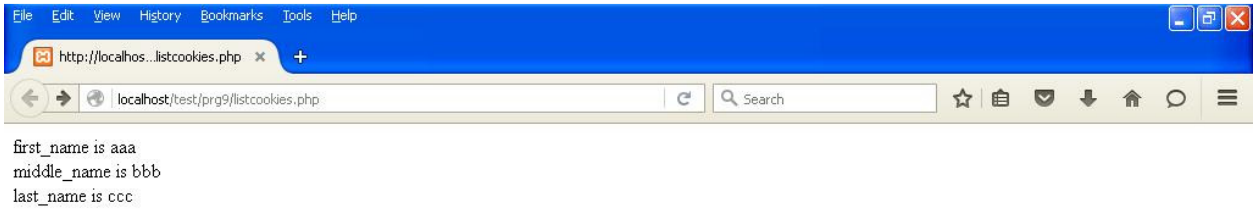
```
setcookie('last_name',$lastname,time() + 86400);

print "cookies set";

?>
```



Listcookies.php

```
<?php

if(!empty($_COOKIE))

{

foreach ($_COOKIE as $key=>$val)
```

```
  {
    echo $key.' is '.$val."<br>\n";
  }
}
else {
echo 'There are no Cookies, you must set some cookies.';
}
?>
```



TEXT BOOKS

• Web technologies, Uttam K Roy, OUP

• The complete reference PHP- Steven Holzner, Tata mcGraw-Hill