PRACTICAL NO.	PRACTICAL TITLE	PAGE NO.	TEACHER SIGNATURE
01	Aim: To Create a responsive web page. a) Create a responsive web page using bootstrap, flex , HTML and CSS. b) Web page must include a top menu bar with logo. c) There should be a Carousel having 5 images. d) Use Cards, For m, and Button controls.	5 - 11	
02	Aim: To create User Registration form and login form. a) Create webpage having login form and an option for new registration. On click of new registration the registration page should be opened. b) Create User registration page having details: username, e-mail ID, location and contact number, password and confirm password with validation. c) Do Login validation, authentication of login form and show welcome message after successful login	12 - 21	
03	Aim: Demonstrate reading contents form a webpage using AJAX, XHR and JQuery. Problem Statement: Client A is wants some functionality in his website. He asked you to bring these changes in his website. a) Create a HTML file named 'Home.html´and read the contents of a webpage testimonials.php´——————— using XMLHttpRequest object. testimonial.php may be containing Name, photograph, designation and testimonial. Content should be loaded in home page with refreshing other contents. b) Some user still using Microsoft Internet Explorer, so client A wants same functionality for users of Microsoft Internet Explorer. c) All the pages must have to be responsive. ,	22 - 23	
04	Aim : Demonstrate reading contents from text file on your computer using AJAX, XHR and JQuery. Problem Statement: David (our client) is facing some issue in his website. He is having some text file located somewhere and he wants the website should load data form text file to his website. He wants these features in his website. a)Create a HTML file statement.html´and read the contents of a text file (data.txt) using XMLHttpRequest object.	24 - 25	

2

	b) On clicking the button the content of text file must be loaded into target place.		
05	Aim: Design a webpage and demonstrate DOM and CSS manipulation using AJAX and JQuery. Problem Statement: A vendor wants to create a webpage which have functionality of DOM manipulation. He wants when user clicks on button add a new paragraph to HTML page using AJAX. Problems. a) Design HTML page with 2 buttons. The first button to Add new paragraph and second button to remove all paragraphs. There should be paragraph count system. b) Design a webpage with 3 paragraphs and do CSS manipulation using DOM and JQuery.	26 - 30	
06	Aim: To Implement html form validation Using AJAX and JQuery. Problem Statement: a) Design a HTML registration () form and perform field validation using AJAX and JQuery. Create style sheet and script file separately. b) Validation should include e-mail, first name, and last name, phone no validation. c) There should be checkbox validation; at least one must be selected. d) Use must have to select city name. Provide validation for city name. e) Password and Confirm Password validation should be there.	31 - 36	
07	Write a Program to check whether rollno field is validated or not.	37 - 39	
08	Write a program to show animation using JS.	40 - 42	
09	Design a program to calculate sum of two no using JS	43 - 45	
10	Design a program to print the table of given no using JS.	46 - 47	

11	Session Handling in PHP. Problem Statement: a) Create a MySql database ³MyDB with a table ³Usertbl´ having User_Id, User_Name, User_Email, User_Password. b) Design a login page (login.php) with validation and create a session variable for User Name. c) Design a webpage (dashboard.php) and test the session, if done then show content else redirect to login page.	48 - 53	
12	Aim : Create a HTML form to accept Student details (RollNo, Name, DOB , Photo) and perform following; Problem Statement: a) Design a HTML form with validation thru AJAX. b) Create PHP script to display the size, name , type of the image uploaded. c) Create PHP script for validation of the uploaded file as per following criteria: file size (50kb) and file type as JPG.	54 - 58	
13	Aim: To demonstrate the concept of class and object with constructor and destructor. Problem Statement: a) Create web form asking the details of UU student (Roll-No, Name, DOB, Age, Course) and submit the form.(redirected to process.php). b) Create process.php script having class Student (Roll-No, Name, DOB, Age, Course), initialize the data-members using PHP parameterized constructor and show details using display(). Class should have destructor function.	59 - 73	
14	Aim: To demonstrate exception handling. Problem Statement: a) Create PHP script to demonstrate exception handling. b) Create a PHP script to implement custom exception. c) Design a web form asking username and email id and validate the e mail id with the help of exception handling.	74 - 80	
15	To implement PHP and MySql concepts using MySqli / PDO and AJAX. Problem Statement: a) Create a database (MyDB) and table (producttbl) having product_id	81-103	

	[primary key], product_name, product_size, product_price. b) Create web form (insert.php) and PHP script to insert product details. c) Create a web page (show.php) to fetch records form database and show in well formatted table. d) Create a web page (update.php) to update the product details. e) Create a web page (delete.php)to delete product and redirect to ³show.php.			
16	Aim: To create User Registration form and login form. a) Create webpage having login form and an option for new registration. On click of new registration the registration page should be opened. b) Create User registration page having details: username, e-mail ID, location and contact number, password and confirm password with validation. c) Do Login validation, authentication of login form and show welcome message after successful login	104-120		

PRACTICAL NO. 1

To Create a responsive web page.

a) Create a responsive web page using bootstrap, flex , HTML and CSS.

b) Web page must include a top menu bar with logo.

c) There should be a Carousel having 5 images.

d) Use Cards, Form, and Button controls.

Code:

```
<html lang="en">
<head>
  <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <title>Navigation Bar</title>
   <link rel="stylesheet" href="css/bootstrap.min.css">
   <linkrel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
   <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
   <script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.16.0/umd/popper.min.js"></script>
   <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
</head>
<body>
   <nav class="navbar navbar-expand-lg navbar-light bg-primary">


     <a class="navbar-brand" href="#">Navbar</a>
```

6

```html
<button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarSupportedContent" aria-controls="navbarSupportedContent" aria-expanded="false" aria-label="Toggle navigation">

    <span class="navbar-toggler-icon"></span>
  </button>
  <div class="collapse navbar-collapse" id="navbarSupportedContent">
   <ul class="navbar-nav me-auto mb-2 mb-lg-0">
    <li class="nav-item">
     <a class="nav-link active" aria-current="page" href="#">Home</a>
    </li>
    <li class="nav-item">
     <a class="nav-link" href="#">Gallery</a>
    </li>
    <li class="nav-item">
     <a class="nav-link" href="#">About Us</a>
    </li>
    <li class="nav-item">
     <a class="nav-link" href="#">Services</a>
    </li>
    <li class="nav-item">
     <a class="nav-link" href="#">Contact Us</a>
    </li>
   </ul>
   <form class="d-flex">
    <input class="form-control me-2" type="search" placeholder="Search" aria-label="Search">
    <button class="btn btn-warning" type="submit">Search</button>
   </form>
  </div>
 </div>
```

```
    </nav>

    <br>

    <div class="container">

      <div class="row">

        <div class="col-sm-4">

    <div class="card" style="width: 18rem;">

      <img class="card-img-top" src="slide5.jpg" alt="Card image cap">

      <div class="card-body">

        <h5 class="card-title">Card title</h5>


        <p class="card-text">Some quick example text to build on the card title and make up the
bulk of the card's content.</p>

        <a    href="https://pngtree.com/free-backgrounds"    class="btn    btn-primary">Go
somewhere</a>

      </div>

      </div>

      </div>

      <div class="col-sm-4"></div>

      <div class="card" style="width: 18rem;">

        <img class="card-img-top" src="slide2.jpg" alt="Card image cap">

        <div class="card-body">

          <h5 class="card-title">Card title</h5>

          <p class="card-text">Some quick example text to build on the card title and make up the
bulk of the card's content.</p>

          <a href="#" class="btn btn-primary">Go somewhere</a>

        </div>

      </div>

      </div>

    </div>

    <br>
```

```html
<div id="demo" class="carousel slide" data-ride="carousel">

  <!-- Indicators -->
  <ul class="carousel-indicators">
    <li data-target="#demo" data-slide-to="0" class="active"></li>
    <li data-target="#demo" data-slide-to="1"></li>
    <li data-target="#demo" data-slide-to="2"></li>
    <li data-target="#demo" data-slide-to="3"></li>
    <li data-target="#demo" data-slide-to="4"></li>
    <li data-target="#demo" data-slide-to="5"></li>
  </ul>

  <!-- The slideshow -->
  <div class="carousel-inner">
    <div class="carousel-item active">
      <img src="slide1.jpg" alt="Los Angeles" width="1700" height="600">
    </div>
    <div class="carousel-item">
      <img src="slide2.jpg" alt="Chicago" width="1700" height="600">
    </div>
    <div class="carousel-item">
      <img src="slide3.jpg" alt="New York" width="1700" height="600">
    </div>
    <div class="carousel-item">

      <img src="slide4.png" alt="New York" width="1700" height="600">
    </div>
    <div class="carousel-item">
      <img src="slide5.jpg" alt="New York" width="1700" height="600">
    </div>
```

9

```html
      </div>



      <!-- Left and right controls -->
      <a class="carousel-control-prev" href="#demo" data-slide="prev">
        <span class="carousel-control-prev-icon"></span>
      </a>
      <a class="carousel-control-next" href="#demo" data-slide="next">
        <span class="carousel-control-next-icon"></span>
      </a>
    </div>
    <form>
      <div class="form-row">
        <div class="form-group col-md-6">
          <label for="inputEmail4">UserName</label>
          <input type="email" class="form-control" id="inputEmail4" placeholder="username">
        </div>
        <div class="form-group col-md-6">
          <label for="inputPassword4">Email Id</label>
          <input type="password" class="form-control" id="inputPassword4" placeholder="email">
        </div>
      </div>
      <div class="form-group col-md-6">
      <label for="inputState">City</label>
        <select class="form-select" aria-label="Default select example">
          <option selected>Open this select menu</option>
              <option selected>Haridwar</option>
          <option selected>Dehardun</option>
          <option selected>Jaipur</option>
```
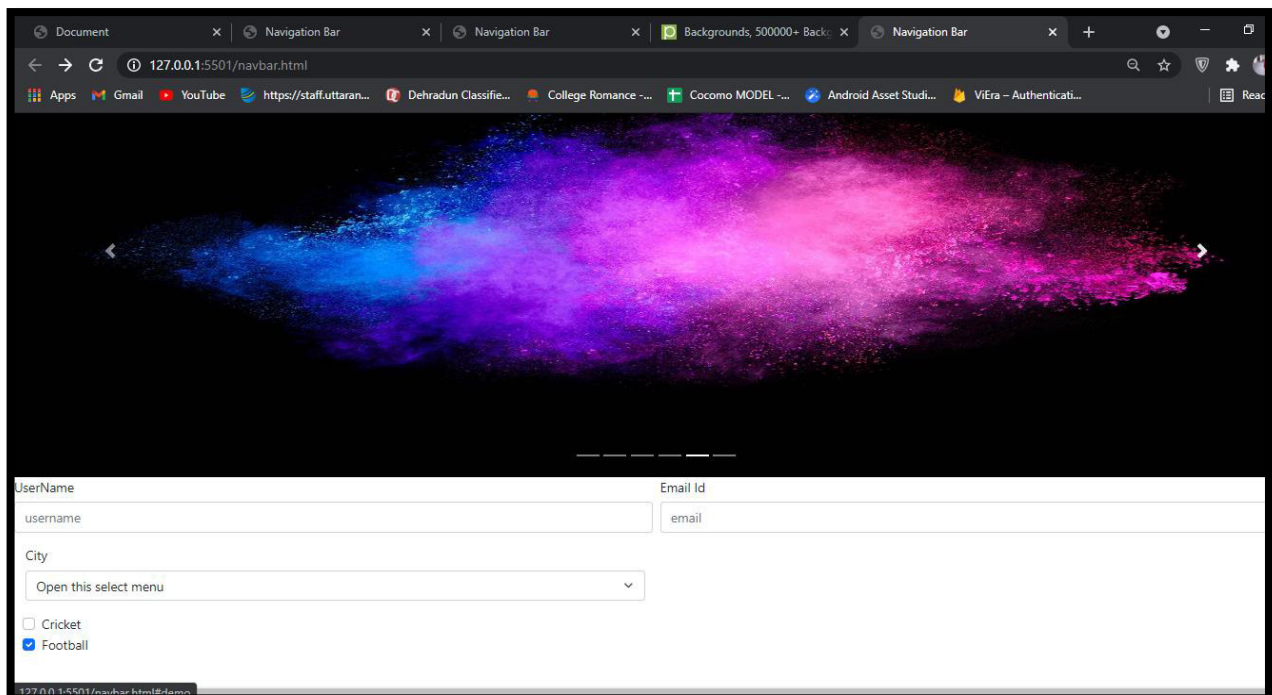
10

```html
        <option selected>Delhi</option>

      </select>

    </div>

    <div class="form-group col-md-6">

    <div class="form-check">

      <input class="form-check-input" type="checkbox" value="" id="flexCheckDefault">

      <label class="form-check-label" for="flexCheckDefault">

       Cricket

      </label>

    </div>

    <div class="form-check">

      <input class="form-check-input" type="checkbox" value="" id="flexCheckChecked" checked>

      <label class="form-check-label" for="flexCheckChecked">

       Football

      </label>

    </div>

    </form>

  <br>

</body>

<script src="js/jquery.js"></script>

<script src="js/bootstrap.min.js"></script>

</html>
```
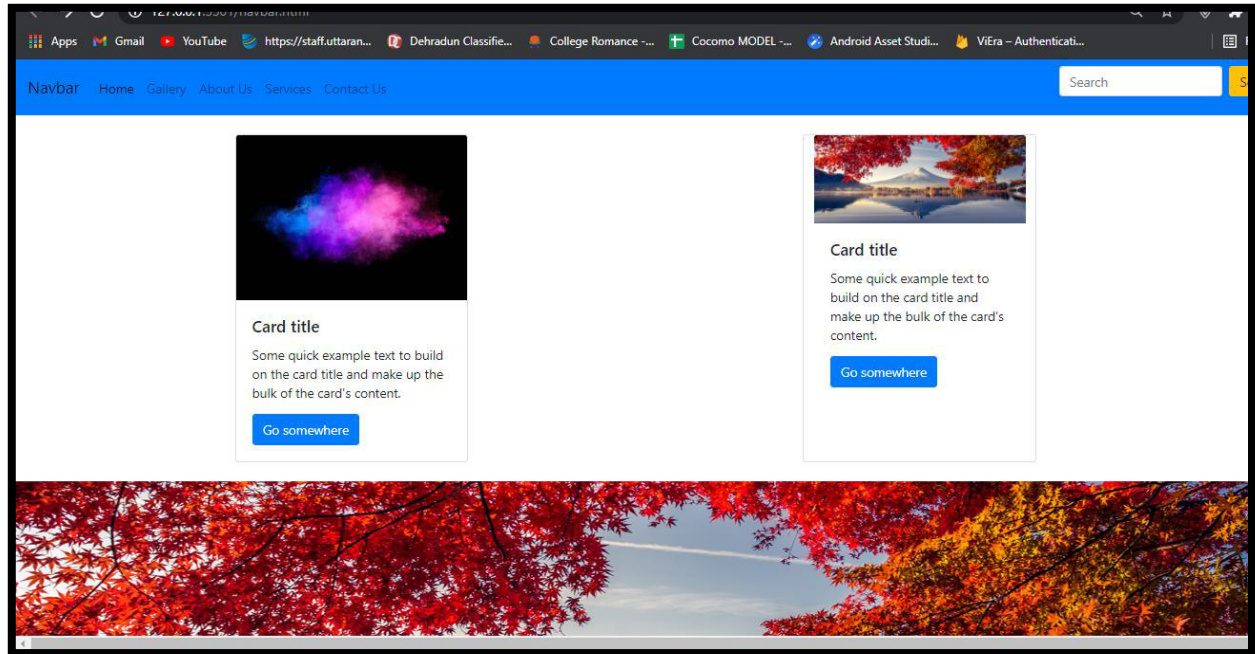
OUTPUT:

PRACTICAL NO. 2

To create User Registration form and login form.

a) Create webpage having login form and an option for new registration. On click of new registration the registration page should be opened.

b) Create User registration page having details: username, e-mail ID, location and contact number, password and confirm password with validation.

c) Do Login validation, authentication of login form and show welcome message after successful login

Code:

signup.html

```html
!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta http-equiv="X-UA-Compatible" content="IE=edge">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Document</title>

  <link rel="stylesheet" href="css/bootstrap.min.css">


  <script src="jquery-3.6.0.min.js"></script>

  <script src="js/bootstrap.min.js"></script>

  <script src="js/popper.min.js"></script>

  <style>

    .error{

      color: red;

      font-weight: 800;

    }
```

```
        .success{
            color: green;
            font-weight: 800;
        }
    </style>
</head>
<body>
    <h1>Welcome User..</h1>
    <form id="reg" name="reg">
        <div class="container">
            <h3 style="text-align: center;">User Registration</h3>
            <div class="form-group">
                <label for="uname">Enter Name</label></br>
                <input type="text" id="uname" name="uname" class="form-control"></br>
                <span id="name-error"></span>
            </div>
            <div class="form-group">
                <label for="age">Enter Age</label></br>
                <input type="text" id="age" name="age" class="form-control"></br>
                <span id="age-error"></span>
            </div>
            <div class="form-group">
                <label for="email">Enter Email Id</label></br>
                <input type="text" id="email" name="email" class="form-control"></br>
                <span id="email-error"></span>
            </div>
            <div class="form-group">
                <label for="pass">Enter Password</label></br>
                <input type="text" id="pass" name="pass" class="form-control"></br>
                <span id="pass-error"></span>
```

14

```html
        </div>
        <div class="form-group">
          <label for="cpass">Confirm Password</label></br>
          <input type="text" id="cpass" name="cpass" class="form-control"></br>
          <span id="cpass-error"></span>
        </div>


        <button class="btn btn-primary" id="go" name="go">Check</button>
      </div>
   </form>



   <div id="result" style="background-color: blueviolet; color:aliceblue;width: 1000px;
height: 500px;">


   </div>
</body>
<script>
  $(document).ready(function(){
    $("#go").click(function(e){
      e.preventDefault();// will no submit my form
      if(validate()==true)
      {
        var name=$("#uname").val();
        var age=$("#age").val();
        var email=$("#email").val();
        var pass=$("#pass").val();
        var cpass=$("#cpass").val();
        alert(name);
```

```javascript
        $.post("regProcess.php",{uname:name,age:age,email:email,pass:pass,cpass:cpass},function(data,status){

                if(status=="success")

                {

                    $("#result").html(data);

                }

            });

        }

    });

})


function validate()

{

    // UserName

    var p=/[A-Z]+$/;

    var name=$("#name").val();

    if(!p.test(name)&& name=="")

    {

        $("#name-error").addClass("error");

        $("#name-error").text("Enter only Capital Letters or left Blank");

        return false;

    }

    else

    {

        $("#name-error").addClass("success");

        $("#name-error").text("Valid Input");

    }

    // Age Validation

    var age=$("#age").val();

    if(age<18)
```

```javascript
      {
         $("#age-error").addClass("error");

         $("#age-error").text("Age should be greater than 18");

         return false;

      }

      else

      {

         $("#age-error").addClass("success");

         $("#age-error").text("Valid Age");

      }

      // E-Mail Validation

      var     epx=/^(([^<>()[\]\\.,;:\s@"]+(\.[^<>()[\]\\.,;:\s@"]+)*)|(".+"))@((\[[0-9]{1,3}\.[0-
9]{1,3}\.[0-9]{1,3}\.[0-9]{1,3}\])|(([a-zA-Z\-0-9]+\.)+[a-zA-Z]{2,}))$/


      var email=$("#email").val();

      if(!epx.test(email))

      {

         $("#email-error").addClass("error");

         $("#email-error").text("Enter Valid E- Mail Id");

         return false;

      }

      else

      {

         $("#email-error").addClass("success");

         $("#email-error").text("Valid E- Mail ID");

      }

      // Password Validation

      var pass=$("#pass").val();

      if(pass.length<8)

      {

         $("#pass-error").addClass("error");
```

```javascript
        $("#pass-error").text("Password length should be 8-15");

        return false;

      }

      else

      {

        $("#pass-error").addClass("success");

        $("#pass-error").text("Valid Password");

      }

      // Confirm Validation

      var p=$("#pass").val();

      var cp=$("#cpass").val();

      if(cp!=p)

      {

        $("#cpass-error").addClass("error");

        $("#cpass-error").text("Password and Cofrim Passwrod must be same");

        return false

      }

      else

      {

        $("#cpass-error").addClass("success");

        $("#cpass-error").text("Valid Password");

      }

      return true;

  }

</script>

</html>
```

Login.html

```html
<!DOCTYPE html>

<html lang="en">

<head>
```

18

```html
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <link rel="stylesheet" href="css/bootstrap.min.css">


    <script src="jquery-3.6.0.min.js"></script>
    <script src="js/bootstrap.min.js"></script>
    <script src="js/popper.min.js"></script>
    <style>
      .error{
        color: red;
        font-weight: 800;
      }
      .success{
        color: green;
        font-weight: 800;
      }
    </style>
</head>
<body>
    <form  action="signup.html" method="GET">
      <div class="container">
        <h3 style="text-align: center;">User Registration</h3>
        <div class="form-group">
          <label for="uname">Enter Name</label></br>
          <input type="text" id="uname" name="uname" class="form-control"></br>
          <span id="name-error"></span>
        </div>
```
19

```html
        <div class="form-group">
          <label for="pass">Enter Password</label></br>
          <input type="text" id="pass" name="pass" class="form-control"></br>
          <span id="pass-error"></span>
        </div>


        <button class="btn btn-primary" id="go" name="go">New Registration</button>
      </div>
    </form>



  <div id="result" style="background-color: blueviolet; color:aliceblue;width: 1000px; height: 500px;">


  </div>
</body>
<script>
  $(document).ready(function(){
    $("#go").click(function(e){
      e.preventDefault();// will no submit my form
      if(validate()==true)
      {
        var name=$("#uname").val();


        var pass=$("#pass").val();



        $.post("regProcess.php",{uname:name,pass:pass},function(data,status){
          if(status=="success")
          {
            $("#result").html(data);
```

20

```
        }
      });
    }
  });
})

function validate()
{
  // UserName
  var p=/[A-Z]+$/;
  var name=$("#name").val();
  if(!p.test(name)&& name=="")
  {
    $("#name-error").addClass("error");
    $("#name-error").text("Enter only Capital Letters or left Blank");
    return false;
  }
  else
  {
    $("#name-error").addClass("success");
    $("#name-error").text("Valid Input");
  }

  // Password Validation
  var pass=$("#pass").val();
  if(pass.length<8)
  {
    $("#pass-error").addClass("error");
    $("#pass-error").text("Password length should be 8-15");
    return false;
```

21

```
        }

        else

        {

            $("#pass-error").addClass("success");

            $("#pass-error").text("Valid Password");

        }

    return true }

</script>

</html>
```

OUTPUT:

PRACTICAL NO. 3

Demonstrate reading contents form a webpage using AJAX, XHR and JQuery. Problem Statement: Client A is wants some functionality in his website. He asked you to bring these changes in his website.

a) Create a HTML file named 'Home.html´and read the contents of a webpage testimonials.php´ using XMLHttpRequest object. testimonial.php may be containing Name, photograph, designation and testimonial. Content should be loaded in home page with refreshing other contents.

b) Some user still using Microsoft Internet Explorer, so client A wants same functionality for users of Microsoft Internet Explorer.

c) All the pages must have to be responsive. ,

<u>Coding:</u>

Home.html

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta http-equiv="X-UA-Compatible" content="IE=edge">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Document</title>

</head>

<body>

  <div  onmouseover="loadData()"  id="target"  style="background-color: blueviolet;color: aliceblue;height: 300px; width: 700px;">

  </div>

  <button onclick="loadData()" >View</button>

</body>

<script>

function loadData()

{

   var req=new XMLHttpRequest();
```
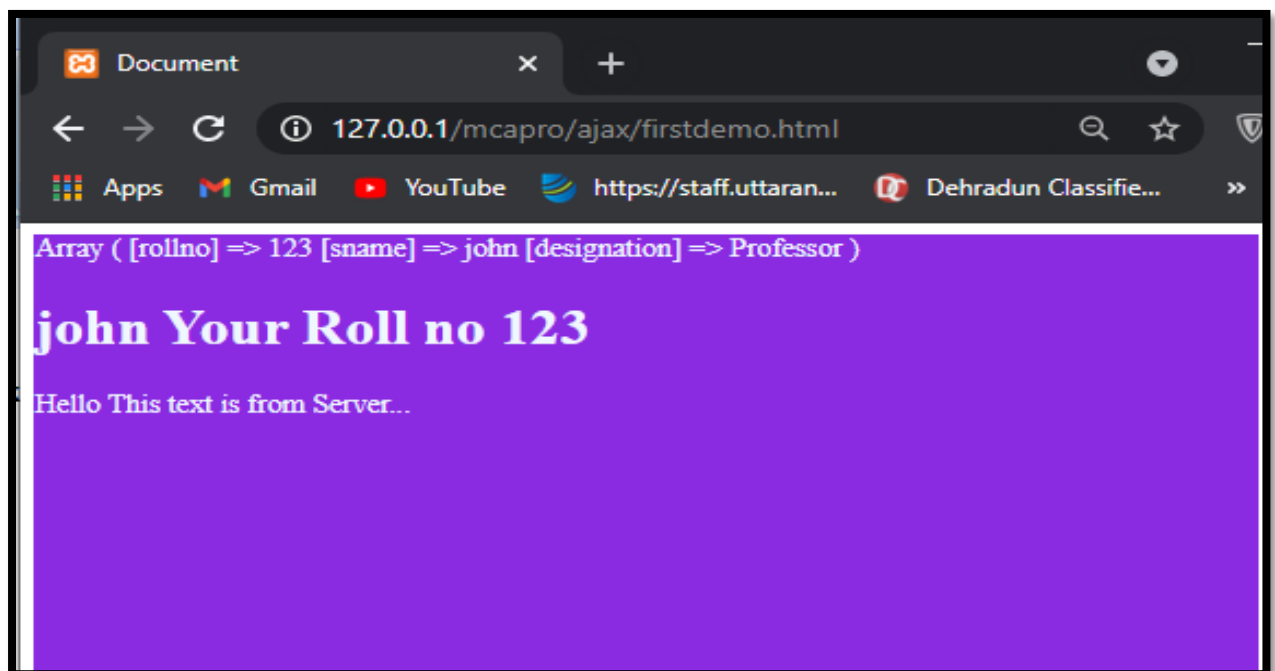
```
    req.open("GET","testimonial.php
?rollno=123&sname=john&&designation=Professor",true);

    req.send();

    req.onreadystatechange=function(){

      if(req.readyState==4 && req.status==200)

       {

          document.getElementById("target").innerHTML=req.responseText;}}}
```

</script>

</html>

Testimonial.php

```php
<?php
print_r($_GET);
    $sn=$_GET["sname"];
    $rno=$_GET["rollno"];
    echo "<h1>" . $sn ." Your Roll no " . $rno . "</h1>";
    echo("Hello This text is from Server...");
?>
```

OUTPUT:

PRACTICAL NO. 4

Demonstrate reading contents from text file on your computer using AJAX, XHR and JQuery. Problem Statement: David (our client) is facing some issue in his website. He is having some text file located somewhere and he wants the website should load data form text file to his website. He wants these features in his website.

a)Create a HTML file
statement.html´and read the contents of a text file (data.txt) using XMLHttpRequest object.

b) On clicking the button the content of text file must be loaded into target place.

c) Whatever content loaded form text file must be stored in a properly formatted table.

d) At the end of he wants information like 1) No. of lines 2) word length

Code:

Statement.html

```
<!DOCTYPE html>

<html lang="en">

<head>

   <meta charset="UTF-8">

   <meta http-equiv="X-UA-Compatible" content="IE=edge">

   <meta name="viewport" content="width=device-width, initial-scale=1.0">

   <title>Document</title>

</head>

<body>

   <div   onclick="loadData()"   id="target"   style="background-color:   blueviolet;color:
aliceblue;height: 300px; width: 700px;">

 </div>

   <button onclick="loadData()" >View</button>

</body>

<script>

  function loadData()
```

25

```
{

    var req=new XMLHttpRequest();

    req.open("GET","data.txt",true);

    req.send();

  req.onreadystatechange=function(){

        if(req.readyState==4 && req.status==200)

      {

          document.getElementById("target").innerText=req.responseText;

      }

    }

  }

</script>

</html>
```

Data.txt

Hibernate is a high-performance Object/Relational persistence and query service, which is licensed under the open source GNU Lesser General Public License (LGPL) and is free to download. Hibernate not only takes care of the mapping from Java classes to database tables (and from Java data types to SQL data types), but also provides data query and retrieval facilities. This tutorial will teach you how to use Hibernate to develop your database based web applications in simple and easy steps.

<u>OUTPUT</u>:
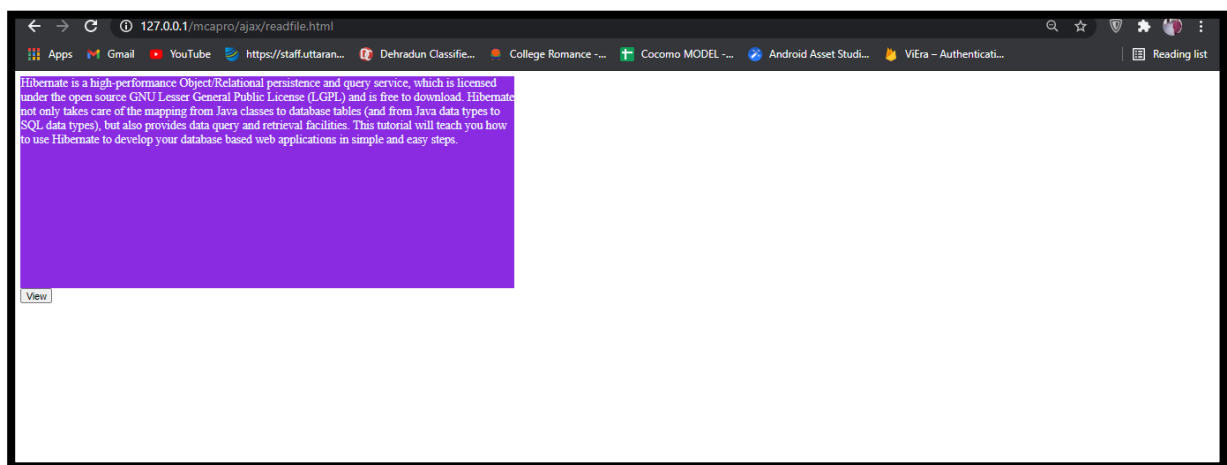
PRACTICAL NO. 5

Design a webpage and demonstrate DOM and CSS manipulation using AJAX and JQuery. Problem Statement: A vendor wants to create a webpage which have functionality of DOM manipulation. He wants when user clicks on button add a new paragraph to HTML page using AJAX. Problems.

a) Design HTML page with 2 buttons. The first button to Add new paragraph and second button to remove all paragraphs. There should be paragraph count system.

b) Design a webpage with 3 paragraphs and do CSS manipulation using DOM and JQuery

Coding:-

a) Design HTML page with 2 buttons. The first button to Add new paragraph and second button to remove all paragraphs. There should be paragraph count system.

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta http-equiv="X-UA-Compatible" content="IE=edge">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Document</title>

  <script src="jquery-3.6.0.min.js"></script>


  <style>

    .one{

      width: 200px;

      height: 300px;

      border: 10px red solid;

      background-color: blueviolet;

    }


    .two{

      width: 300px;

      height: 400px;
```

```html
        border: 10px rgb(47, 182, 23) solid;

        background-color: rgb(218, 23, 201);

      }

    </style>

</head>

<body>

  <div id="d1">

    <p id="p1"></p>

    <p id="p2"></p>

  </div>

  <div id="d2">

  </div>

  <button id="changeOne">Add Paragraph</button>


  <button id="undo">Remove Paragraph</button>


</body>


<script>

  $(document).ready(function(){

    $("#changeOne").click(function(){

      $("#p1").text("The DOM is a W3C (World Wide Web Consortium) standardThe DOM
defines a standard for accessing document");

      $("#d1").addClass("one");

    })

  $("#undo").click(function(){

      $("#d1").remove();

    })

})

</script>

</html>
```
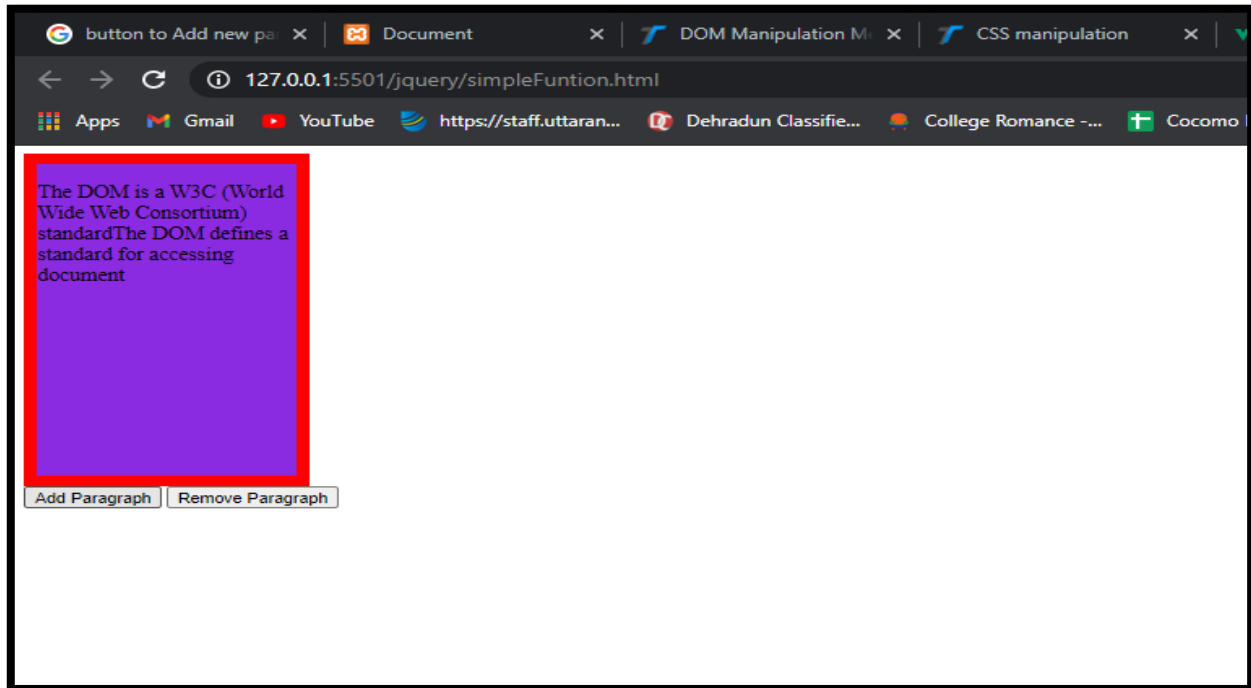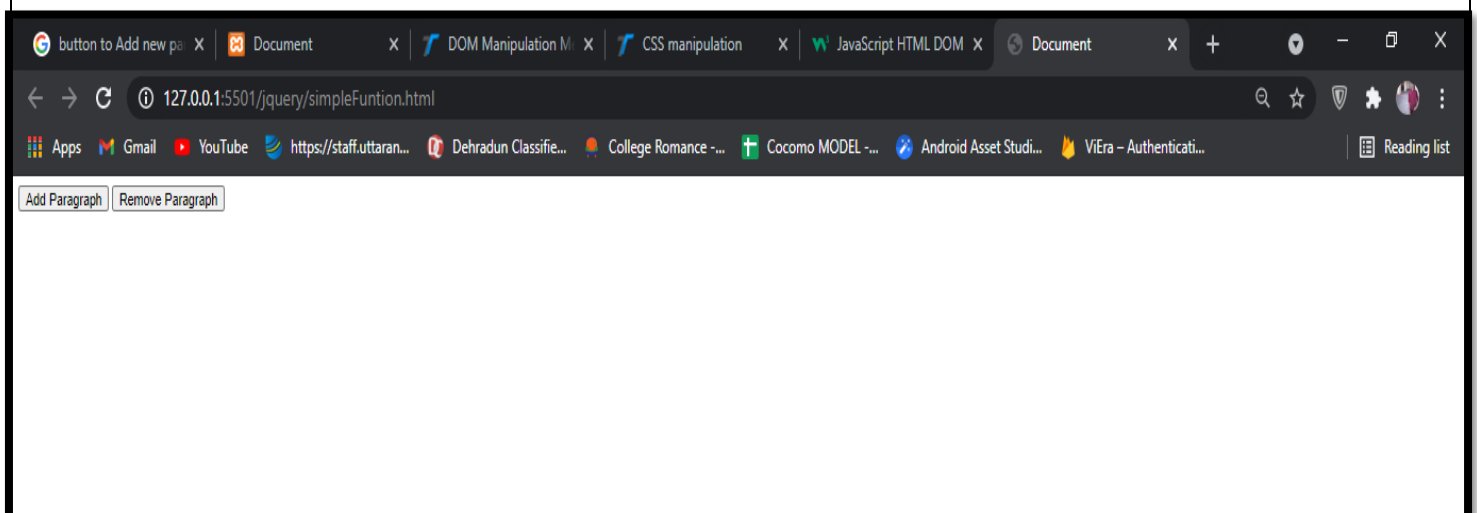
Adding Paragraph

Removed Paragraph

b) Design a webpage with 3 paragraphs and do CSS manipulation using DOM and JQuery.

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>CSS Manipulation Using JQuery</title>
    <script src="jquery-3.6.0.min.js"></script>
</head>
<body>
    <div style="padding: 20px;">
        <p id="p1">
            This is Para One
        </p>
        <p id="p2">
            This is Para Two
        </p>


        <button id="changeOne">Apply CSS to Paraone</button>
        <button id="changeTwo">Apply CSS to Para Two</button>
    </div>
</body>
<script>
    $(document).ready(function(){
        $("#changeOne").click(function(){
            $("#p1").css("background-color","red");
        }); $("#changeTwo").click(function(){
            $("#p2").css("background-color","maroon");
```
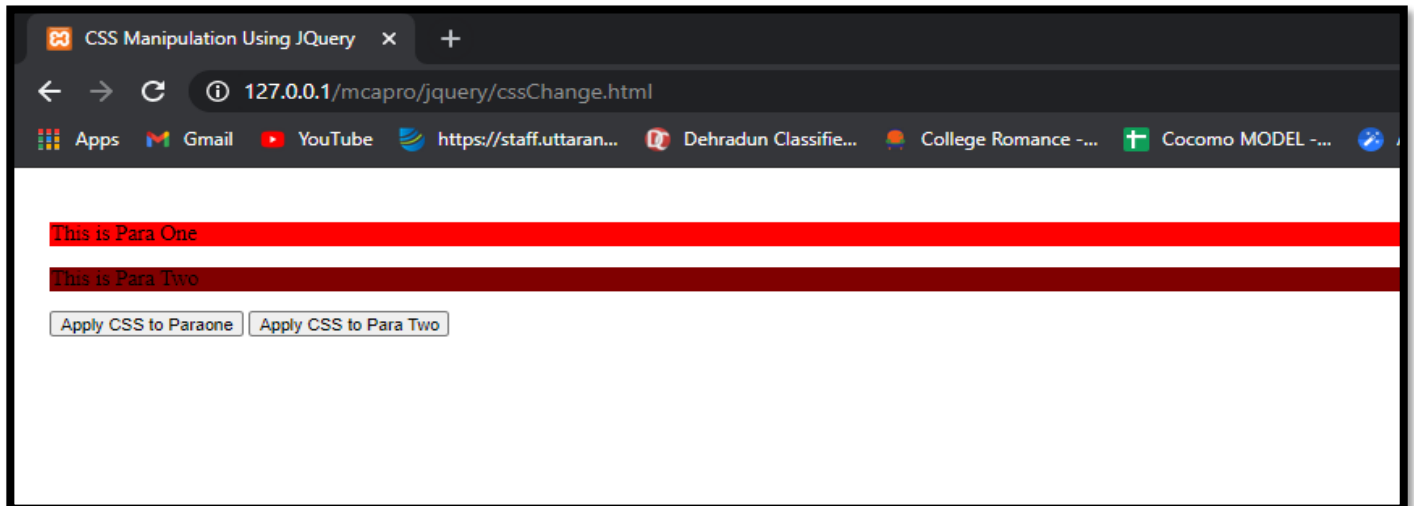
30

```
        });
    });
    </script>
    </html>
```

OUTPUT:

PRACTICAL NO. 6

To Implement html form validation Using AJAX and JQuery. Problem Statement:

a) Design a HTML registration () form and perform field validation using AJAX and JQuery. Create style sheet and script file separately.

b) Validation should include e-mail, first name, and last name, phone no validation.

c) There should be checkbox validation; at least one must be selected.

d) Use must have to select city name. Provide validation for city name.

e) Password and Confirm Password validation should be there.

CODE:

FormValidation.html

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Document</title>
   <link rel="stylesheet" href="style.css">
</head>
<body>
   <div id="content">
      <h1>Apply For a Job</h1>
      <div id="errorDiv"></div>
      <table>
        <tr>  <td>First Name:-</td>
           <td><input type="text" id="nameInput"/></td>
        </tr>
        <tr>
           <td>Last Name:-</td>
           <td><input type="text" id="ageInput"/></td>
```

32

```html
        </tr>
        <tr>
          <td>Email:-</td>
          <td><input type="text" id="emailInput" /></td>
        </tr>
        <tr>
          <td>Phone Number:-</td>
          <td><input type="text" id="phoneInput" /></td>
        </tr>
        <tr>
          <td>City:-</td>
          <td>Delhi<input type="checkbox" title="Yes" id="marriedCheckBox"/>
Mumbai<input type="checkbox" title="Yes" id="marriedCheckBox"/>    Assam<input
type="checkbox" title="Yes" id="marriedCheckBox"/>    Other<input type="checkbox"
title="Yes" id="marriedCheckBox"/>
          </td>
          <td>Password:-</td>
          <td><input type="text" id="ageInput"/></td>
        </tr>
        <tr>
          <td>Confirm Password:-</td>
          <td><input type="text" id="passInput"/></td>
        </tr>
        <tr>
          <td colspan="2"><input type="submit" id="submitButton" value="Apply"/></td>
        </tr>
    </table>
  </div>
  <script type="text/javascript" src="js/jq.js"> </script>
  <script type="text/javascript">
    $(document).ready(function () {
```

```javascript
      $("#submitButton").click(function (e) {

        ValidateAll();

        return false;

      });

    });

</script>

<script type="text/javascript" lang="javascript">

   function EmailValidate() {

      var numericExpression = /^w.+@[a-zA-Z_-]+?.[a-zA-Z]{2,3}$/;

      var elem = $("#emailInput").val();

      if (elem.match(numericExpression))

         return true;

      else

         return false;

   }

 function ValidateAll() {

      var errorCounter = 0;

      var errorMessage = "";

      //Name

      if ($("#nameInput").val() == ") {

         errorMessage += " Enter your First Name<br/>";

         errorCounter++;

      }

      //End


      //Age

      if ($("#ageInput").val() == ") {

         errorMessage += " Enter your Last Name<br/>";

         errorCounter++;

      }
```

34

```
else if (!$.isNumeric($("#ageInput").val()))

{

    errorMessage += " Invalid age-should be numeric<br/>";

    errorCounter++;

}

//End


//Email

if ($("#emailInput").val() == ") {

    errorMessage += " Enter your email address<br/>";

    errorCounter++;

}

else if (!(EmailValidate())) {

    errorMessage += " Invalid email address<br/>";

    errorCounter++;

}

//End


//Sex

if ($("#phoneInput").val() == ") {

    errorMessage += " Enter your Phone Number<br/>";

    errorCounter++;

}

else if (!(EmailValidate())) {

    errorMessage += " Invalid email address<br/>";

    errorCounter++;

}

//End


//Married
```

```javascript
        if (!($('#marriedCheckBox').prop('checked')))

        {

            errorMessage += " Please Select your City<br/>";

            errorCounter++;

        }

        //End

    //Work Permit

        if ($("#ageInput").val() == '') {

            errorMessage += " Enter your Password<br/>";

            errorCounter++;

        }

        //End

        if ($("#passInput").val() == '') {

            errorMessage += " Confirm your Password<br/>";

            errorCounter++;

        }

        $("#errorDiv").html(errorMessage);

        if (errorCounter == 0) {

            alert('Thank you, your job application has been submitted successfully. We will
contact you soon.')

            return true; }

        else

        {

            return false;   }   }

    </script>

</body>

</html>


Style.css

#content {

    margin: 0 auto;
```

```css
    width: 960px;

    background-color: #cccccc;

}


  #content h1 {

    text-align: center;

    text-decoration: underline;

  }table {

  width: 100%;

} table tr td {

    width: 40%;

    text-align: center;

  }


#errorDiv {

  background-color: red;


  color: #FFFFFF;

  padding-left:25px;}
```
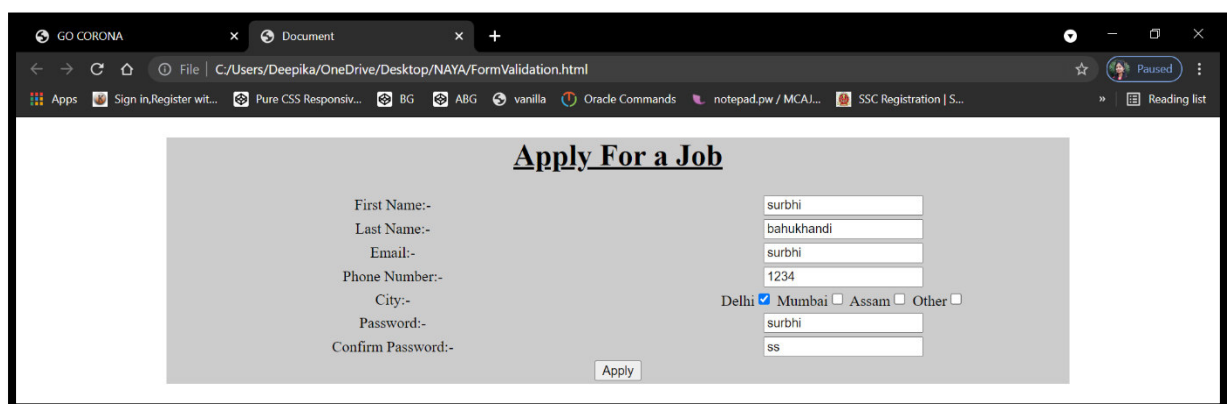
OUTPUT:

PRACTICAL NO. 7

Write a Program to check whether rollno field is validated or not.

Code:

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <script src="jquery-3.6.0.min.js"></script>

    <style>
        .error{
            color: red;
            font-weight: 800;
        }
        .success{
            color: green;
            font-weight: 800;
        }
    </style>
</head>
<body>
    <form>
        <label for="txtrno">Enter Roll No</label></br>
        <input type="text" id="txtrno" name="txtrno"></br>
```
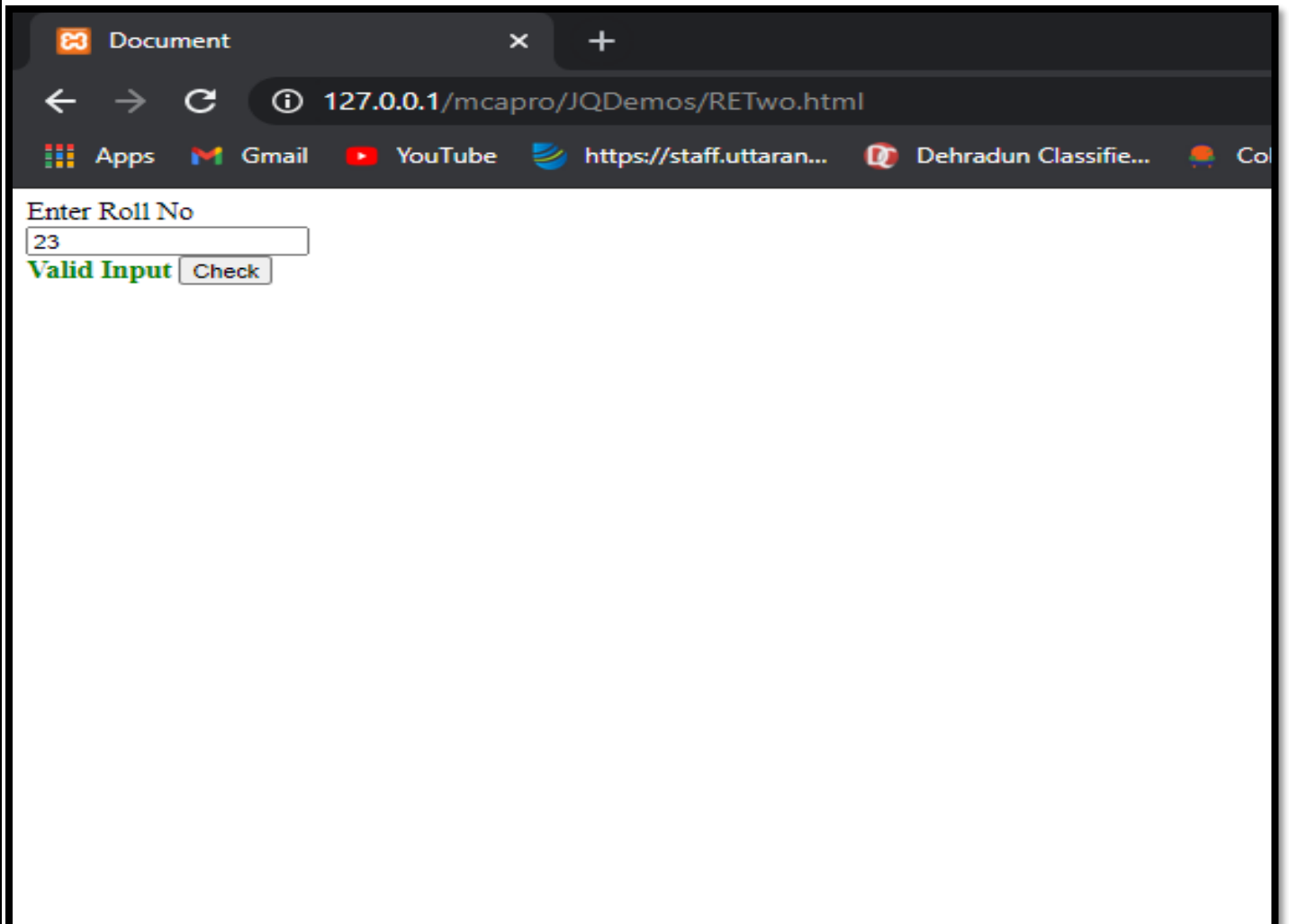
```html
      <span id="rno-error"></span>
      <button id="go" name="go">Check</button>
    </form>
</body>
<script>
   $(document).ready(function(){
      $("#go").click(function(e){
         e.preventDefault();// will no submit my form
         var p=/^[0-9]+$/;
         var rno=$("#txtrno").val();
         if(!p.test(rno))
         {
            $("#rno-error").addClass("error");
            $("#rno-error").text("Enter only digits");
         }
         else
         {
            $("#rno-error").addClass("success");
            $("#rno-error").text("Valid Input");
         }
      });
   })
</script>
</html>
```

PRACTICAL NO. 8

Write a program to show animation using JS.

CODE:

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>CSS Manipulation Using JQuery</title>
    <script src="jquery-3.6.0.min.js"></script>
</head>
<body>
    <div id="one" style="padding: 20px;background-color: cadetblue;color:black">
        <p id="p1">
            This is Para One
        </p>
        <p id="p2">
            This is Para Two
        </p>


    </div>
    <div id="two" style="padding: 20px; background-color: blueviolet; color:
aliceblue;">
        <p id="p1">
            This is Para One
```

```
            </p>
            <p id="p2">
                This is Para Two
            </p>


    </div>
    <button id="changeOne">Animate One</button>
    <button id="changeTwo">Animate Two</button>
</body>
<script>
    $(document).ready(function(){
        $("#changeOne").click(function(){
            $("#one").toggle(5000);
        });


        $("#changeTwo").click(function(){
            $("#two").toggle(2000);
        });
    });
</script>
</html>
```
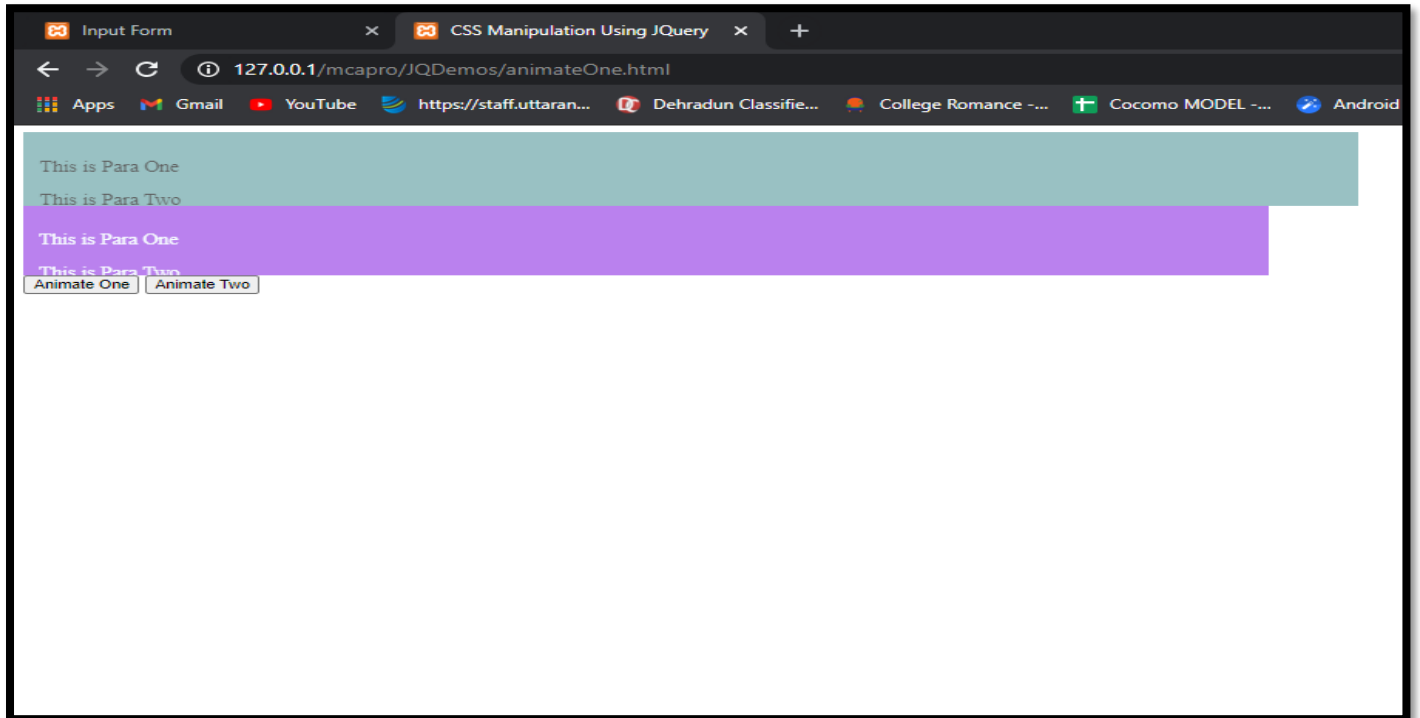
OUTPUT:

PRACTICAL NO. 9

Design a program to calculate sum of two no using JS

<u>Code:</u>

```
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Input Form</title>

</head>

<body>

    <h1 style="text-align: center;">Input Form</h1>

    <form name="frm">

        <label>First No.</label><br>
```

```html
    <input type="text" name="fno"><br>

    <label>Second No.</label><br>

    <input type="text" name="sno"><br><br>

    <label>Result </label><br>

    <input type="text" name="result"><br><br>

    <input type="button" name="add" value ="Add" onclick="doAdd()"
onmouseover="dochange()">

  </form>
  <div style="background-color:blueviolet;color: cadetblue;padding: 30px;"></div>
  <p id="data"></p>
</body>

<script>

  function doAdd()

  {

    var a=parseInt(document.frm.fno.value);

    var b=parseInt(document.frm.sno.value);
    var c=a+b
```
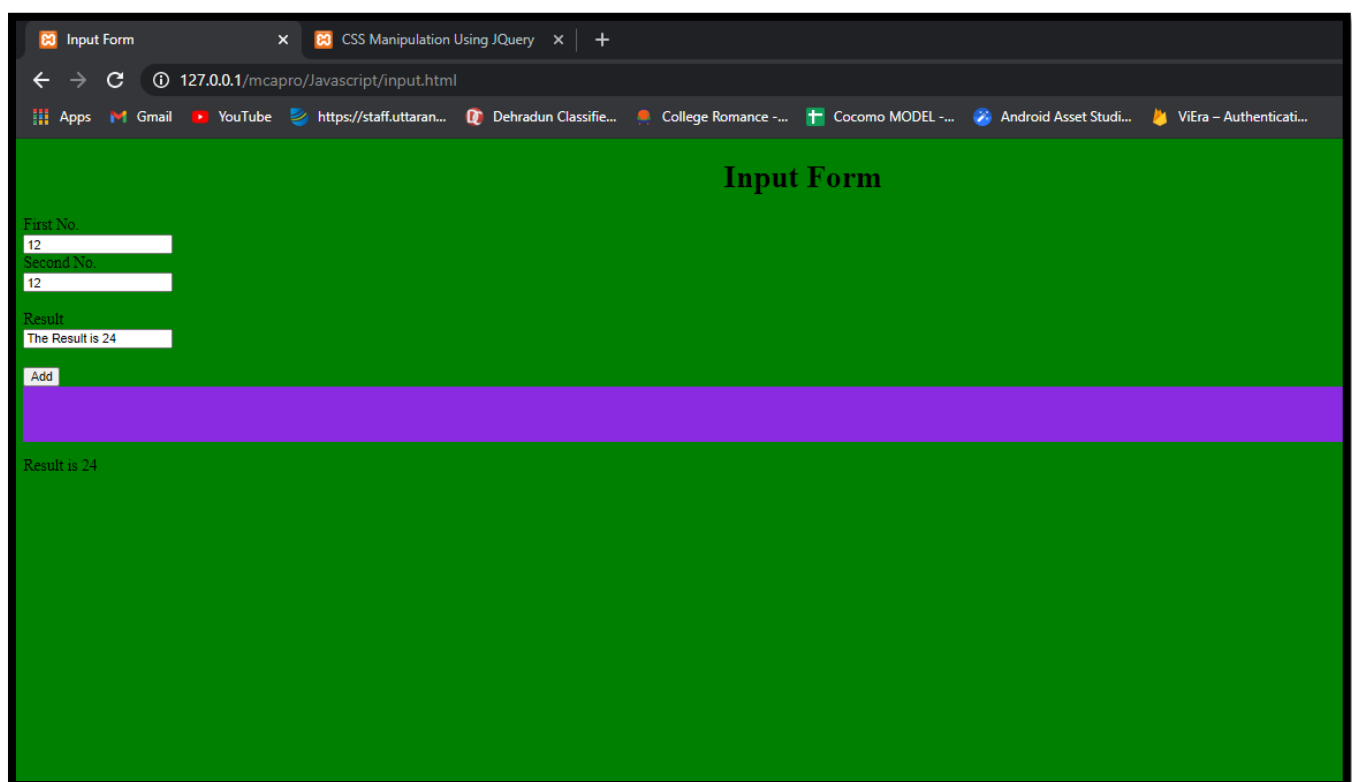
```
        //alert("The Sum is "  + c);

        document.frm.result.value="The Result is " + c;

        document.bgColor="green";

        document.getElementById("data").innerText="Result is "+c;

    }

    function dochange()

    {

        fno.bgColor="blue";

    }

</script>

</html>
```

OUTPUT:

PRACTICAL NO. 10

Design a program to print the table of given no using JS.

CODE:

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>

</body>
<script>
    function printTable()
    {
        var num=parseInt(prompt("Enter The Number"));
        var i=1;
        document.write("<table cellpadding='5' cellspacing='5' border='5'>")

        while(i<=10)
        {
            var value=num*i;
            document.write("<tr>")
            document.write("<td>" + num + " x " + i + " = " + value + "</td>");
            document.write("</tr>")
            i++;
```
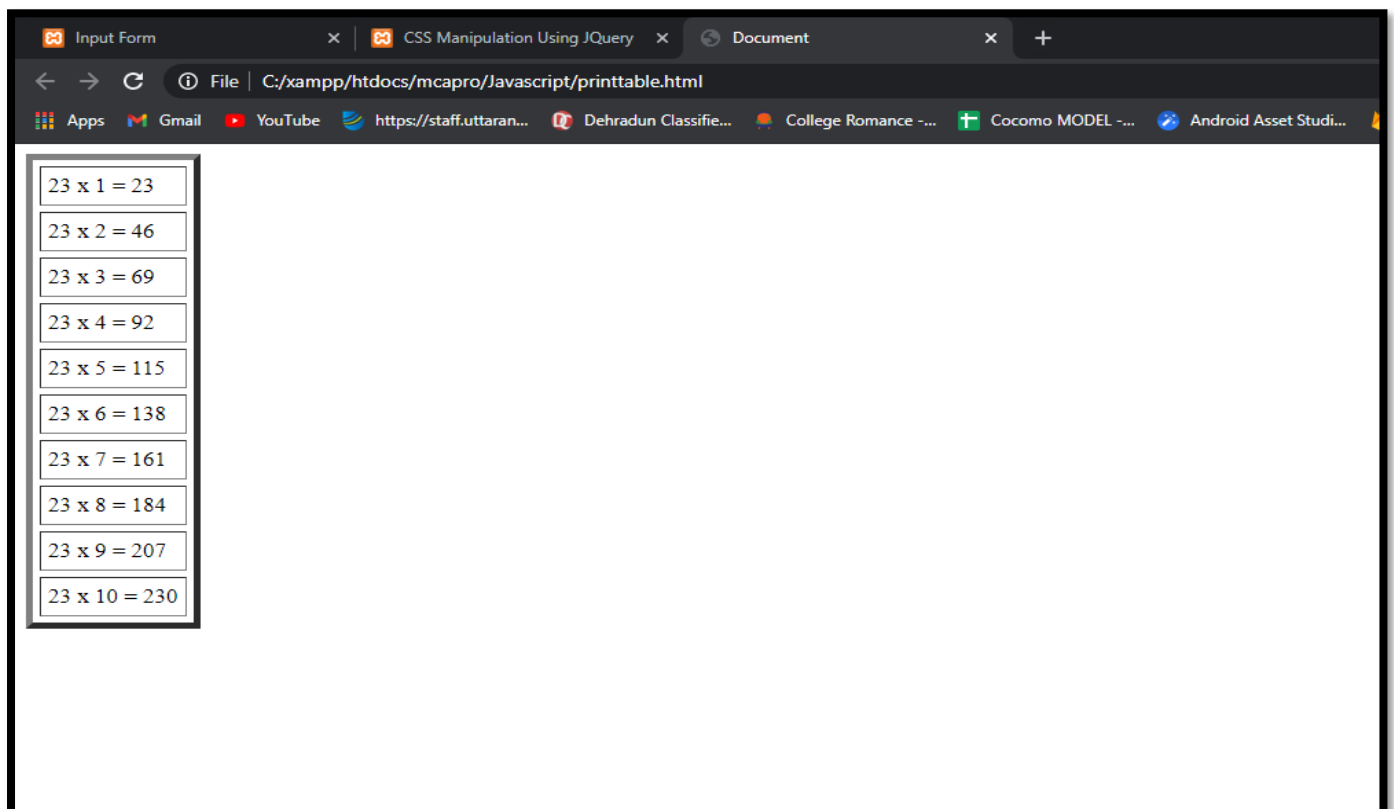
47

```
            }
        document.write("</table>")
    }
    printTable();//  Calling of Function
    </script>
</html>
```

**OUTPUT**:

PROGRAM NO. 11

Session Handling in PHP.

Problem Statement:

a) Create a MySql database ³MyDB with a table ³Usertbl´ having User_Id, User_Name, User_Email, User_Password.

b) Design a login page (login.php) with validation and create a session variable for User Name.

c) Design a webpage (dashboard.php) and test the session, if done then show content else redirect to login page.

CODE:

A)
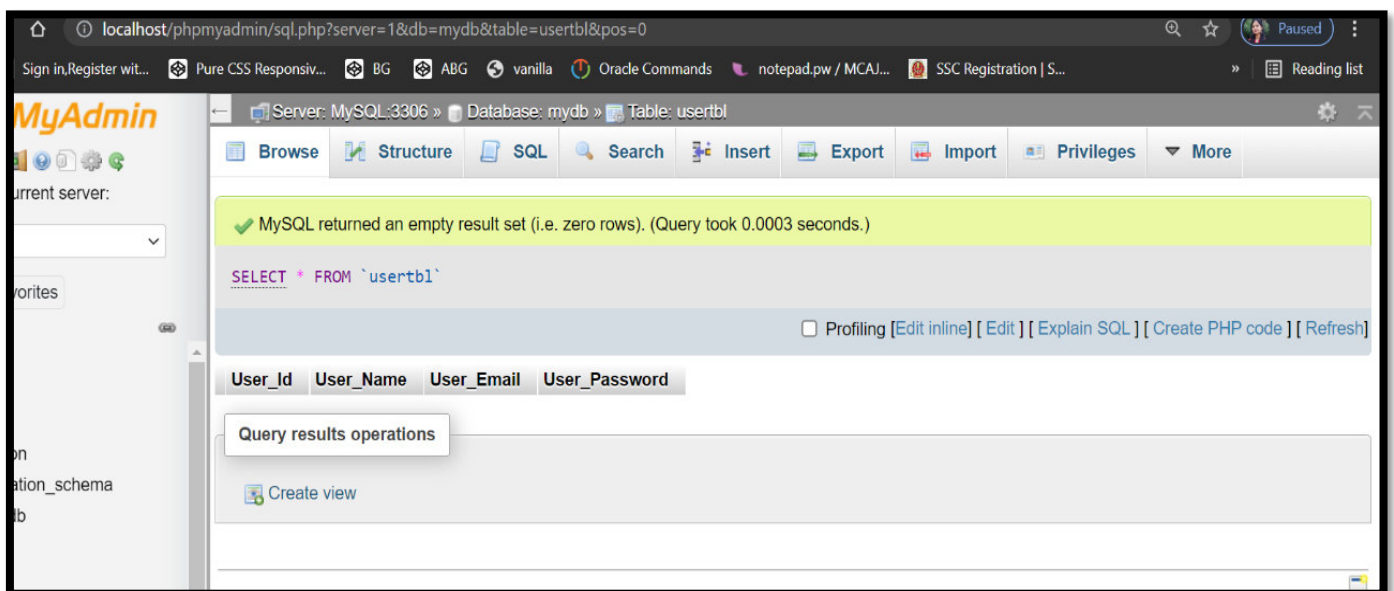
b) **index.html**

```
<html>
<head>
   <title>PHP login system</title>
   // insert style.css file inside index.html
   <link rel = "stylesheet" type = "text/css" href = "style.css">
</head>
```

```html
<body>
  <div id = "frm">
    <h1>Login</h1>
    <form name="f1" action = "authentication.php" onsubmit = "return validation()" method
= "POST">
      <p>
        <label> UserName: </label>
        <input type = "text" id ="user" name  = "user" />
      </p>
      <p>
        <label> Password: </label>
        <input type = "password" id ="pass" name  = "pass" />
      </p>
      <p>
        <input type =  "submit" id = "btn" value = "Login" />
      </p>
    </form>
  </div>
  // validation for empty field
  <script>
      function validation()
      {
        var id=document.f1.user.value;
        var ps=document.f1.pass.value;
        if(id.length=="" && ps.length=="") {
          alert("User Name and Password fields are empty");
          return false;
        }
        else
        {
          if(id.length=="") {
```

```
                    alert("User Name is empty");

                        return false;

                    }

                if (ps.length=="") {

                alert("Password field is empty");

                return false;

                }

            }

        }

    </script>

</body>

</html>
```

Style.css

```css
body{

   background: #eee;

}

#frm{

   border: solid gray 1px;

   width:25%;

   border-radius: 2px;

   margin: 120px auto;

   background: white;

   padding: 50px;

}

#btn{

   color: #fff;

   background: #337ab7;

   padding: 7px;

   margin-left: 70%;
```

51

```php
}
```

Connection.php

```php
<?php
   $host = "localhost";
   $user = "root";
   $password = ";
   $db_name = "surbhi1";


   $con = mysqli_connect($host, $user, $password, $db_name);
   if(mysqli_connect_errno()) {
      die("Failed to connect with MySQL: ". mysqli_connect_error());
   }
?>
```

Authentication.php

```php
<?php
   include('connection.php');
   $username = $_POST['user'];
   $password = $_POST['pass'];


      //to prevent from mysqli injection
      $username = stripcslashes($username);
      $password = stripcslashes($password);
      $username = mysqli_real_escape_string($con, $username);
      $password = mysqli_real_escape_string($con, $password);


      $sql = "select *from login where username = '$username' and password = '$password'";
      $result = mysqli_query($con, $sql);
      $row = mysqli_fetch_array($result, MYSQLI_ASSOC);
      $count = mysqli_num_rows($result);
```
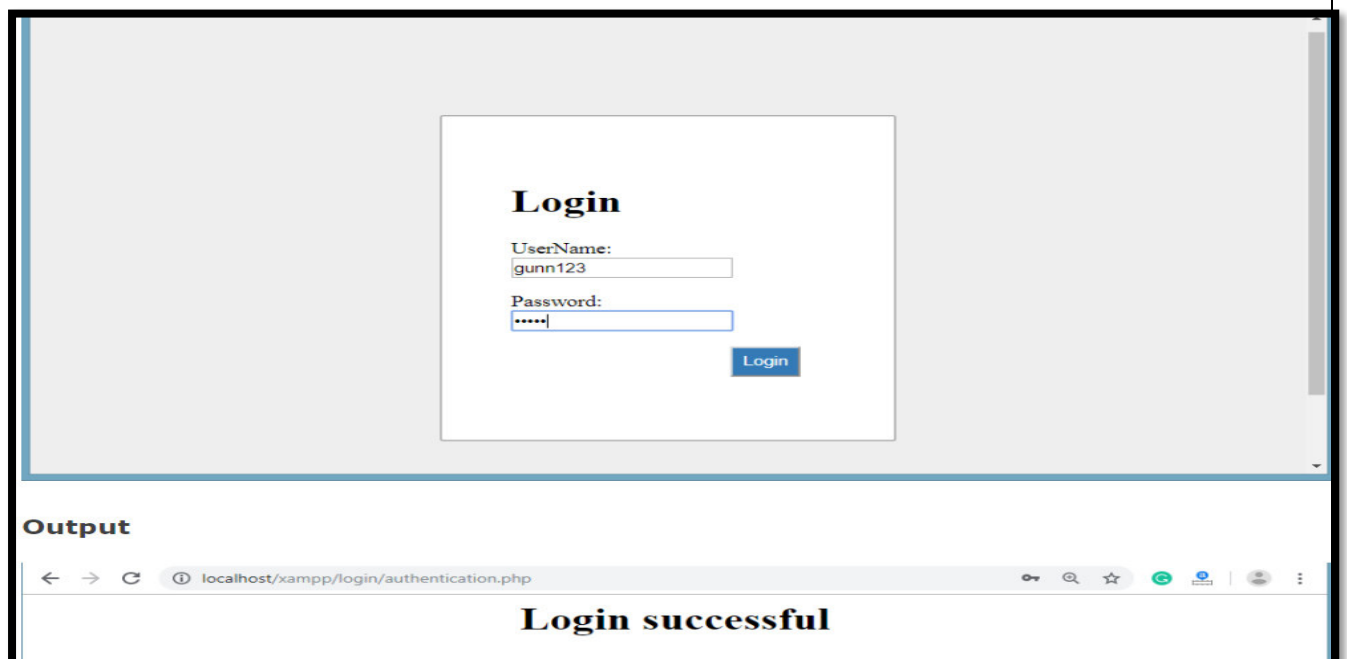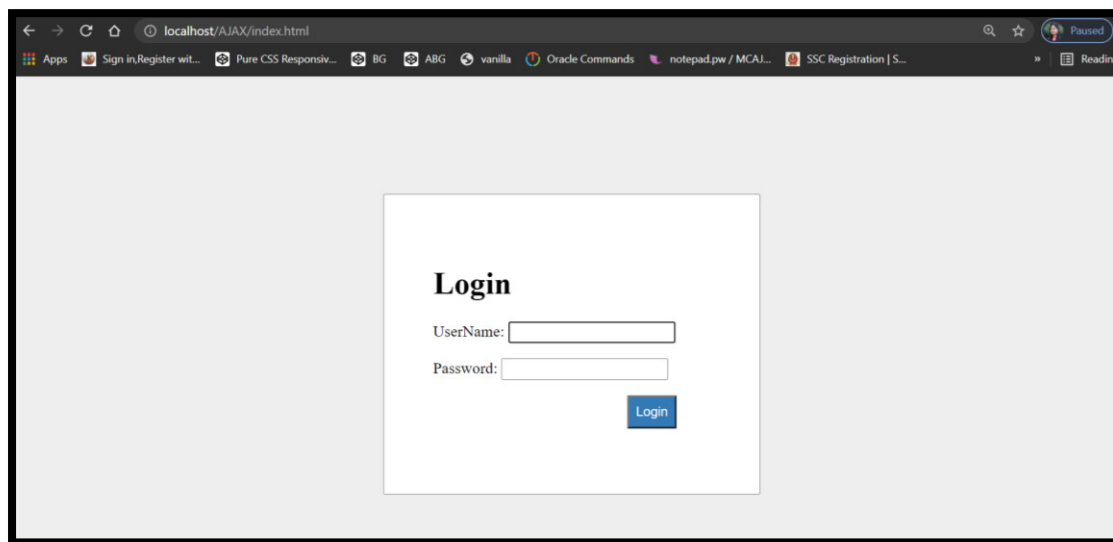
```
if($count == 1){

    echo "<h1><center> Login successful </center></h1>";

}
else{

    echo "<h1> Login failed. Invalid username or password.</h1>";

}
?>
```

OUTPUT:

PROGRAM NO. 12

Create a HTML form to accept Student details (RollNo, Name, DOB , Photo) and perform following

Problem Statement: a) Design a HTML form with validation thru AJAX.

b) Create PHP script to display the size, name , type of the image uploaded.

c) Create PHP script for validation of the uploaded file as per following criteria: file size (50kb) and file type as JPG.

CODE:

Index.php

```php
<?php
if (isset($_POST["upload"])) {

  // Get Image Dimension
  $fileinfo = @getimagesize($_FILES["file-input"]["tmp_name"]);
  $width = $fileinfo[0];
  $height = $fileinfo[1];


  $allowed_image_extension = array(
    "png",
    "jpg",
    "jpeg"
  );

  // Get image file extension
  $file_extension = pathinfo($_FILES["file-input"]["name"], PATHINFO_EXTENSION);

  // Validate file input to check if is not empty
  if (! file_exists($_FILES["file-input"]["tmp_name"])) {
    $response = array(
        "type" => "error",
```

```php
      "message" => "Choose image file to upload."
    );
  }   // Validate file input to check if is with valid extension
  else if (! in_array($file_extension, $allowed_image_extension)) {
    $response = array(
      "type" => "error",
      "message" => "Upload valiid images. Only PNG and JPEG are allowed."
    );
    echo $result;
  }   // Validate image file size
  else if (($_FILES["file-input"]["size"] > 2000000)) {
    $response = array(
      "type" => "error",
      "message" => "Image size exceeds 2MB"
    );
  }   // Validate image file dimension
  else if ($width > "300" || $height > "200") {
    $response = array(
      "type" => "error",
      "message" => "Image dimension should be within 300X200"
    );
  } else {
    $target = "image/" . basename($_FILES["file-input"]["name"]);
    if (move_uploaded_file($_FILES["file-input"]["tmp_name"], $target)) {
      $response = array(
        "type" => "success",
        "message" => "Image uploaded successfully."
      );
    } else {
      $response = array(
```

```php
                    "type" => "error",

                    "message" => "Problem in uploading image files."
                );
            }
        }
    }
?>
```
```html
<html>
<head>
<title>PHP Image Upload with Size Type Dimension Validation</title>
<link href="style.css" rel="stylesheet" type="text/css">
</head>
<body>
    <h2>PHP Image Upload with Size Type Dimension Validation</h2>
    <form id="frm-image-upload" action="index.php" name='img'
        method="post" enctype="multipart/form-data">
        <div class="form-row">
            <div>Choose Image file:</div>
            <div>
                <input type="file" class="file-input" name="file-input">
            </div>
        </div>


        <div class="button-row">
            <input type="submit" id="btn-submit" name="upload"
                value="Upload">
        </div>
    </form>
    <?php if(!empty($response)) { ?>
    <div class="response <?php echo $response["type"]; ?>"><?php echo
$response["message"]; ?></div>
```

56

```php
    <?php }?>
</body>
</html>
```

Style.css

```css
body{
   font-family: Arial;
   width: 550px;
}
#frm-image-upload{
   padding: 0px;
   background-color: lightblue;
}


.form-row {
   padding: 20px;
   border-top: #8aacb7 1px solid;
}


.button-row {
   padding: 10px 20px;
   border-top: #8aacb7 1px solid;
}
.error {
   background: #fdcdcd;
   border: #ecc0c1 1px solid;
}


.success {
   background: #c5f3c3;
   border: #bbe6ba 1px solid;
```
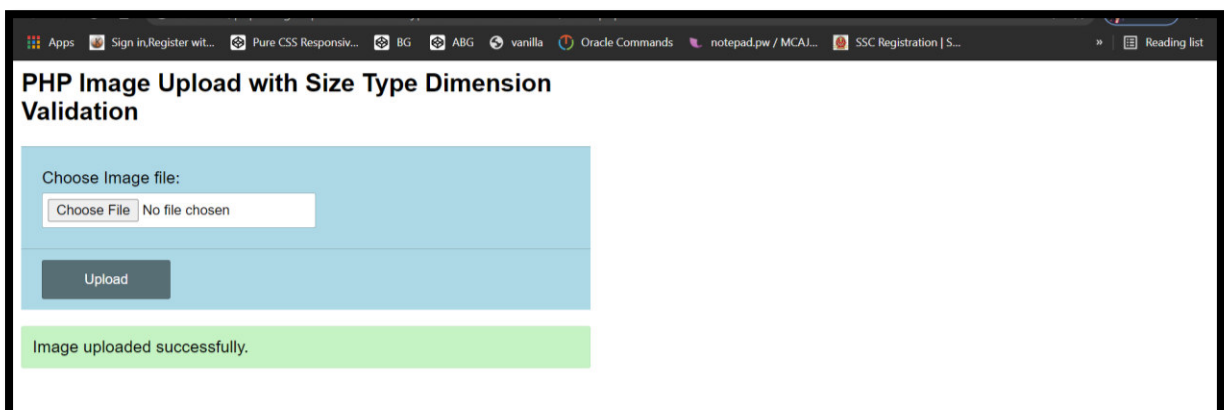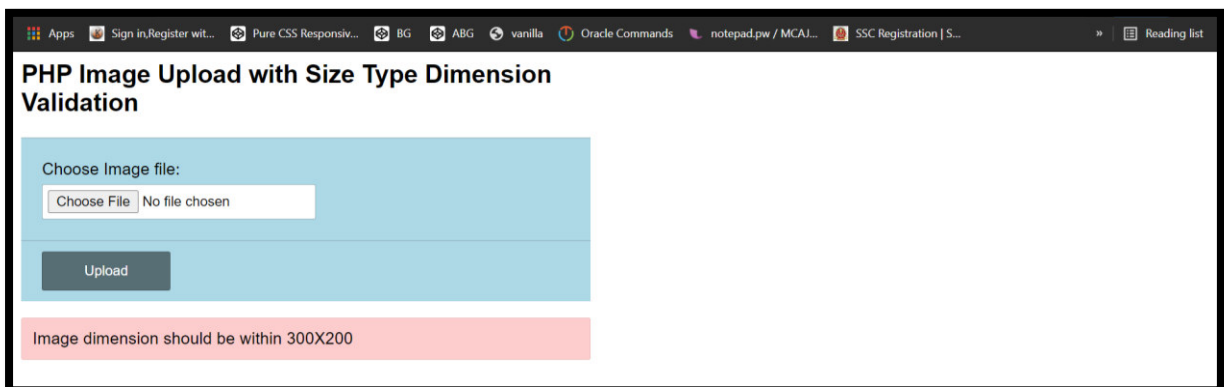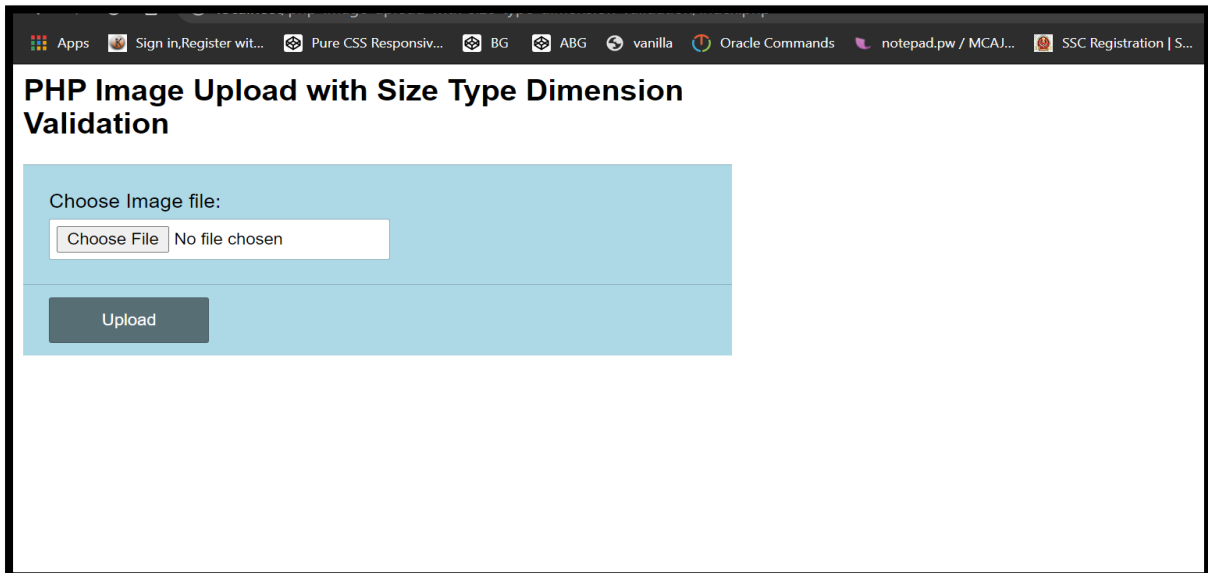
}

OUTPUT:

PROGRAM NO. 13

To demonstrate the concept of class and object with constructor and destructor.
Problem Statement:

a) Create web form asking the details of UU student (Roll-No, Name, DOB, Age, Course) and submit the form.(redirected to process.php).

b) Create process.php script having class Student (Roll-No, Name, DOB, Age, Course), initialize the data-members using PHP parameterized constructor and show details using display().

Class should have destructor function.

CODE:

Step 1

CREATE TABLE IF NOT EXISTS `users` (

 `id` int(11) NOT NULL AUTO_INCREMENT,

 `username` varchar(30) NOT NULL,

 `emailid` varchar(30) NOT NULL,

 `password` varchar(30) NOT NULL,

  PRIMARY KEY (`id`)

) ENGINE=MyISAM DEFAULT CHARSET=latin1 AUTO_INCREMENT=3 ;

Step 2

index.php

```
<!DOCTYPE html>
 <html lang="en" class="no-js">
 <head>
     <meta charset="UTF-8" />
     <title>Login and Registration Form with HTML5 and CSS3</title>
     <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```html
    <meta name="description" content="Login and Registration Form with HTML5 and
CSS3" />

    <meta name="keywords" content="html5, css3, form, switch, animation, :target,
pseudo-class" />

    <meta name="author" content="Codrops" />

    <link rel="shortcut icon" href="../favicon.ico">

    <link rel="stylesheet" type="text/css" href="css/demo.css" />

    <link rel="stylesheet" type="text/css" href="css/style2.css" />

    <link rel="stylesheet" type="text/css" href="css/animate-custom.css" />

  </head>

  <body>

    <div class="container">

      <header>

        <h1>Login and Registration Form  </h1>

      </header>

      <section>

        <div id="container_demo" >

          <a class="hiddenanchor" id="toregister"></a>

          <a class="hiddenanchor" id="tologin"></a>

          <div id="wrapper">

            <div id="login" class="animate form">

              <form name="login" method="post" action="">

                <h1>Log in</h1>

                <p>

                  <label for="emailsignup" class="youmail" data-icon="e" > Your
email</label>

                  <input id="emailsignup" name="emailid" required="required"
type="email" placeholder="mysupermail@mail.com"/>

                </p>

                <p>
```
60

```html
                    <label for="password" class="youpasswd" data-icon="p"> Your
password </label>

                    <input id="password" name="password" required="required"
type="password" placeholder="eg. X8df!90EO" />

                </p>

                <p class="keeplogin">

                    <input type="checkbox" name="loginkeeping" id="loginkeeping"
value="loginkeeping" />

                    <label for="loginkeeping">Keep me logged in</label>

                </p>

                <p class="login button">

                    <input type="submit" name="login" value="Login" />

                </p>

                <p class="change_link">

                    Not a member yet ?

                    <a href="#toregister" class="to_register">Join us</a>

                </p>

            </form>

        </div>

        <div id="register" class="animate form">

            <form name="login" method="post" action="">

                <h1> Sign up </h1>

                <p>

                    <label for="usernamesignup" class="uname" data-icon="u">Your
username</label>

                    <input id="usernamesignup" name="username" required="required"
type="text" placeholder="mysuperusername690" />

                </p>

                <p>

                    <label for="emailsignup" class="youmail" data-icon="e" > Your
email</label>
```

61

```html
                    <input id="emailsignup" name="emailid" required="required"
type="email" placeholder="mysupermail@mail.com"/>

                </p>

                <p>

                    <label for="passwordsignup" class="youpasswd" data-icon="p">Your
password </label>

                    <input id="passwordsignup" name="password" required="required"
type="password" placeholder="eg. X8df!90EO"/>

                </p>

                <p>

                    <label for="passwordsignup_confirm" class="youpasswd" data-
icon="p">Please confirm your password </label>

                    <input id="passwordsignup_confirm" name="confirm_password"
required="required" type="password" placeholder="eg. X8df!90EO"/>

                </p>

                <p class="signin button">

                    <input type="submit" name="register" value="Sign up"/>

                </p>

                <p class="change_link">

                    Already a member ?

                    <a href="#tologin" class="to_register"> Go and log in </a>

                </p>

            </form>

        </div>


    </div>

    </div>

    </section>

    </div>

  </body>

</html>
```

config.php

```php
<?php
  define("DB_HOST", 'localhost');
  define("DB_USER", 'root');
  define("DB_PASSWORD", '');
  define("DB_DATABSE", 'mypratice');
?>
```

dbConnect.php

```php
<?php
  class dbConnect {
    function __construct() {
      require_once('config.php');
      $conn = mysql_connect(DB_HOST, DB_USER, DB_PASSWORD);
      mysql_select_db(DB_DATABSE, $conn);
      if(!$conn)// testing the connection
      {
        die ("Cannot connect to the database");
      }
      return $conn;
    }
    public function Close(){
      mysql_close();
    }
  }
?>
```

dbFunction.php

```php
<?php
require_once 'dbConnect.php';
session_start();
```

```php
class dbFunction {

    function __construct() {

        // connecting to database
        $db = new dbConnect();;

    }
    // destructor
    function __destruct() {

    }
    public function UserRegister($username, $emailid, $password){
        $password = md5($password);
        $qr = mysql_query("INSERT INTO users(username, emailid, password)
values('".$username."','".$emailid."','".$password."')") or die(mysql_error());
        return $qr;

    }
    public function Login($emailid, $password){
        $res = mysql_query("SELECT * FROM users WHERE emailid = '".$emailid."' AND
password = '".md5($password)."'");
        $user_data = mysql_fetch_array($res);
        //print_r($user_data);
        $no_rows = mysql_num_rows($res);

        if ($no_rows == 1)
        {

            $_SESSION['login'] = true;
            $_SESSION['uid'] = $user_data['id'];
```

```php
            $_SESSION['username'] = $user_data['username'];

            $_SESSION['email'] = $user_data['emailid'];

            return TRUE;

        }

        else

        {

            return FALSE;

        }

    }

    public function isUserExist($emailid){

        $qr = mysql_query("SELECT * FROM users WHERE emailid = '".$emailid."'");

        echo $row = mysql_num_rows($qr);

        if($row > 0){

            return true;

        } else {

            return false;

        }

    }

}
?>


index.php
<?php
    include_once('dbFunction.php');


    $funObj = new dbFunction();
    if($_POST['login']){

        $emailid = $_POST['emailid'];

        $password = $_POST['password'];

        $user = $funObj->Login($emailid, $password);
```

```php
    if ($user) {
        // Registration Success
        header("location:home.php");
    } else {
        // Registration Failed
        echo "<script>alert('Emailid / Password Not Match')</script>";
    }
}
if($_POST['register']){
    $username = $_POST['username'];
    $emailid = $_POST['emailid'];
    $password = $_POST['password'];
    $confirmPassword = $_POST['confirm_password'];
    if($password == $confirmPassword){
        $email = $funObj->isUserExist($emailid);
        if(!$email){
            $register = $funObj->UserRegister($username, $emailid, $password);
            if($register){
                echo "<script>alert('Registration Successful')</script>";
            }else{
                echo "<script>alert('Registration Not Successful')</script>";
            }
        } else {
            echo "<script>alert('Email Already Exist')</script>";
        }
    } else {
        echo "<script>alert('Password Not Match')</script>";


    }
}
```

66

```html
?>
<!DOCTYPE html>
<html lang="en" class="no-js">
<head>
    <meta charset="UTF-8" />
    <title>Login and Registration Form with HTML5 and CSS3</title>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <meta name="description" content="Login and Registration Form with HTML5 and CSS3" />
    <meta name="keywords" content="html5, css3, form, switch, animation, :target, pseudo-class" />
    <meta name="author" content="Codrops" />
    <link rel="shortcut icon" href="../favicon.ico">
    <link rel="stylesheet" type="text/css" href="css/demo.css" />
    <link rel="stylesheet" type="text/css" href="css/style2.css" />
    <link rel="stylesheet" type="text/css" href="css/animate-custom.css" />
</head>
<body>
    <div class="container">
        <header>
            <h1>Login and Registration Form  </h1>
        </header>
        <section>
            <div id="container_demo" >

                <a class="hiddenanchor" id="toregister"></a>
                <a class="hiddenanchor" id="tologin"></a>
                <div id="wrapper">
                    <div id="login" class="animate form">
                        <form name="login" method="post" action="">
                            <h1>Log in</h1>
```

```html
                    <p>

                        <label for="emailsignup" class="youmail" data-icon="e" > Your email</label>

                        <input id="emailsignup" name="emailid" required="required" type="email" placeholder="mysupermail@mail.com"/>

                    </p>

                    <p>

                        <label for="password" class="youpasswd" data-icon="p"> Your password </label>

                        <input id="password" name="password" required="required" type="password" placeholder="eg. X8df!90EO" />

                    </p>

                    <p class="keeplogin">

                        <input type="checkbox" name="loginkeeping" id="loginkeeping" value="loginkeeping" />

                        <label for="loginkeeping">Keep me logged in</label>

                    </p>

                    <p class="login button">

                        <input type="submit" name="login" value="Login" />

                    </p>

                    <p class="change_link">

                        Not a member yet ?

                        <a href="#toregister" class="to_register">Join us</a>

                    </p>

                </form>

            </div>


            <div id="register" class="animate form">

                <form name="login" method="post" action="">

                    <h1> Sign up </h1>

                    <p>
```

```html
                <label for="usernamesignup" class="uname" data-icon="u">Your
username</label>

                <input id="usernamesignup" name="username" required="required"
type="text" placeholder="mysuperusername690" />

                </p>

                <p>

                <label for="emailsignup" class="youmail" data-icon="e" > Your
email</label>

                <input id="emailsignup" name="emailid" required="required"
type="email" placeholder="mysupermail@mail.com"/>

                </p>

                <p>

                <label for="passwordsignup" class="youpasswd" data-icon="p">Your
password </label>

                <input id="passwordsignup" name="password" required="required"
type="password" placeholder="eg. X8df!90EO"/>

                </p>

                <p>

                <label for="passwordsignup_confirm" class="youpasswd" data-
icon="p">Please confirm your password </label>

                <input id="passwordsignup_confirm" name="confirm_password"
required="required" type="password" placeholder="eg. X8df!90EO"/>

                </p>

                <p class="signin button">

                <input type="submit" name="register" value="Sign up"/>

                </p>

                <p class="change_link">

                Already a member ?

                <a href="#tologin" class="to_register"> Go and log in </a>

                </p>

            </form>

        </div>
```

```
            </div>

          </div>

        </section>

      </div>

    </body>

</html>


home.php

<?php

  include_once('dbFunction.php');

  if($_POST['welcome']){

    // remove all session variables

    session_unset();


    // destroy the session

    session_destroy();

  }

  if(!($_SESSION)){

    header("Location:index.php");

  }

?>

<!DOCTYPE html>

 <html lang="en" class="no-js">

 <head>

     <meta charset="UTF-8" />

     <title>Login and Registration Form with HTML5 and CSS3</title>

     <meta name="viewport" content="width=device-width, initial-scale=1.0">

     <meta name="description" content="Login and Registration Form with HTML5 and
CSS3" />

     <meta name="keywords" content="html5, css3, form, switch, animation, :target,
pseudo-class" />
```

```html
    <meta name="author" content="Codrops" />
    <link rel="shortcut icon" href="../favicon.ico">
    <link rel="stylesheet" type="text/css" href="css/demo.css" />
    <link rel="stylesheet" type="text/css" href="css/style2.css" />
    <link rel="stylesheet" type="text/css" href="css/animate-custom.css" />
</head>
<body>
    <div class="container">
        <header>
            <h1>Welcome Form  </h1>
        </header>
        <section>
            <div id="container_demo" >

                <a class="hiddenanchor" id="toregister"></a>
                <a class="hiddenanchor" id="tologin"></a>
                <div id="wrapper">
                    <div id="login" class="animate form">
                        <form name="login" method="post" action="">
                            <h1>Welcome </h1>
                            <p>
                                <label for="emailid" class="uname"   > Your Name </label>
                                <?=$_SESSION['username']?>

                            </p>
                            <p>
                                <label for="email" class="youpasswd"  > Your Email </label>
                                <?=$_SESSION['email']?>
                            </p>
```

71

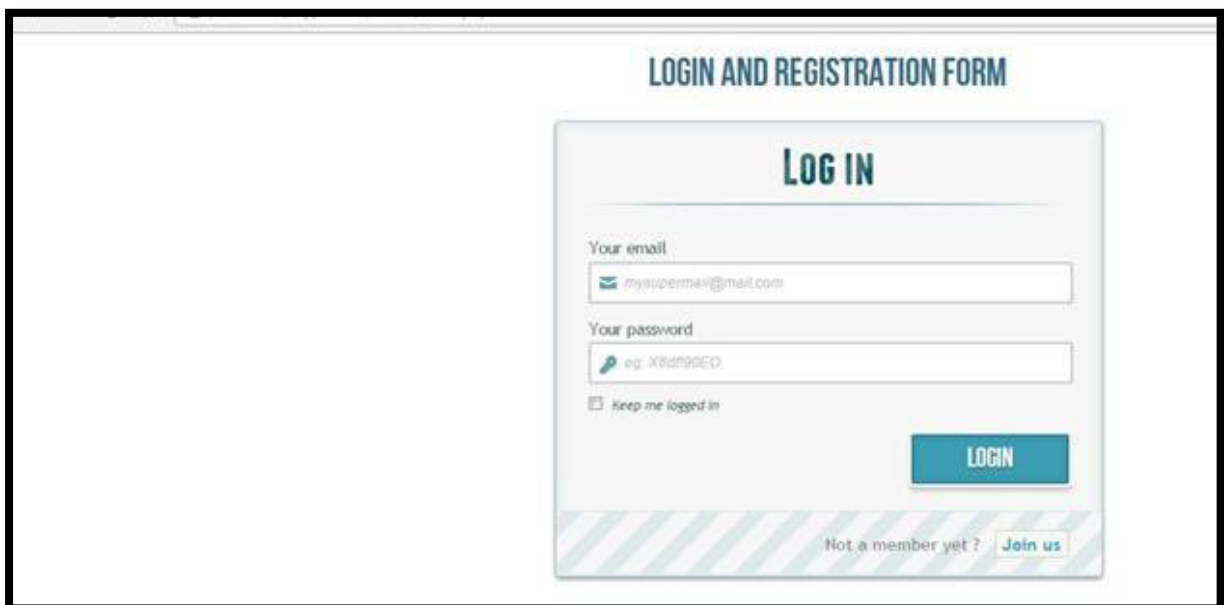```
                    <p class="login button">

                        <input type="submit" name="welcome" value="Logout" />

                    </p>

                </form>

            </div>

        </div>

    </div>

</section>

    </div>

  </body>

</html>
```

## Output :

**1- Login Screen**



**2- Registration Screen**

**3- Home Screen**

# PROGRAM NO. 14

**To demonstrate exception handling. Problem Statement:**

a) Create PHP script to demonstrate exception handling.

b) Create a PHP script to implement custom exception.

c) Design a web form asking username and email id and validate the email id with the help of exception handling

A) Create PHP script to demonstrate exception handling

**CODE:**

```php
<?php
function division($dividend, $divisor){        // Throw exception if divisor is zero
    if($divisor == 0){
        throw new Exception('Division by zero.');
    } else{
        $quotient = $dividend / $divisor;
        echo "<p>$dividend / $divisor = $quotient</p>";
    }
}

try{
    division(10, 2);
    division(30, -4);
    division(15, 0);

    // If exception is thrown following line won't execute
    echo '<p>All divisions performed successfully.</p>';
} catch(Exception $e){
    // Handle the exception
    echo "<p>Caught exception: " . $e->getMessage() . "</p>";
}

// Continue execution
echo "<p>Hello World!</p>";        ?>
```

OUTPUT:

10 / 2 = 5

30 / -4 = -7.5

Caught exception: Division by zero.

Hello World!
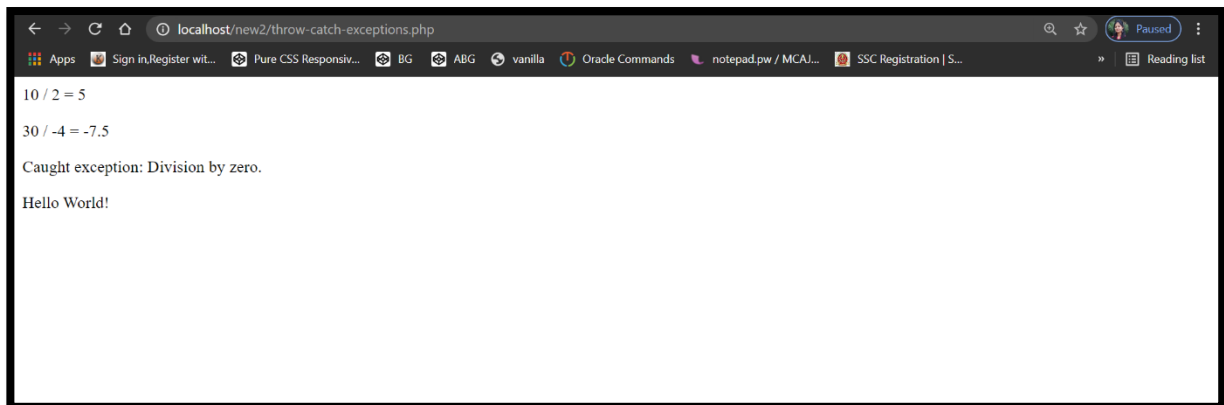
exception-class-methods.php

```php
<?php
// Turn off default error reporting
error_reporting(0);

try{
   $file = "somefile.txt";

   // Attempt to open the file
   $handle = fopen($file, "r");
   if(!$handle){
      throw new Exception("Cannot open the file!", 5);
   }

   // Attempt to read the file contents
   $content = fread($handle, filesize($file));
   if(!$content){
      throw new Exception("Could not read file!", 10);
   }

   // Closing the file handle
   fclose($handle);

   // Display file contents
   echo $content;
} catch(Exception $e){
   echo "<h3>Caught Exception!</h3>";
   echo "<p>Error message: " . $e->getMessage() . "</p>";
   echo "<p>File: " . $e->getFile() . "</p>";
   echo "<p>Line: " . $e->getLine() . "</p>";
   echo "<p>Error code: " . $e->getCode() . "</p>";
   echo "<p>Trace: " . $e->getTraceAsString() . "</p>";
}
?>
```
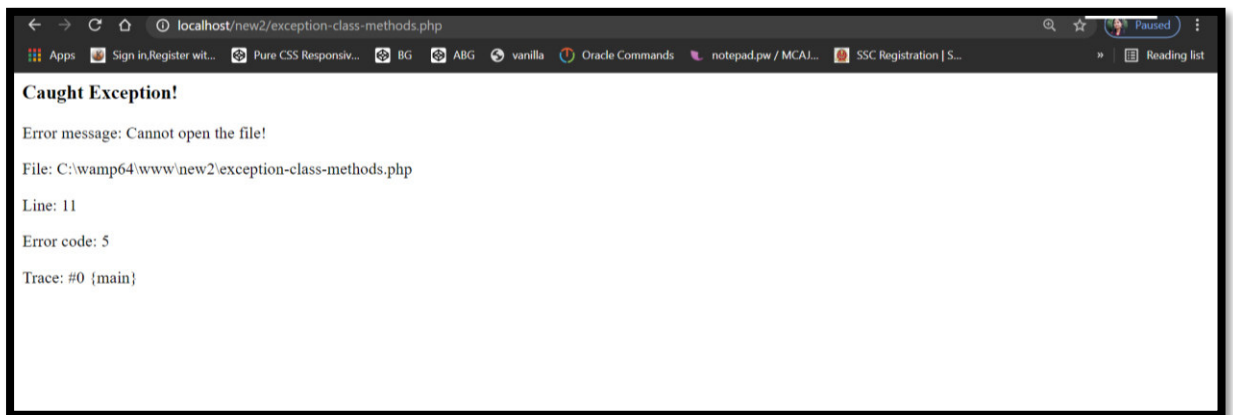
OUTPUT:

b) Create a PHP script to implement custom exception.

```php
<?php
// Extending the Exception class
class EmptyEmailException extends Exception {}
class InvalidEmailException extends Exception {}

$email = "someuser@example..com";

try{
   // Throw exception if email is empty
   if($email == ""){
      throw new EmptyEmailException("<p>Please enter your E-mail address!</p>");
   }

   // Throw exception if email is not valid
   if(filter_var($email, FILTER_VALIDATE_EMAIL) === FALSE) {
      throw new InvalidEmailException("<p><b>$email</b> is not a valid E-mail
address!</p>");
   }

   // Display success message if email is valid
   echo "<p>SUCCESS: Email validation successful.</p>";
} catch(EmptyEmailException $e){
   echo $e->getMessage();
} catch(InvalidEmailException $e){
   echo $e->getMessage();
}
?>
```

OUTPUT:
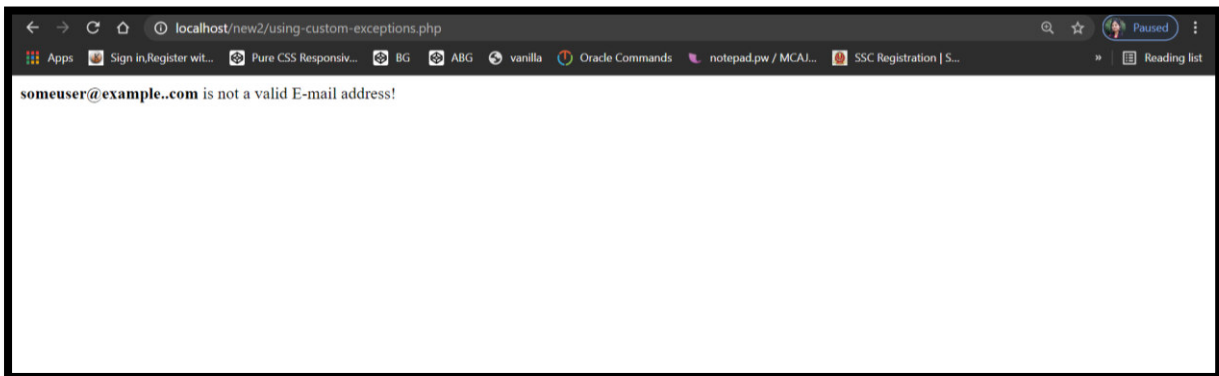
Setting a Global Exception Handler

```php
<?php
function handleUncaughtException($e){
   // Display generic error message to the user
   echo "Opps! Something went wrong. Please try again, or contact us if the problem
persists.";

   // Construct the error string
   $error = "Uncaught Exception: " . $message = date("Y-m-d H:i:s - ");
   $error .= $e->getMessage() . " in file " . $e->getFile() . " on line " . $e->getLine() .
"\n";

   // Log details of error in a file
   error_log($error, 3, "var/log/exceptionLog.log");
}

// Register custom exception handler
set_exception_handler("handleUncaughtException");

// Throw an exception
throw new Exception("Testing Exception!");
?>
```

c) Design a web form asking username and email id and validate the email id with the help of exception handling

```html
<!DOCTYPE HTML>
<html>
<head>
<style>
.error {color: #FF0000;}
</style>
</head>
<body>
```

77

```php
<?php
// define variables and set to empty values
$nameErr = $emailErr = $genderErr = $websiteErr = "";
$name = $email = $gender = $comment = $website = "";

if ($_SERVER["REQUEST_METHOD"] == "POST") {
  if (empty($_POST["name"])) {
    $nameErr = "Name is required";
  } else {
    $name = test_input($_POST["name"]);
    // check if name only contains letters and whitespace
    if (!preg_match("/^[a-zA-Z-' ]*$/",$name)) {
      $nameErr = "Only letters and white space allowed";
    }
  }

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

  if (empty($_POST["website"])) {
    $website = "";
  } else {
    $website = test_input($_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";
    }
  }

  if (empty($_POST["comment"])) {
    $comment = "";
  } else {
    $comment = test_input($_POST["comment"]);
  }

  if (empty($_POST["gender"])) {
    $genderErr = "Gender is required";
  } else {
```

78

```php
    $gender = test_input($_POST["gender"]);
  }
}

function test_input($data) {
  $data = trim($data);
  $data = stripslashes($data);
  $data = htmlspecialchars($data);
  return $data;
}
?>
```

```html
<h2>PHP Form Validation Example</h2>
<p><span class="error">* required field</span></p>
<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>
  Website: <input type="text" name="website">
  <span class="error"><?php echo $websiteErr;?></span>
  <br><br>
  Comment: <textarea name="comment" rows="5" cols="40"></textarea>
  <br><br>
  Gender:
  <input type="radio" name="gender" value="female">Female
  <input type="radio" name="gender" value="male">Male
  <input type="radio" name="gender" value="other">Other
  <span class="error">* <?php echo $genderErr;?></span>
  <br><br>
  <input type="submit" name="submit" value="Submit">
</form>
```

```php
<?php
echo "<h2>Your Input:</h2>";
echo $name;
echo "<br>";
echo $email;
echo "<br>";
echo $website;
echo "<br>";
echo $comment;
echo "<br>";
```

```
echo $gender;
?>

</body>
</html>
```

OUTPUT:

PROGRAM NO. 15

To implement PHP and MySql concepts using MySqli / PDO and AJAX.

Problem Statement:

a) Create a database (MyDB) and table (producttbl) having product_id [primary key], product_name, product_size, product_price.

b) Create web form (insert.php) and PHP script to insert product details.

c) Create a web page (show.php) to fetch records form database and show in well formatted table.

d) Create a web page (update.php) to update the product details.

e) Create a web page (delete.php)to delete product and redirect to show.php´page.

CODE:

Creating the Database Table

CREATE TABLE employees (id INT NOT NULL PRIMARY KEY AUTO_INCREMENT, name VARCHAR(100) NOT NULL, address VARCHAR(255) NOT NULL, salary INT(10) NOT NULL);

```
mysql> CREATE TABLE employees (
    ->      id INT NOT NULL PRIMARY KEY AUTO_INCREMENT,
    ->      name VARCHAR(100) NOT NULL,
    ->      address VARCHAR(255) NOT NULL,
    ->      salary INT(10) NOT NULL
    -> );
Query OK, 0 rows affected (0.01 sec)
```

Creating the Config File

```php
<?php
/* Database credentials. Assuming you are running MySQL
server with default setting (user 'root' with no password) */
define('DB_SERVER', 'localhost');
define('DB_USERNAME', 'root');
define('DB_PASSWORD', '');
define('DB_NAME', 'surbhi');
```

```php
/* Attempt to connect to MySQL database */
$link = mysqli_connect(DB_SERVER, DB_USERNAME, DB_PASSWORD, DB_NAME);

// Check connection
if($link === false){
    die("ERROR: Could not connect. " . mysqli_connect_error());
}
?>
```

Creating the Landing Page

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Dashboard</title>
    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/font-
awesome/4.7.0/css/font-awesome.min.css">
    <script src="https://code.jquery.com/jquery-3.5.1.min.js"></script>
    <script
src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js"></script>
    <script
src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
    <style>
        .wrapper{
            width: 600px;
            margin: 0 auto;
        }
        table tr td:last-child{
            width: 120px;
        }
```

```
    </style>
    <script>
      $(document).ready(function(){
        $('[data-toggle="tooltip"]').tooltip();
      });
    </script>
</head>
<body>
    <div class="wrapper">
        <div class="container-fluid">
            <div class="row">
                <div class="col-md-12">
                    <div class="mt-5 mb-3 clearfix">
                        <h2 class="pull-left">Employees Details</h2>
                        <a href="create.php" class="btn btn-success pull-right"><i class="fa fa-
plus"></i> Add New Employee</a>
                    </div>
                    <?php
                    // Include config file
                    require_once "config.php";

                    // Attempt select query execution
                    $sql = "SELECT * FROM employees";
                    if($result = mysqli_query($link, $sql)){
                        if(mysqli_num_rows($result) > 0){
                            echo '<table class="table table-bordered table-striped">';
                                echo "<thead>";
                                    echo "<tr>";
                                        echo "<th>#</th>";
                                        echo "<th>Name</th>";
                                        echo "<th>Address</th>";
```

83

```php
                echo "<th>Salary</th>";
                echo "<th>Action</th>";
              echo "</tr>";
            echo "</thead>";
            echo "<tbody>";
            while($row = mysqli_fetch_array($result)){
              echo "<tr>";
                echo "<td>" . $row['id'] . "</td>";
                echo "<td>" . $row['name'] . "</td>";
                echo "<td>" . $row['address'] . "</td>";
                echo "<td>" . $row['salary'] . "</td>";
                echo "<td>";
                    echo '<a href="read.php?id='. $row['id'] .'" class="mr-3"
title="View Record" data-toggle="tooltip"><span class="fa fa-eye"></span></a>';
                    echo '<a href="update.php?id='. $row['id'] .'" class="mr-3"
title="Update Record" data-toggle="tooltip"><span class="fa fa-pencil"></span></a>';
                    echo '<a href="delete.php?id='. $row['id'] .'" title="Delete
Record" data-toggle="tooltip"><span class="fa fa-trash"></span></a>';
                echo "</td>";
              echo "</tr>";
            }
            echo "</tbody>";
          echo "</table>";
          // Free result set
          mysqli_free_result($result);
        } else{
          echo '<div class="alert alert-danger"><em>No records were
found.</em></div>';
        }
      } else{
        echo "Oops! Something went wrong. Please try again later.";
      }
```

```
            // Close connection

            mysqli_close($link);

            ?>

          </div>

        </div>

      </div>

    </div>

  </body>

</html>
```
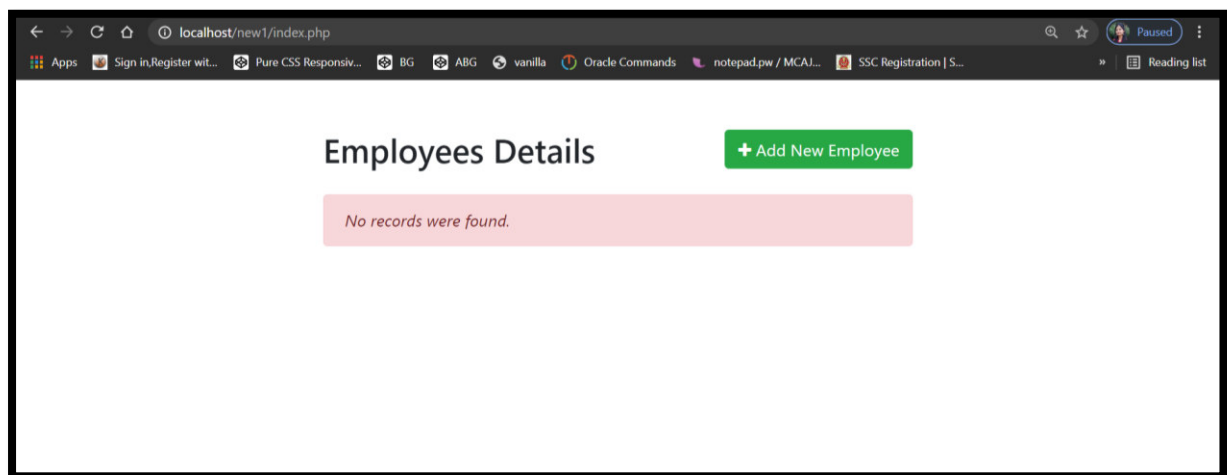

Creating the Create Page

```php
<?php
// Include config file
require_once "config.php";

// Define variables and initialize with empty values
$name = $address = $salary = "";
$name_err = $address_err = $salary_err = "";

// Processing form data when form is submitted
if($_SERVER["REQUEST_METHOD"] == "POST"){
    // Validate name
```

```php
    $input_name = trim($_POST["name"]);

    if(empty($input_name)){

        $name_err = "Please enter a name.";

    } elseif(!filter_var($input_name, FILTER_VALIDATE_REGEXP,
array("options"=>array("regexp"=>"/^[a-zA-Z\s]+$/")))){

        $name_err = "Please enter a valid name.";

    } else{

        $name = $input_name;

    }


    // Validate address

    $input_address = trim($_POST["address"]);

    if(empty($input_address)){

        $address_err = "Please enter an address.";

    } else{

        $address = $input_address;

    }


    // Validate salary

    $input_salary = trim($_POST["salary"]);

    if(empty($input_salary)){

        $salary_err = "Please enter the salary amount.";

    } elseif(!ctype_digit($input_salary)){

        $salary_err = "Please enter a positive integer value.";

    } else{

        $salary = $input_salary;

    }


    // Check input errors before inserting in database

    if(empty($name_err) && empty($address_err) && empty($salary_err)){

        // Prepare an insert statement
```

86

```php
    $sql = "INSERT INTO employees (name, address, salary) VALUES (?, ?, ?)";

    if($stmt = mysqli_prepare($link, $sql)){
        // Bind variables to the prepared statement as parameters
        mysqli_stmt_bind_param($stmt, "sss", $param_name, $param_address,
$param_salary);

        // Set parameters
        $param_name = $name;
        $param_address = $address;
        $param_salary = $salary;

        // Attempt to execute the prepared statement
        if(mysqli_stmt_execute($stmt)){
            // Records created successfully. Redirect to landing page
            header("location: index.php");
            exit();
        } else{
            echo "Oops! Something went wrong. Please try again later.";
        }
    }

    // Close statement
    mysqli_stmt_close($stmt);
  }

  // Close connection
  mysqli_close($link);
}
?>
```

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Create Record</title>
    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
    <style>
        .wrapper{
            width: 600px;
            margin: 0 auto;
        }
    </style>
</head>
<body>
    <div class="wrapper">
        <div class="container-fluid">
            <div class="row">
                <div class="col-md-12">
                    <h2 class="mt-5">Create Record</h2>
                    <p>Please fill this form and submit to add employee record to the database.</p>
                    <form action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]); ?>"
method="post">
                        <div class="form-group">
                            <label>Name</label>
                            <input type="text" name="name" class="form-control <?php echo
(!empty($name_err)) ? 'is-invalid' : ''; ?>" value="<?php echo $name; ?>">
                            <span class="invalid-feedback"><?php echo $name_err;?></span>
                        </div>
                        <div class="form-group">
                            <label>Address</label>
```

88

```php
            <textarea name="address" class="form-control <?php echo
(!empty($address_err)) ? 'is-invalid' : ''; ?>"><?php echo $address; ?></textarea>

                <span class="invalid-feedback"><?php echo $address_err;?></span>

            </div>

            <div class="form-group">

                <label>Salary</label>

                <input type="text" name="salary" class="form-control <?php echo
(!empty($salary_err)) ? 'is-invalid' : ''; ?>" value="<?php echo $salary; ?>">

                <span class="invalid-feedback"><?php echo $salary_err;?></span>

            </div>

            <input type="submit" class="btn btn-primary" value="Submit">

            <a href="index.php" class="btn btn-secondary ml-2">Cancel</a>

        </form>

      </div>

    </div>

  </div>

</body>

</html>
```


Creating the Read Page

```php
<?php
```

```php
// Check existence of id parameter before processing further
if(isset($_GET["id"]) && !empty(trim($_GET["id"]))){
    // Include config file
    require_once "config.php";

    // Prepare a select statement
    $sql = "SELECT * FROM employees WHERE id = ?";

    if($stmt = mysqli_prepare($link, $sql)){
        // Bind variables to the prepared statement as parameters
        mysqli_stmt_bind_param($stmt, "i", $param_id);

        // Set parameters
        $param_id = trim($_GET["id"]);

        // Attempt to execute the prepared statement
        if(mysqli_stmt_execute($stmt)){
            $result = mysqli_stmt_get_result($stmt);

            if(mysqli_num_rows($result) == 1){
                /* Fetch result row as an associative array. Since the result set
                contains only one row, we don't need to use while loop */
                $row = mysqli_fetch_array($result, MYSQLI_ASSOC);

                // Retrieve individual field value
                $name = $row["name"];
                $address = $row["address"];
                $salary = $row["salary"];
            } else{
                // URL doesn't contain valid id parameter. Redirect to error page
```

```php
                header("location: error.php");
                exit();
            }


        } else{
            echo "Oops! Something went wrong. Please try again later.";
        }
    }


    // Close statement
    mysqli_stmt_close($stmt);


    // Close connection
    mysqli_close($link);
} else{
    // URL doesn't contain id parameter. Redirect to error page
    header("location: error.php");
    exit();
}
?>


<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>View Record</title>
    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
    <style>
        .wrapper{
            width: 600px;
```

91

```
            margin: 0 auto;
        }
    </style>
</head>
<body>
    <div class="wrapper">
        <div class="container-fluid">
            <div class="row">
                <div class="col-md-12">
                    <h1 class="mt-5 mb-3">View Record</h1>
                    <div class="form-group">
                        <label>Name</label>
                        <p><b><?php echo $row["name"]; ?></b></p>
                    </div>
                    <div class="form-group">
                        <label>Address</label>
                        <p><b><?php echo $row["address"]; ?></b></p>
                    </div>
                    <div class="form-group">
                        <label>Salary</label>
                        <p><b><?php echo $row["salary"]; ?></b></p>
                    </div>
                    <p><a href="index.php" class="btn btn-primary">Back</a></p>
                </div>
            </div>
        </div>
    </div>
</body>
```
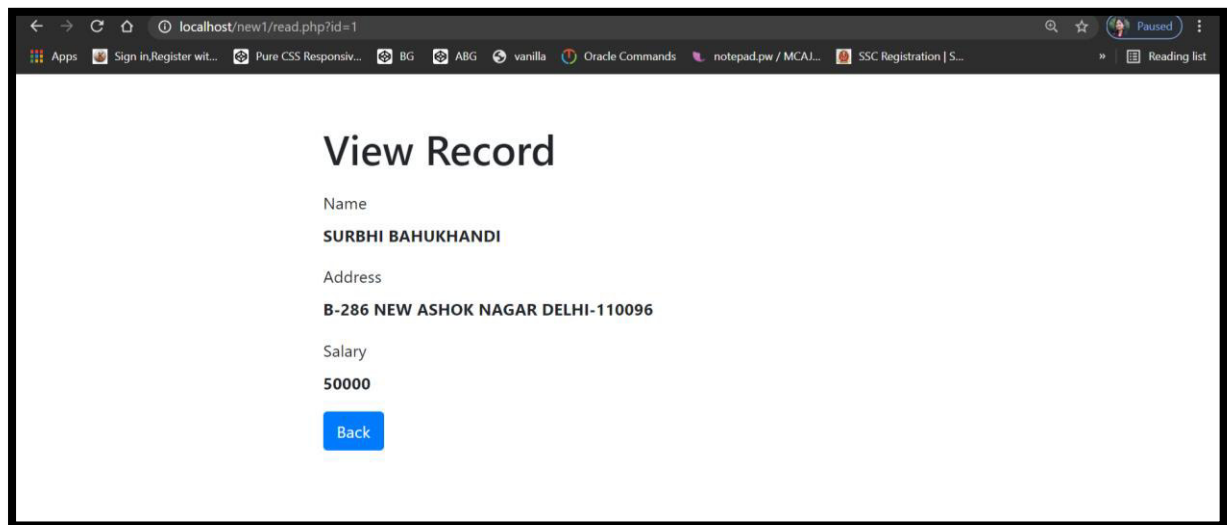
</html>

Creating the Update Page

```php
<?php
// Include config file
require_once "config.php";

// Define variables and initialize with empty values
$name = $address = $salary = "";
$name_err = $address_err = $salary_err = "";

// Processing form data when form is submitted
if(isset($_POST["id"]) && !empty($_POST["id"])){
    // Get hidden input value
    $id = $_POST["id"];

    // Validate name
    $input_name = trim($_POST["name"]);
    if(empty($input_name)){
        $name_err = "Please enter a name.";
    } elseif(!filter_var($input_name, FILTER_VALIDATE_REGEXP,
array("options"=>array("regexp"=>"/^[a-zA-Z\s]+$/")))){
```

```php
        $name_err = "Please enter a valid name.";
    } else{
        $name = $input_name;
    }


    // Validate address address
    $input_address = trim($_POST["address"]);
    if(empty($input_address)){
        $address_err = "Please enter an address.";
    } else{
        $address = $input_address;
    }


    // Validate salary
    $input_salary = trim($_POST["salary"]);
    if(empty($input_salary)){
        $salary_err = "Please enter the salary amount.";
    } elseif(!ctype_digit($input_salary)){
        $salary_err = "Please enter a positive integer value.";
    } else{
        $salary = $input_salary;
    }


    // Check input errors before inserting in database
    if(empty($name_err) && empty($address_err) && empty($salary_err)){
        // Prepare an update statement
        $sql = "UPDATE employees SET name=?, address=?, salary=? WHERE id=?";


        if($stmt = mysqli_prepare($link, $sql)){
            // Bind variables to the prepared statement as parameters
```

```php
        mysqli_stmt_bind_param($stmt, "sssi", $param_name, $param_address,
$param_salary, $param_id);


        // Set parameters
        $param_name = $name;

        $param_address = $address;

        $param_salary = $salary;

        $param_id = $id;


        // Attempt to execute the prepared statement
        if(mysqli_stmt_execute($stmt)){
            // Records updated successfully. Redirect to landing page
            header("location: index.php");
            exit();
        } else{
            echo "Oops! Something went wrong. Please try again later.";
        }
    }


    // Close statement
    mysqli_stmt_close($stmt);
    }


    // Close connection
    mysqli_close($link);
} else{
    // Check existence of id parameter before processing further
    if(isset($_GET["id"]) && !empty(trim($_GET["id"]))){
        // Get URL parameter
        $id =  trim($_GET["id"]);
```

```php
// Prepare a select statement
$sql = "SELECT * FROM employees WHERE id = ?";
if($stmt = mysqli_prepare($link, $sql)){
    // Bind variables to the prepared statement as parameters
    mysqli_stmt_bind_param($stmt, "i", $param_id);

    // Set parameters
    $param_id = $id;

    // Attempt to execute the prepared statement
    if(mysqli_stmt_execute($stmt)){
        $result = mysqli_stmt_get_result($stmt);

        if(mysqli_num_rows($result) == 1){
            /* Fetch result row as an associative array. Since the result set
            contains only one row, we don't need to use while loop */
            $row = mysqli_fetch_array($result, MYSQLI_ASSOC);

            // Retrieve individual field value
            $name = $row["name"];
            $address = $row["address"];
            $salary = $row["salary"];
        } else{
            // URL doesn't contain valid id. Redirect to error page
            header("location: error.php");
            exit();
        }

    } else{
        echo "Oops! Something went wrong. Please try again later.";
```

```php
            }
        }


        // Close statement
        mysqli_stmt_close($stmt);


        // Close connection
        mysqli_close($link);
    } else{
        // URL doesn't contain id parameter. Redirect to error page
        header("location: error.php");
        exit();
    }
}
?>


<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Update Record</title>
    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
    <style>
        .wrapper{
            width: 600px;
            margin: 0 auto;
        }
    </style>
</head>
<body>
```

```
<div class="wrapper">

    <div class="container-fluid">

        <div class="row">

            <div class="col-md-12">

                <h2 class="mt-5">Update Record</h2>

                <p>Please edit the input values and submit to update the employee record.</p>

                <form action="<?php echo
htmlspecialchars(basename($_SERVER['REQUEST_URI'])); ?>" method="post">

                    <div class="form-group">

                        <label>Name</label>

                        <input type="text" name="name" class="form-control <?php echo
(!empty($name_err)) ? 'is-invalid' : ''; ?>" value="<?php echo $name; ?>">

                        <span class="invalid-feedback"><?php echo $name_err;?></span>

                    </div>

                    <div class="form-group">

                        <label>Address</label>

                        <textarea name="address" class="form-control <?php echo
(!empty($address_err)) ? 'is-invalid' : ''; ?>"><?php echo $address; ?></textarea>

                        <span class="invalid-feedback"><?php echo $address_err;?></span>

                    </div>

                    <div class="form-group">

                        <label>Salary</label>

                        <input type="text" name="salary" class="form-control <?php echo
(!empty($salary_err)) ? 'is-invalid' : ''; ?>" value="<?php echo $salary; ?>">

                        <span class="invalid-feedback"><?php echo $salary_err;?></span>

                    </div>

                    <input type="hidden" name="id" value="<?php echo $id; ?>"/>

                    <input type="submit" class="btn btn-primary" value="Submit">

                    <a href="index.php" class="btn btn-secondary ml-2">Cancel</a>

                </form>

            </div>

        </div>
```

98

```
            </div>

        </div>

    </body>

</html>
```


Creating the Delete Page

```php
<?php

// Process delete operation after confirmation

if(isset($_POST["id"]) && !empty($_POST["id"])){

    // Include config file

    require_once "config.php";


    // Prepare a delete statement

    $sql = "DELETE FROM employees WHERE id = ?";


    if($stmt = mysqli_prepare($link, $sql)){

        // Bind variables to the prepared statement as parameters

        mysqli_stmt_bind_param($stmt, "i", $param_id);


        // Set parameters

        $param_id = trim($_POST["id"]);
```

```php
        // Attempt to execute the prepared statement
        if(mysqli_stmt_execute($stmt)){
            // Records deleted successfully. Redirect to landing page
            header("location: index.php");
            exit();
        } else{
            echo "Oops! Something went wrong. Please try again later.";
        }
    }

    // Close statement
    mysqli_stmt_close($stmt);

    // Close connection
    mysqli_close($link);
} else{
    // Check existence of id parameter
    if(empty(trim($_GET["id"]))){
        // URL doesn't contain id parameter. Redirect to error page
        header("location: error.php");
        exit();
    }
}
?>

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
```

```html
    <title>Delete Record</title>
    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
    <style>
        .wrapper{
            width: 600px;
            margin: 0 auto;
        }
    </style>
</head>
<body>
    <div class="wrapper">
        <div class="container-fluid">
            <div class="row">
                <div class="col-md-12">
                    <h2 class="mt-5 mb-3">Delete Record</h2>
                    <form action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]); ?>"
method="post">
                        <div class="alert alert-danger">
                            <input type="hidden" name="id" value="<?php echo trim($_GET["id"]);
?>"/>
                            <p>Are you sure you want to delete this employee record?</p>
                            <p>
                                <input type="submit" value="Yes" class="btn btn-danger">
                                <a href="index.php" class="btn btn-secondary">No</a>
                            </p>
                        </div>
                    </form>
                </div>
            </div>
        </div>
```

```
        </div>

</body>

</html>
```


Creating the Error Page

```
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <title>Error</title>

    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">

    <style>

        .wrapper{

            width: 600px;

            margin: 0 auto;

        }

    </style>

</head>

<body>

    <div class="wrapper">

        <div class="container-fluid">

            <div class="row">
```
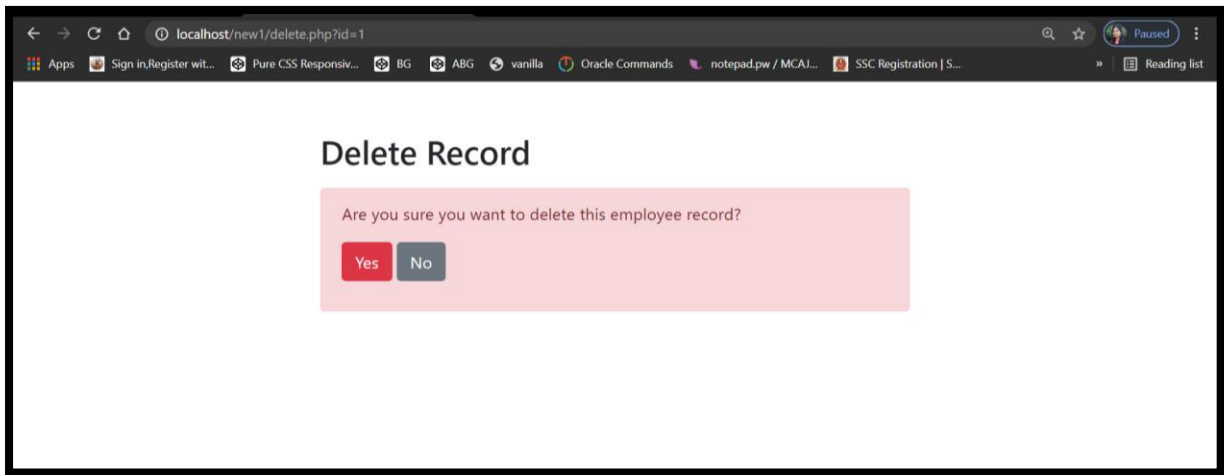
```
            <div class="col-md-12">

                <h2 class="mt-5 mb-3">Invalid Request</h2>

                <div class="alert alert-danger">Sorry, you've made an invalid request. Please <a
href="index.php" class="alert-link">go back</a> and try again.</div>

            </div>

        </div>

    </div>

</body>

</html>
```
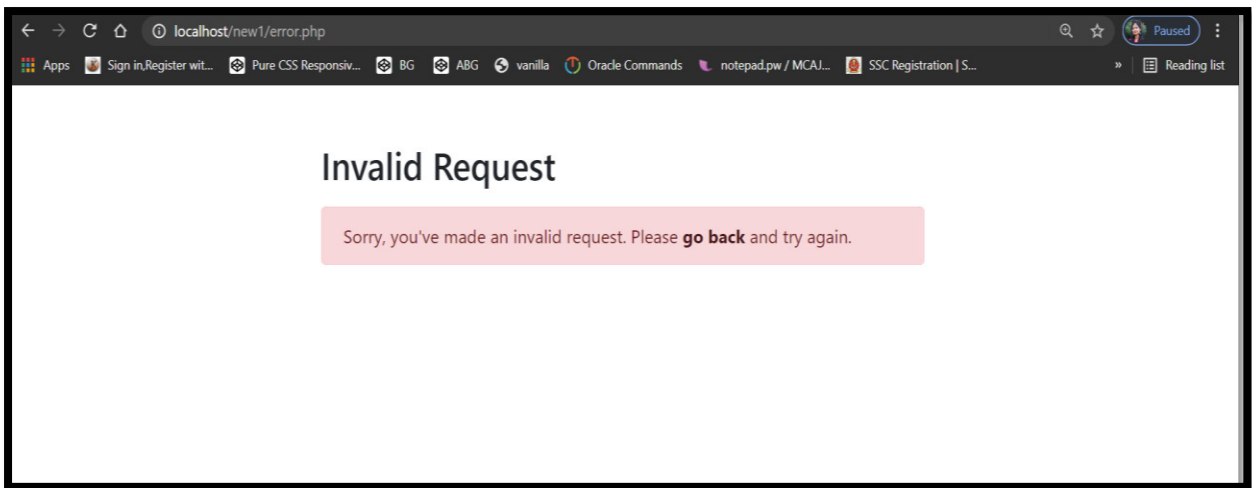
PROGRAM NO. 16

To create User Registration form and login form.

a) Create webpage having login form and an option for new registration. On click of new registration the registration page should be opened.

b) Create User registration page having details: username, e-mail ID, location and contact number, password and confirm password with validation.

c) Do Login validation, authentication of login form and show welcome message after successful login.

CODE:

Step 1: Creating the Database Table

CREATE TABLE users (id INT NOT NULL PRIMARY KEY AUTO_INCREMENT, username VARCHAR(50) NOT NULL UNIQUE, password VARCHAR(255) NOT NULL);

```
mysql> CREATE TABLE users (
    ->     id INT NOT NULL PRIMARY KEY AUTO_INCREMENT,
    ->     username VARCHAR(50) NOT NULL UNIQUE,
    ->     password VARCHAR(255) NOT NULL);
Query OK, 0 rows affected (0.02 sec)
```

Step 2: Creating the Config File

<?php

/* Database credentials. Assuming you are running MySQL

server with default setting (user 'root' with no password) */

define('DB_SERVER', 'localhost');

define('DB_USERNAME', 'root');

define('DB_PASSWORD', '');

define('DB_NAME', 'surbhi');

/* Attempt to connect to MySQL database */

$link = mysqli_connect(DB_SERVER, DB_USERNAME, DB_PASSWORD, DB_NAME);

// Check connection

if($link === false){

```php
        die("ERROR: Could not connect. " . mysqli_connect_error());
}
?>
```

Step 3: Creating the Registration Form

```php
<?php
// Include config file
require_once "config.php";

// Define variables and initialize with empty values
$username = $password = $confirm_password = "";
$username_err = $password_err = $confirm_password_err = "";

// Processing form data when form is submitted
if($_SERVER["REQUEST_METHOD"] == "POST"){

    // Validate username
    if(empty(trim($_POST["username"]))){
        $username_err = "Please enter a username.";
    } elseif(!preg_match('/^[a-zA-Z0-9_]+$/', trim($_POST["username"]))){
        $username_err = "Username can only contain letters, numbers, and underscores.";
    } else{
        // Prepare a select statement
        $sql = "SELECT id FROM users WHERE username = ?";

        if($stmt = mysqli_prepare($link, $sql)){
            // Bind variables to the prepared statement as parameters
            mysqli_stmt_bind_param($stmt, "s", $param_username);

            // Set parameters
            $param_username = trim($_POST["username"]);

            // Attempt to execute the prepared statement
```

```php
        if(mysqli_stmt_execute($stmt)){
            /* store result */
            mysqli_stmt_store_result($stmt);


            if(mysqli_stmt_num_rows($stmt) == 1){
                $username_err = "This username is already taken.";
            } else{
                $username = trim($_POST["username"]);
            }
        } else{
            echo "Oops! Something went wrong. Please try again later.";
        }


        // Close statement
        mysqli_stmt_close($stmt);
    }
}


// Validate password
if(empty(trim($_POST["password"]))){
    $password_err = "Please enter a password.";
} elseif(strlen(trim($_POST["password"])) < 6){
    $password_err = "Password must have atleast 6 characters.";
} else{
    $password = trim($_POST["password"]);
}


// Validate confirm password
if(empty(trim($_POST["confirm_password"]))){
    $confirm_password_err = "Please confirm password.";
} else{
    $confirm_password = trim($_POST["confirm_password"]);
    if(empty($password_err) && ($password != $confirm_password)){
```

106

```php
                    $confirm_password_err = "Password did not match.";

            }

        }


        // Check input errors before inserting in database
        if(empty($username_err) && empty($password_err) && empty($confirm_password_err)){


            // Prepare an insert statement
            $sql = "INSERT INTO users (username, password) VALUES (?, ?)";


            if($stmt = mysqli_prepare($link, $sql)){
                // Bind variables to the prepared statement as parameters
                mysqli_stmt_bind_param($stmt, "ss", $param_username, $param_password);


                // Set parameters
                $param_username = $username;
                $param_password = password_hash($password, PASSWORD_DEFAULT); // Creates a password
hash


                // Attempt to execute the prepared statement
                if(mysqli_stmt_execute($stmt)){
                    // Redirect to login page
                    header("location: login.php");
                } else{
                    echo "Oops! Something went wrong. Please try again later.";
                }


                // Close statement
                mysqli_stmt_close($stmt);
            }
        }


        // Close connection
```

107

```php
        mysqli_close($link);
    }
?>
```

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Sign Up</title>
    <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
    <style>
        body{ font: 14px sans-serif; }
        .wrapper{ width: 360px; padding: 20px; }
    </style>
</head>
<body>
    <div class="wrapper">
        <h2>Sign Up</h2>
        <p>Please fill this form to create an account.</p>
        <form action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]); ?>" method="post">
            <div class="form-group">
                <label>Username</label>
                <input type="text" name="username" class="form-control <?php echo (!empty($username_err))
? 'is-invalid' : ''; ?>" value="<?php echo $username; ?>">
                <span class="invalid-feedback"><?php echo $username_err; ?></span>
            </div>
            <div class="form-group">
                <label>Password</label>
                <input type="password" name="password" class="form-control <?php echo
(!empty($password_err)) ? 'is-invalid' : ''; ?>" value="<?php echo $password; ?>">
                <span class="invalid-feedback"><?php echo $password_err; ?></span>
            </div>
            <div class="form-group">
                <label>Confirm Password</label>
```

```
            <input type="password" name="confirm_password" class="form-control <?php echo
(!empty($confirm_password_err)) ? 'is-invalid' : ''; ?>" value="<?php echo $confirm_password; ?>">

            <span class="invalid-feedback"><?php echo $confirm_password_err; ?></span>

        </div>

        <div class="form-group">

            <input type="submit" class="btn btn-primary" value="Submit">

            <input type="reset" class="btn btn-secondary ml-2" value="Reset">

        </div>

        <p>Already have an account? <a href="login.php">Login here</a>.</p>

    </form>

  </div>

</body>

</html>
```
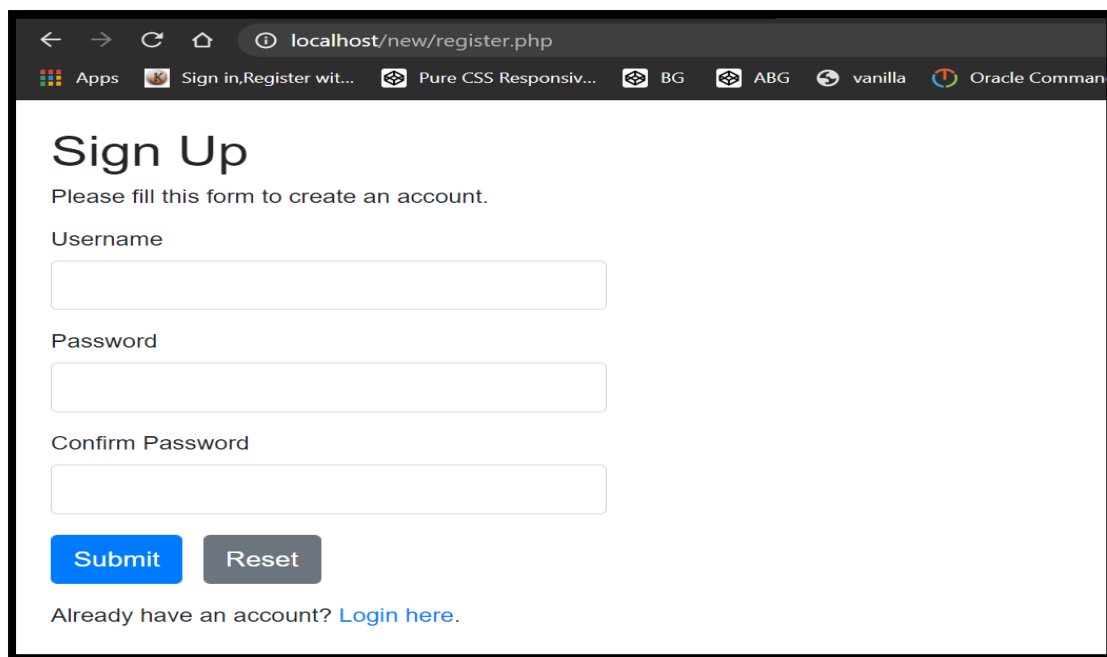

Building the Login System

Step 1: Creating the Login Form

```php
<?php

// Initialize the session

session_start();


// Check if the user is already logged in, if yes then redirect him to welcome page
```

```php
if(isset($_SESSION["loggedin"]) && $_SESSION["loggedin"] === true){
    header("location: welcome.php");
    exit;
}


// Include config file
require_once "config.php";


// Define variables and initialize with empty values
$username = $password = "";
$username_err = $password_err = $login_err = "";


// Processing form data when form is submitted
if($_SERVER["REQUEST_METHOD"] == "POST"){


    // Check if username is empty
    if(empty(trim($_POST["username"]))){
        $username_err = "Please enter username.";
    } else{
        $username = trim($_POST["username"]);
    }


    // Check if password is empty
    if(empty(trim($_POST["password"]))){
        $password_err = "Please enter your password.";
    } else{
        $password = trim($_POST["password"]);
    }


    // Validate credentials
```

110

```php
if(empty($username_err) && empty($password_err)){
    // Prepare a select statement
    $sql = "SELECT id, username, password FROM users WHERE username = ?";

    if($stmt = mysqli_prepare($link, $sql)){
        // Bind variables to the prepared statement as parameters
        mysqli_stmt_bind_param($stmt, "s", $param_username);

        // Set parameters
        $param_username = $username;

        // Attempt to execute the prepared statement
        if(mysqli_stmt_execute($stmt)){
            // Store result
            mysqli_stmt_store_result($stmt);

            // Check if username exists, if yes then verify password
            if(mysqli_stmt_num_rows($stmt) == 1){
                // Bind result variables
                mysqli_stmt_bind_result($stmt, $id, $username, $hashed_password);
                if(mysqli_stmt_fetch($stmt)){
                    if(password_verify($password, $hashed_password)){
                        // Password is correct, so start a new session
                        session_start();

                        // Store data in session variables
                        $_SESSION["loggedin"] = true;
                        $_SESSION["id"] = $id;
                        $_SESSION["username"] = $username;
```

```php
                    // Redirect user to welcome page
                    header("location: welcome.php");
                } else{
                    // Password is not valid, display a generic error message
                    $login_err = "Invalid username or password.";
                }
            }
        } else{
            // Username doesn't exist, display a generic error message
            $login_err = "Invalid username or password.";
        }
    } else{
        echo "Oops! Something went wrong. Please try again later.";
    }


    // Close statement
    mysqli_stmt_close($stmt);
    }
}


// Close connection
mysqli_close($link);
}
?>


<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Login</title>
```

112

```php
    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
    <style>
        body{ font: 14px sans-serif; }
        .wrapper{ width: 360px; padding: 20px; }
    </style>
</head>
<body>
    <div class="wrapper">
        <h2>Login</h2>
        <p>Please fill in your credentials to login.</p>


        <?php
        if(!empty($login_err)){
            echo '<div class="alert alert-danger">' . $login_err . '</div>';
        }
        ?>


        <form action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]); ?>"
method="post">
            <div class="form-group">
                <label>Username</label>
                <input type="text" name="username" class="form-control <?php echo
(!empty($username_err)) ? 'is-invalid' : ''; ?>" value="<?php echo $username; ?>">
                <span class="invalid-feedback"><?php echo $username_err; ?></span>
            </div>
            <div class="form-group">
                <label>Password</label>
                <input type="password" name="password" class="form-control <?php echo
(!empty($password_err)) ? 'is-invalid' : ''; ?>">
                <span class="invalid-feedback"><?php echo $password_err; ?></span>
            </div>
```

113

```html
        <div class="form-group">
            <input type="submit" class="btn btn-primary" value="Login">
        </div>
        <p>Don't have an account? <a href="register.php">Sign up now</a>.</p>
    </form>
  </div>
</body>
</html>
```
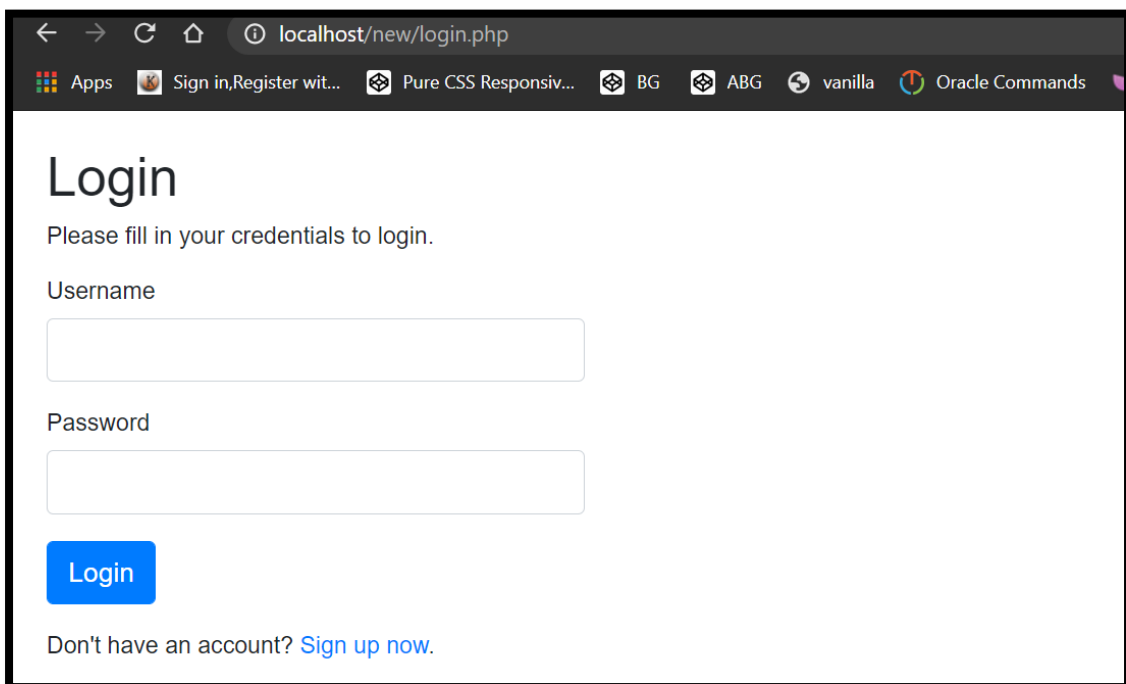

Step 2: Creating the Welcome Page

```php
<?php
// Initialize the session
session_start();

// Check if the user is logged in, if not then redirect him to login page
if(!isset($_SESSION["loggedin"]) || $_SESSION["loggedin"] !== true){
    header("location: login.php");
    exit;
}
```

```
?>


<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <title>Welcome</title>

    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">

    <style>

        body{ font: 14px sans-serif; text-align: center; }

    </style>

</head>

<body>

    <h1 class="my-5">Hi, <b><?php echo htmlspecialchars($_SESSION["username"]);
?></b>. Welcome to our site.</h1>

    <p>

        <a href="reset-password.php" class="btn btn-warning">Reset Your Password</a>

        <a href="logout.php" class="btn btn-danger ml-3">Sign Out of Your Account</a>

    </p>

</body>

</html>
```
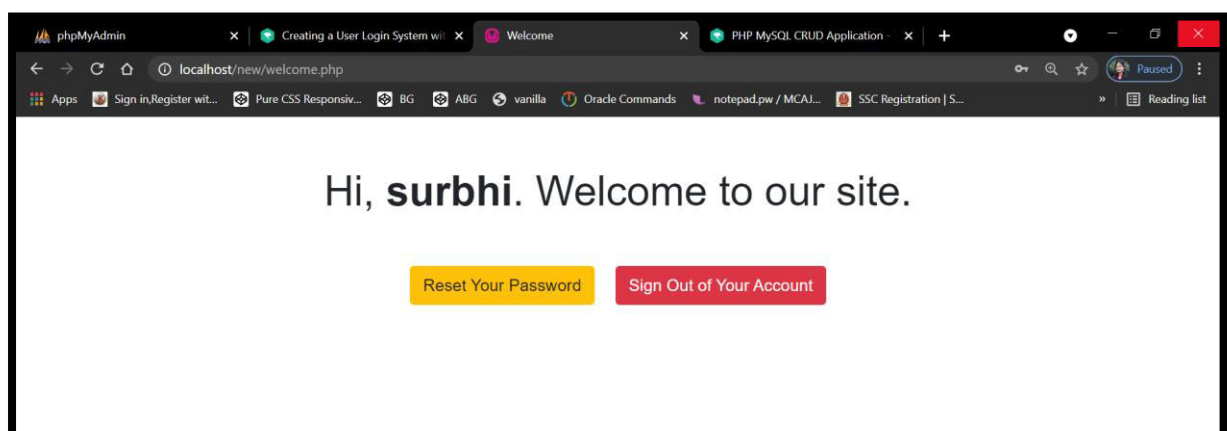
Step 3: Creating the Logout Script

```php
<?php
// Initialize the session

session_start();


// Unset all of the session variables

$_SESSION = array();


// Destroy the session.

session_destroy();


// Redirect to login page

header("location: login.php");

exit;

?>Adding the Password Reset Feature
<?php
// Initialize the session
session_start();

// Check if the user is logged in, otherwise redirect to login page
if(!isset($_SESSION["loggedin"]) || $_SESSION["loggedin"] !== true){
    header("location: login.php");
    exit;
```

116

```php
}

// Include config file
require_once "config.php";

// Define variables and initialize with empty values
$new_password = $confirm_password = "";
$new_password_err = $confirm_password_err = "";

// Processing form data when form is submitted
if($_SERVER["REQUEST_METHOD"] == "POST"){

    // Validate new password
    if(empty(trim($_POST["new_password"]))){
        $new_password_err = "Please enter the new password.";
    } elseif(strlen(trim($_POST["new_password"])) < 6){
        $new_password_err = "Password must have atleast 6 characters.";
    } else{
        $new_password = trim($_POST["new_password"]);
    }

    // Validate confirm password
    if(empty(trim($_POST["confirm_password"]))){
        $confirm_password_err = "Please confirm the password.";
    } else{
        $confirm_password = trim($_POST["confirm_password"]);
        if(empty($new_password_err) && ($new_password != $confirm_password)){
            $confirm_password_err = "Password did not match.";
        }
    }
```

117

```php
    // Check input errors before updating the database
    if(empty($new_password_err) && empty($confirm_password_err)){
        // Prepare an update statement
        $sql = "UPDATE users SET password = ? WHERE id = ?";

        if($stmt = mysqli_prepare($link, $sql)){
            // Bind variables to the prepared statement as parameters
            mysqli_stmt_bind_param($stmt, "si", $param_password, $param_id);

            // Set parameters
            $param_password = password_hash($new_password, PASSWORD_DEFAULT);
            $param_id = $_SESSION["id"];

            // Attempt to execute the prepared statement
            if(mysqli_stmt_execute($stmt)){
                // Password updated successfully. Destroy the session, and redirect to login page
                session_destroy();
                header("location: login.php");
                exit();
            } else{
                echo "Oops! Something went wrong. Please try again later.";
            }

            // Close statement
            mysqli_stmt_close($stmt);
        }
    }

    // Close connection
```

118

```php
    mysqli_close($link);

}

?>
```

```html
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <title>Reset Password</title>

    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">

    <style>

        body{ font: 14px sans-serif; }

        .wrapper{ width: 360px; padding: 20px; }

    </style>

</head>

<body>

    <div class="wrapper">

        <h2>Reset Password</h2>

        <p>Please fill out this form to reset your password.</p>

        <form action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]); ?>"
method="post">

            <div class="form-group">

                <label>New Password</label>

                <input type="password" name="new_password" class="form-control <?php echo
(!empty($new_password_err)) ? 'is-invalid' : ''; ?>" value="<?php echo $new_password;
?>">

                <span class="invalid-feedback"><?php echo $new_password_err; ?></span>

            </div>

            <div class="form-group">

                <label>Confirm Password</label>
```

```php
            <input type="password" name="confirm_password" class="form-control <?php echo (!empty($confirm_password_err)) ? 'is-invalid' : ''; ?>">
            <span class="invalid-feedback"><?php echo $confirm_password_err; ?></span>
        </div>
        <div class="form-group">
            <input type="submit" class="btn btn-primary" value="Submit">
            <a class="btn btn-link ml-2" href="welcome.php">Cancel</a>
        </div>
    </form>
  </div>
</body>
</html>
```