EX.NO:1 DATE:21.4.2022	Image Maps

AIM:

To create clickable areas for three countries in the picture. When you click the country, information about the country have to be displayed in another web page.

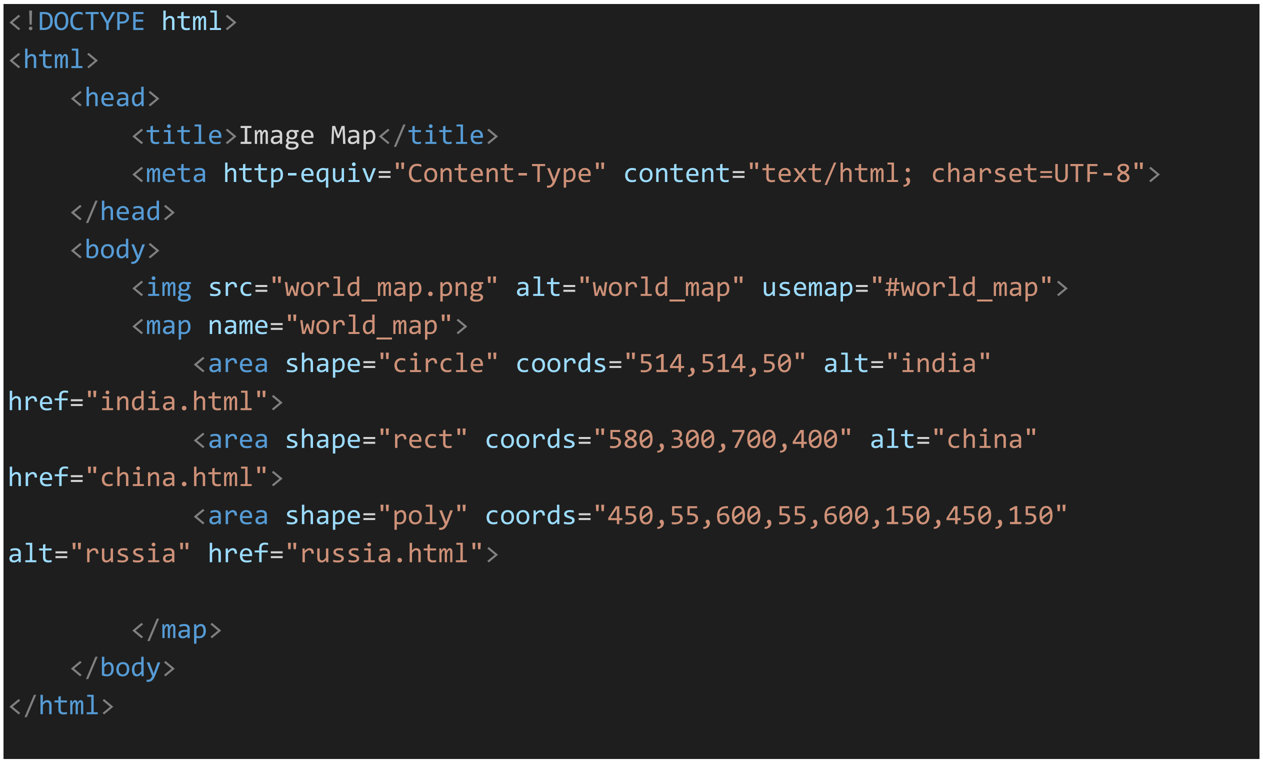
ALGORITHM:

1. Create a webpage with image.
2. Set coordinates in a rectangular shape.
3. When you click at a particular place.
4. The message about the particular gadget is displayed in another webpage.
5. Create such clickable areas in the image.

.

PROGRAM:

index.html



```
<!DOCTYPE html>
<html>
    <head>
        <title>Image Map</title>
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    </head>
    <body>
        <img src="world_map.png" alt="world_map" usemap="#world_map">
        <map name="world_map">
            <area shape="circle" coords="514,514,50" alt="india"
href="india.html">
            <area shape="rect" coords="580,300,700,400" alt="china"
href="china.html">
            <area shape="poly" coords="450,55,600,55,600,150,450,150"
alt="russia" href="russia.html">

        </map>
    </body>
</html>
```

india.html

```html
<!DOCTYPE html>
<html>
    <head>
        <title>India</title>
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    </head>
    <body>
        <h1>India</h1>
    </body>
</html>
```

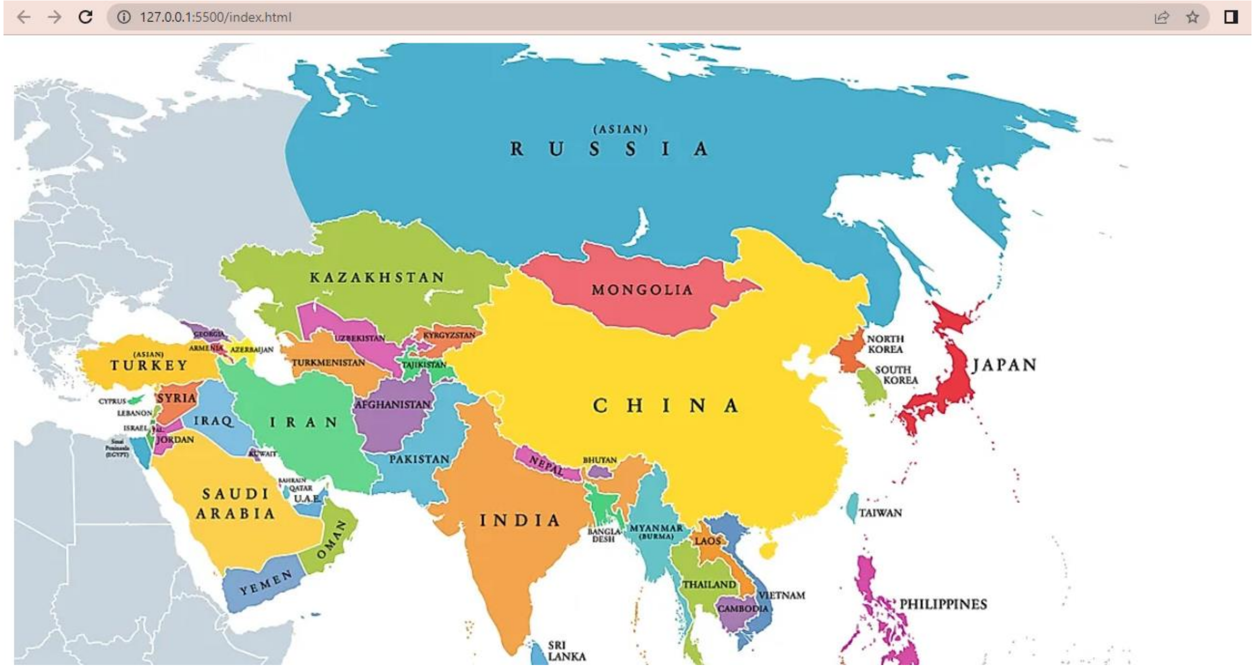
russia.html

```html
<!DOCTYPE html>
<html>
    <head>
        <title>Russia</title>
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    </head>
    <body>
        <h1>Russia</h1>
    </body>
</html>
```

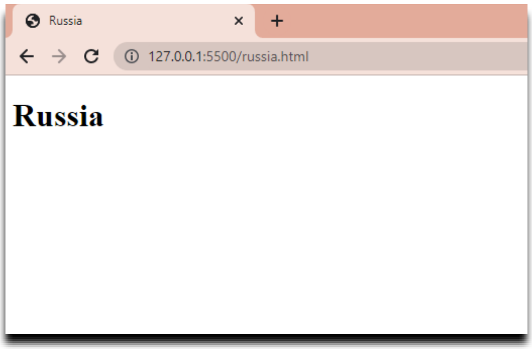
china.html

```html
<!DOCTYPE html>
<html>
    <head>
        <title>China</title>
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    </head>
    <body>
        <h1>China</h1>
    </body>
</html>
```

OUTPUT:



127.0.0.1:5500/index.html



Russia

127.0.0.1:5500/russia.html

Russia

Observation	
Record	
Total	

RESULT:

The given webpage with image map for world map to display the information about the country is created.

EX.NO:1B DATE:29.03.2022	WEBPAGE FOR BUS TICKET BOOKING

AIM:

To design a webpage for bus ticket booking using images, hyperlinks, lists, tables, audio, video, forms.

ALGORITHM:

1. Create a webpage with a button.
2. Button is linked with a new webpage and when you click the button it takes you to the new webpage.
3. Image, videos, audios are attached.
4. Form is created with multiple input options.
5. Table is also attached.
6. Table contains all bus timings and details.

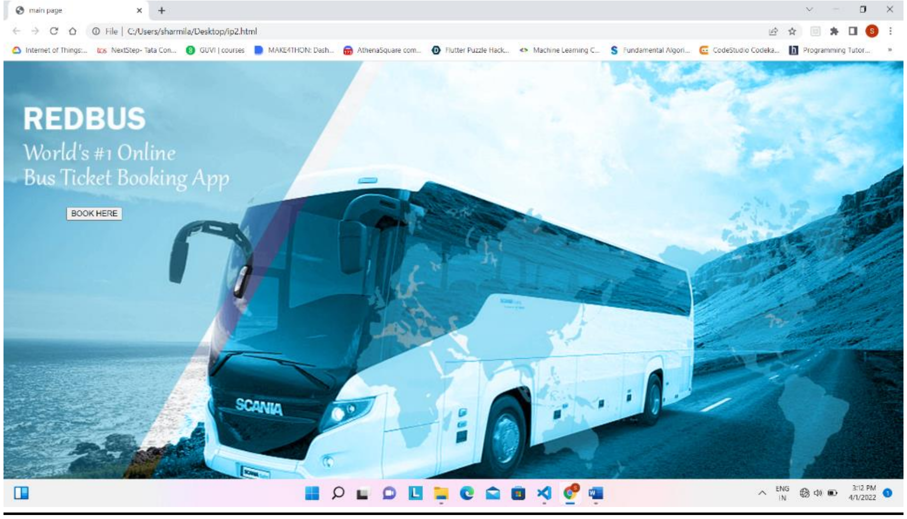
PROGRAM:

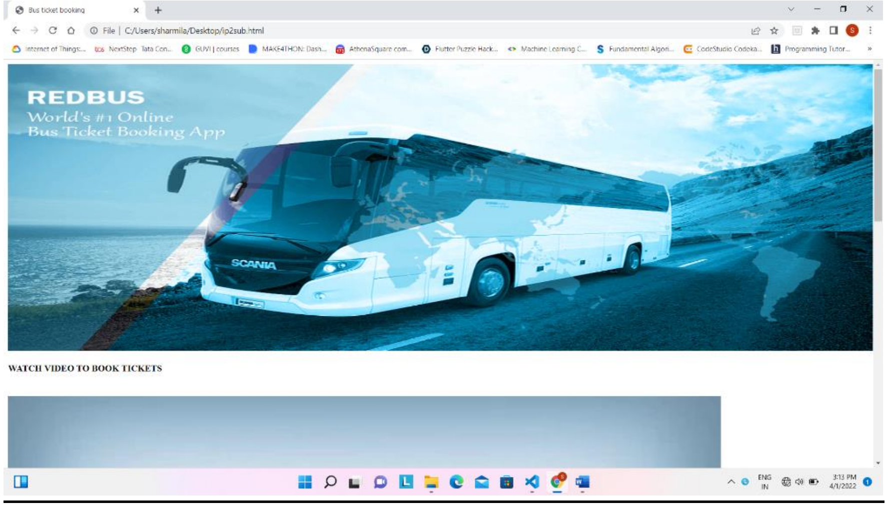
```
<!DOCTYPE html>
<html>
  <head>
    <Title>main page</Title>
    <style type="text/css">
      body{
        background-image:url(bus1.png);
        background-size: cover;
        background-attachment: fixed;
      }
      #a{
        text-align: center;
      }
      #mainbtn1{
        position: fixed;
        top: 35%;
        left: 7%;
      }
    </style>

  </head>
  <body>
```

```
    <a href="ip2sub.html">
      <button id="mainbtn1">BOOK HERE</button>
    </a>
  </body>
</html>
<html>
  <head>
    <title>Bus ticket booking</title>
  </head>
  <body>
    <img src="bus1.png" width="1510px" height="500px" alt="image not available"></img>
    <h4>WATCH VIDEO TO BOOK TICKETS</h4><br>
    <video controls width="=700px" height="700px"><source src="busbooking.mp4"
type="video/mp4">your browser doesn't support this video</video><br>
    <h4>WATCH AUDIO TO BOOK BUS TICKETS</h4><br>
    <audio controls><source src="bus book audio.mp3">your browser doesn't support this
audio</audio><br>
    <table border="10px" cellspacing="0" width="1000" height="250">
      <th>From</th>
      <th>Destination</th>
      <th>Bus timing</th>
      <th>Ticket price</th>
      <tr>
        <td>Madurai</td>
        <td>Chennai</td>
        <td>10.30PM</td>
        <td>RS.250</td>
      </tr><tr>
        <td>Madurai</td>
        <td>Coimbatore</td>
        <td>9.30PM</td>
        <td>RS.500</td>
      </tr><tr>
        <td>Chennai</td>
        <td>Coimbatore</td>
        <td>6.00AM</td>
        <td>RS.350</td>
      </tr>
      <tr>
        <td>Trichy</td>
        <td>Chengalpat</td>
        <td>5.30PM</td>
        <td>RS.200</td>
      </tr><tr>
```

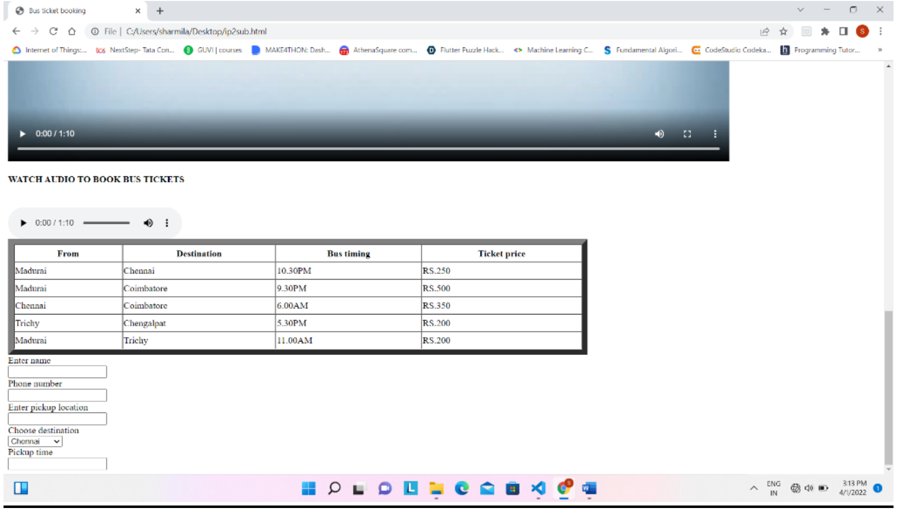
```
        <td>Madurai</td>
        <td>Trichy</td>
        <td>11.00AM</td>
        <td>RS.200</td>
      </tr>
    </table>
    <label for="fname">Enter name</label><br>
    <input type="text" id="fname" name="fname" value=""><br>
    <label for="Phone">Phone number</label><br>
    <input type="text" id="Phone" name="phone" value=""><br>
    <label for="flocation">Enter pickup location</label><br>
    <input type="text" id="flocation" name="flocation" value=""><br>
    <label for="destination">Choose destination</label><br>
    <select id="destination" name="destination">
      <option value="Chennai">Chennai</option>
      <option value="Coimbatore">Coimbatore</option>
      <option value="Madurai">Madurai</option>
      <option value="Chengalpat">Chengalpat</option>
      <option value="Trichy">Trichy</option>
    </select><br>
    <label for="fname">Pickup time</label><br>
    <input type="text" id="fname" name="fname" value=""><br>
  </body>
</html>
```

OUTPUT:





WATCH VIDEO TO BOOK TICKETS



WATCH AUDIO TO BOOK BUS TICKETS

From	Destination	Bus timing	Ticket price
Madurai	Chennai	10.30PM	RS.250
Madurai	Coimbatore	9.30PM	RS.500
Chennai	Coimbatore	6.00AM	RS.350
Trichy	Chengalpat	5.30PM	RS.200
Madurai	Trichy	11.00AM	RS.200

Enter name

Phone number

Enter pickup location

Choose destination
Chennai

Pickup time

Observation	
Record	
Total	

RESULT:

The given webpage for bus ticket booking is created with all necessary details.

EX.NO:2 DATE:06.4.2022	CASCADING STYLE SHEETS(CSS)

AIM:

To design an interactive webpage for bus ticket booking using different types of stylesheets(use inline ,internal ,eternal CSS).

ALGORITHM:

1. Create a webpage with a login option.
2. When you click the login it takes you to the login page.
3. Login page has two form slides one is for login and other is for new registration.
4. When you click the image it takes you to the ticket booking form.
5. In the booking form, you can view details like bus timings and other informations.

PROGRAM:

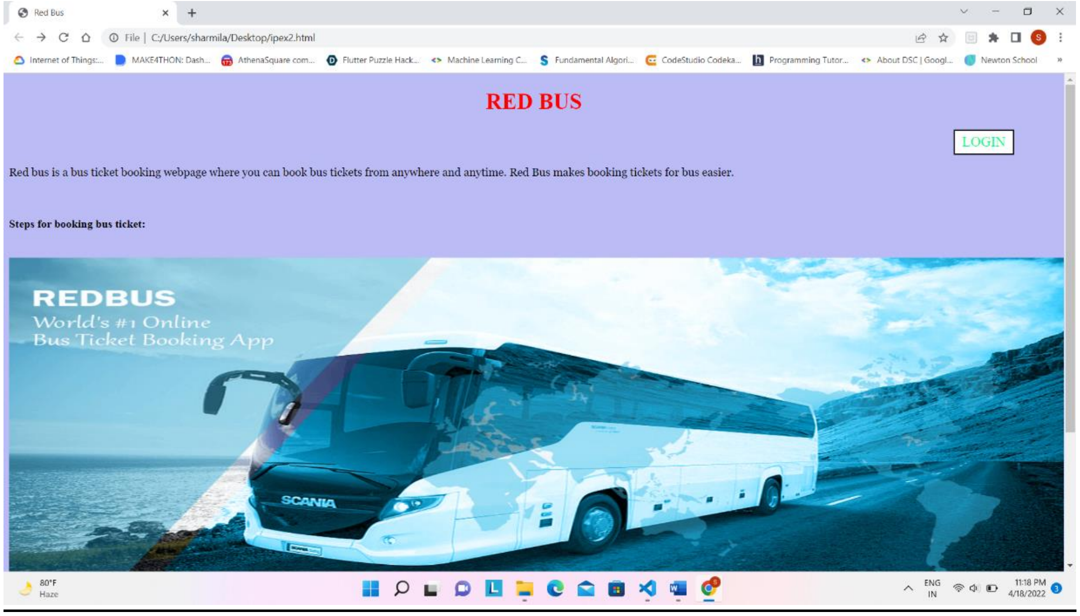
```
<!DOCTYPE html>
<html>
  <head>
    <title>Red Bus</title>
    <style>
      *{
        background: rgb(187, 187, 245);
      }
      .log{
        text-align: center;
        color: springgreen;
        background-color: white;
        border: 2px solid black;
        padding: 5px 10px;
        display: inline-block;
        font-size: 20px;
        cursor: pointer;
        text-decoration: none;
        margin-left: 90%;

      }
      .bus{

      }
    </style>
  </head>
  <body>
    <div class="container">
      <h1 style="color: red; text-align: center;">RED BUS</h1>
      <a href="loginpage.html" class="log">LOGIN
      </a><br/>
      <p style="font: size 40px; font-family: Georgia, 'Times New Roman', Times, serif;">Red bus is a
bus ticket booking webpage where you can book bus tickets from anywhere and anytime. Red Bus
makes booking tickets for bus easier.</p><br/>
      <h4>Steps for booking bus ticket:</h4><br/>
      <img src="bus1.png" width="1510px" height="500px" alt="image not available"></img><br/>
      <table border="10px" cellspacing="0" width="1000" height="200">
        <th>From</th>
        <th>Destination</th>
        <th>Bus timing</th>
        <th>Ticket price</th>
        <tr>
          <td>Madurai</td>
          <td>Chennai</td>
          <td>10.30PM</td>
          <td>RS.250</td>
        </tr>
        <tr>
          <td>Madurai</td>
          <td>Coimbatore</td>
          <td>9.30PM</td>
          <td>RS.500</td>
        </tr>
        <tr>
          <td>Chennai</td>
          <td>Coimbatore</td>
          <td>6.00AM</td>
          <td>RS.350</td>
        </tr>
        <tr>
          <td>Trichy</td>
          <td>Chengalpat</td>
          <td>5.30PM</td>
          <td>RS.200</td>
        </tr>
        <tr>
          <td>Madurai</td>
          <td>Trichy</td>
          <td>11.00AM</td>
          <td>RS.200</td>
        </tr>
      </table>


    </div>
  </body>
</html>
```

LOGIN.CSS

```
*{
  margin:0;
  padding:0;
}
.container{
  width:  100%;
  height: 100vh;
  font-family: sans-serif;
  background: rgb(187, 187, 245);
  color: #fff;
  display: flex;
  align-items: center;
  justify-content: center;

}
.card{
  width: 350px;
  height: 500px;
  box-shadow: 0 0 40px 20px rgba(0,0,0,0.26);
  perspective: 1000px;
}
.inner-box{
  position: relative;
  width: 100%;
  height: 100%;
  transform-style: preserve-3d;
  transition: transform 1s;
}
.card-front, .card-back{
  position: absolute;
  width: 100%;
  height: 100%;
```

```
    background-position: center;
    background-size: cover;
    background-image: linear-gradient(rgba(0,0,100,0.8),rgba(0,0,100,0.8)),url(sss.jpg);
    padding: 20%;
    box-sizing: border-box;
    backface-visibility: hidden;
}
.card-back{
    transform: rotateY(180deg);
}
.card h2{
    font-weight: normal;
    font-size: 24px;
    text-align: center;
    margin-bottom: 20px;
}
.input-box{
    width: 100%;
    background: transparent;
    border: 1px solid #fff;
    margin: 6px 0;
    height: 32px;
    border-radius: 20px;
    padding: 0 10px;
    box-sizing: border-box;
    outline: none;
    text-align: center;
    color: #fff;
}
::placeholder{
    color: #fff;
    font-size: 12px;
}
button{
    width: 100%;
    background: transparent;
    border: 1px solid #fff;
    margin: 35px 0 10px;
    height: 32px;
    font-size: 12px;
    border-radius: 20px;
    padding: 0 10px;
    box-sizing: border-box;
    outline: none;
    color: #fff;
    cursor: pointer;
}
.submit-btn{
    position: relative;
}
.submit-btn::after{
    content: '\27a4';
    color: #333;
    line-height: 32px;
    font-size: 17px;
    height: 32px;
    width: 32px;
    border-radius: 50%;
    background: #fff;
    position: absolute;
    right: -1px;
    top: -1px;
}
span{
    font-size: 13px;
    margin-left: 10px;
}
.card .btn{
    margin-top: 70px;
}
.card a{
    color: #fff;
    text-decoration: none;
    display: block;
    text-align: center;
    font-size: 13px;
    margin-top: 8px;
}
```

OUTPUT:

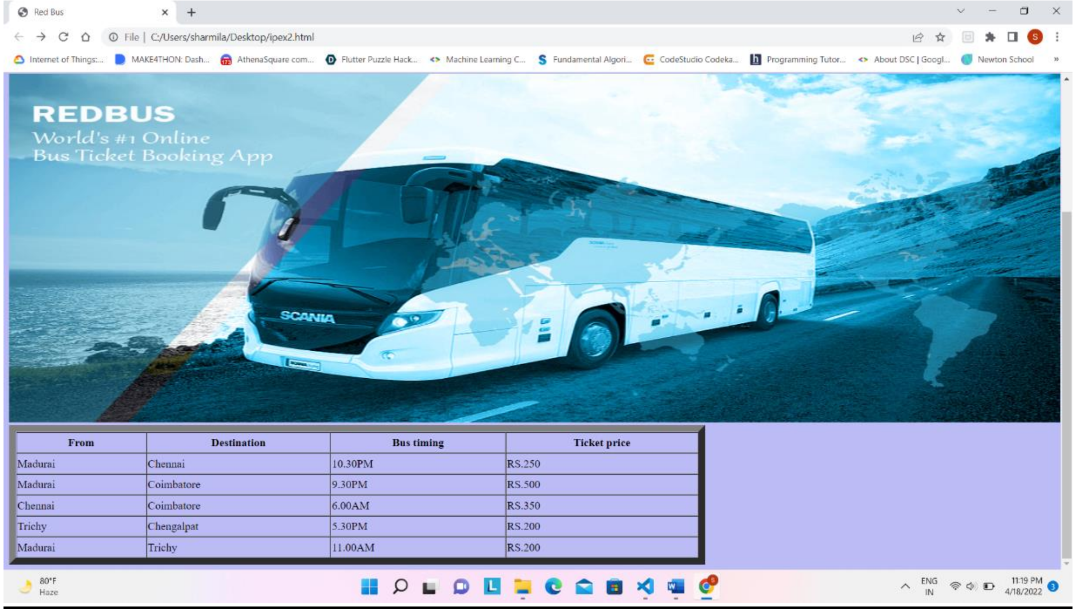


RED BUS

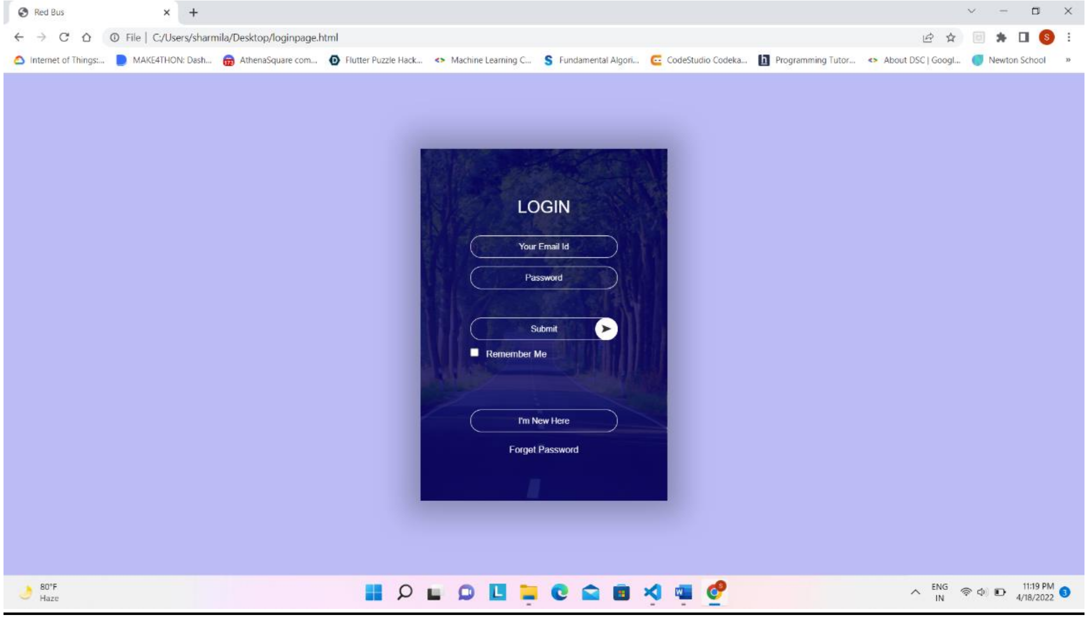
LOGIN

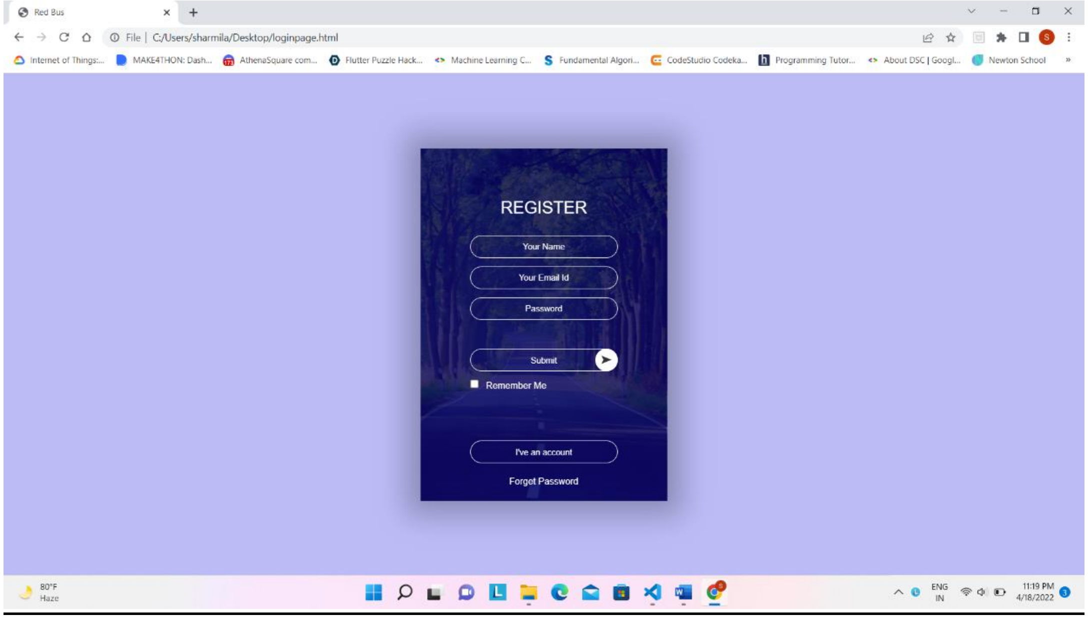
Red bus is a bus ticket booking webpage where you can book bus tickets from anywhere and anytime. Red Bus makes booking tickets for bus easier.

Steps for booking bus ticket:



From	Destination	Bus timing	Ticket price
Madurai	Chennai	10.30PM	RS.250
Madurai	Coimbatore	9.30PM	RS.500
Chennai	Coimbatore	6.00AM	RS.350
Trichy	Chengalpat	5.30PM	RS.200
Madurai	Trichy	11.00AM	RS.200


Red Bus
File | C:/Users/sharmila/Desktop/loginpage.html
LOGIN
Your Email Id
Password
Submit
Remember Me
I'm New Here
Forget Password


Red Bus
File | C:/Users/sharmila/Desktop/loginpage.html
REGISTER
Your Name
Your Email Id
Password
Submit
Remember Me
I've an account
Forget Password

Observation	
Record	
Total	
Sign	

RESULT:

The given webpage for bus ticket booking using cascading style sheets is created.

EX. NO: 3A **DATE:22/04/2022**	**JAVASCRIPT**

AIM:
To write the Java Script code for following programs.

ALGORITHM:

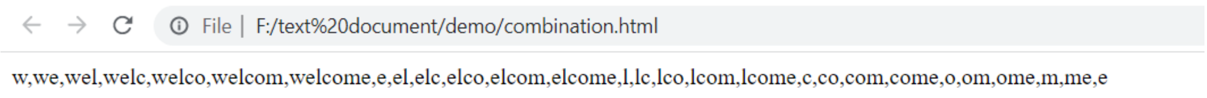
1. Open Netbeans and create a new project.
2. Type <html> <head> section.
3. Under <body> section create a <script> tag and type the code.
4. Create a function using function function_name (){…};
5. Call the function using function name.
6. Close script tag by using </script>
7. Close body section by </body>
8. Run the html file in suitable web browser.
9. Display the output.

1.Write a java script function that print all combination of strings

CODE:

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>
<script>
function combinator (s)
{
list_of_strings =[];
for(i=0;i<s.length;i++){
for(j=i+1;j<s.length+1;j++){
list_of_strings.push(s.slice(i, j));
}}
return list_of_strings;
}
document.write(combinator("welcome"));
</script>
</body>
</html>
```

OUTPUT:



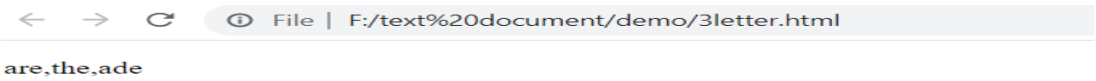
```
w,we,wel,welc,welco,welcom,welcome,e,el,elc,elco,elcom,elcome,l,lc,lco,lcom,lcome,c,co,com,come,o,om,ome,m,me,e
```

2) **Write a java script function that accepts a sentence as input and then it should list out all 3 letter words in it**

CODE:

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>
<p id ="demo"></p>
<script>
function combinator ()
{
let s1="are ares athe the ade";
arr=s1.split(' ');
new_arr=[];
for(i=0;i<arr.length;i++)
{
if(arr[i].length==3){
new_arr.push(arr[i]);
}}
document.getElementById("demo").innerHTML =new_arr;
}
combinator();
</script>
</body>
</html>
```

OUTPUT:



```
are,the,ade
```

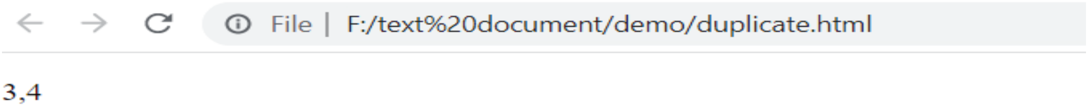
3. **Write a java script program to find out duplicate elements in an array.**

CODE:

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>
<p id ="demo"></p>
<script>
const a = [4,3,6,3,4,3]
function count_duplicate(a){
let res = [];
let counts={};
for(let i =0; i < a.length; i++){
if (counts[a[i]]){
```

```
counts[a[i]] += 1;
} else {
counts[a[i]] = 1;
}}
for (let prop in counts){
if (counts[prop] >= 2){
res.push(prop);
}}
document.getElementById("demo").innerHTML =res;}
count_duplicate(a)
</script>
</body>
</html>
```

OUTPUT:



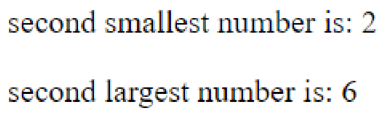
```
3,4
```

4)Write a java script function that prints second largest and smallest element in an array.

CODE:

```
<!DOCTYPE html>
<html>
<head></head>
<body>
<p id ="demo"></p>
<p id ="demo1"></p>
<script>
const a = [4,3,6,1,5,2,7]
function second(a){
s1=[];
s1=a.sort();
len=a.length;
document.getElementById("demo").innerHTML ="second smallest number is:
"+s1[1];
document.getElementById("demo1").innerHTML ="second largest number is:
"+s1[len-2];
}
second(a);
</script></body></html>
```

OUTPUT:



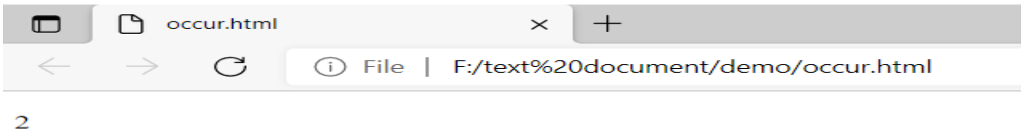
```
second smallest number is: 2

second largest number is: 6
```

5. Write a java script function to count the number of occurrences of a particular word in a sentence

CODE:

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>
<p id ="demo"></p>
<script>
function occur(){
var temp = "to count the occurance of the string by string ";
var count = (temp.match(/string/g) || []).length;
document.getElementById("demo").innerHTML =count;}
occur();
</script>
</body></html>
```

OUTPUT:



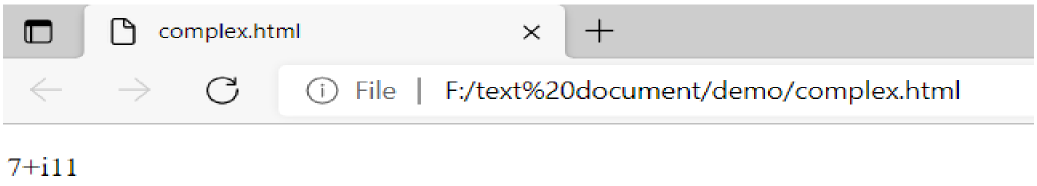
```
2
```

6.Write a java script function to add two complex numbers [create complex number as objects]

CODE:

```
<!DOCTYPE html>
<html>
<head></head>
<body>
<p id ="demo"></p>
<script>
const com = {
real1: 4,
imga1 :5,
real2: 3,
imga2 :6,
add : function() {
real=this.real1+this.real2;
imga=this.imga1+this.imga2;
document.getElementById("demo").innerHTML =real+"+i"+imga;
}};
com.add();
</script>
</body></html>
```

OUTPUT:



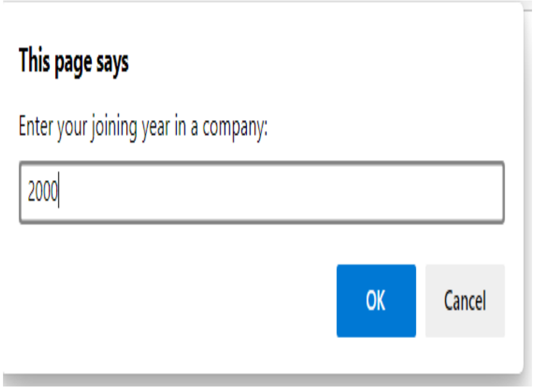
```
7+i11
```

7. Write a java script function to calculate the experience of a employee in a company when joining date is given as input.

CODE:

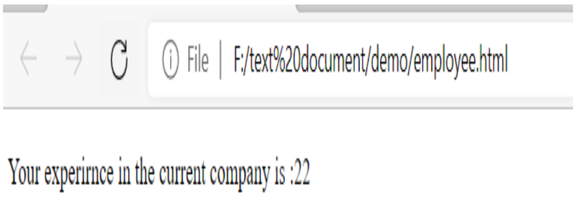
```
<!DOCTYPE html>
<html>
<head></head>
<body>
<p id="demo"></p>
<script>
var date = window.prompt("Enter your joining year in a company:");
var experience = 2022 - date;
document.getElementById("demo").innerHTML = "Your experirnce in the current
company is :"+experience;
</script>
</body>
</html>
```

OUTPUT:


This page says

Enter your joining year in a company:

2000



```
Your experirnce in the current company is :22
```

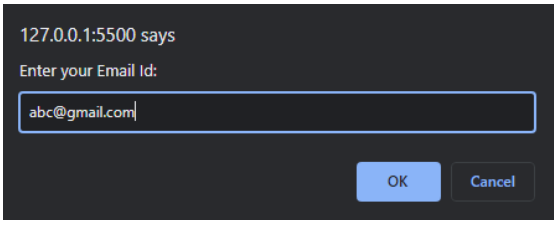
8. Write a java script to find whether given email address is valid or not [Use Regular expression]

CODE:

```
<!DOCTYPE html>
<html>
<head></head>
<body>
<p id="demo"></p>
<p id="demo1"></p>
<script>
function myfunc()
{
```

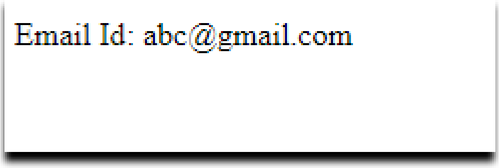
```
let get = window.prompt("Enter your Email Id:");
let regex = /^[a-z A-Z 0-9]@[a-z].[a-z]/;
let test = regex.test(get);
if(test == false){
window.alert("Invalid Mail Id. Enter the correct Mail Id");
}
else{
window.alert("Valid Mail Id.");
}
let get1 = window.prompt("Enter your Email Id:");
document.getElementById("demo").innerHTML = "Email Id:  "+ get1;
}
myfunc();
</script></body></html>
```

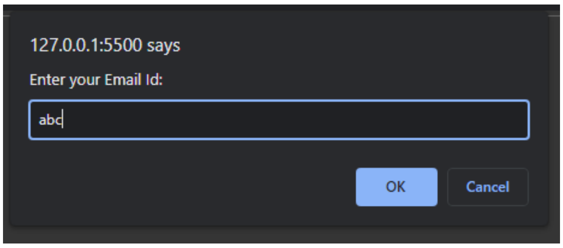
OUTPUT:


127.0.0.1:5500 says

Enter your Email Id:

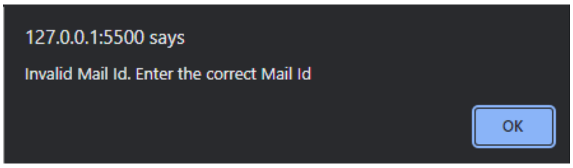
abc@gmail.com


Email Id: abc@gmail.com


127.0.0.1:5500 says

Enter your Email Id:

abc


127.0.0.1:5500 says

Invalid Mail Id. Enter the correct Mail Id

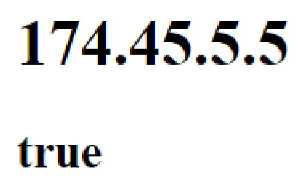
9. Write a java script function to find whether given IP address is valid or not[Use Regular expression]

CODE:

```
<!DOCTYPE html>
<html>
<head>
<title>IP address</title>
</head>
<body>
<h1>174.45.5.5</h1>
<h2 id="ipadd"></h1>
<script>
let str="174.45.5.5"
const octet = '(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]?|0)';
const regex = /^(25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.(25[0-5]|2[0-4][0-9]|[01]?[0-9][0-
9]?)\.(25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.(25[0-5]|2[0-4][0-9]|[01]?[0-9][0-
9]?)$/.test(str);
document.getElementById("ipadd").innerHTML=regex;
```

```
</script>
</body>
</html>
```

OUTPUT:



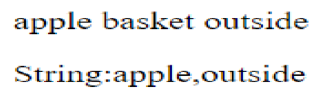
```
174.45.5.5

true
```

10. Write a java script function that prints the string that begins and end with a vowel[Use Regular expression]

CODE:

```
<!DOCTYPE html>
<html lang="en">
<head></head>
<body>
<p id="demo">apple basket outside</p>
<p id="demo1"></p>
<script>
function myfunc(){
let text = document.getElementById("demo").innerHTML;
let regex = text.match(/\b[aeiou]\w+[aeiou]\b/gi) ;
document.getElementById("demo1").innerHTML = "String:"+  regex;}
myfunc();
</script>
</body></html>
```

OUTPUT:



```
apple basket outside

String:apple,outside
```

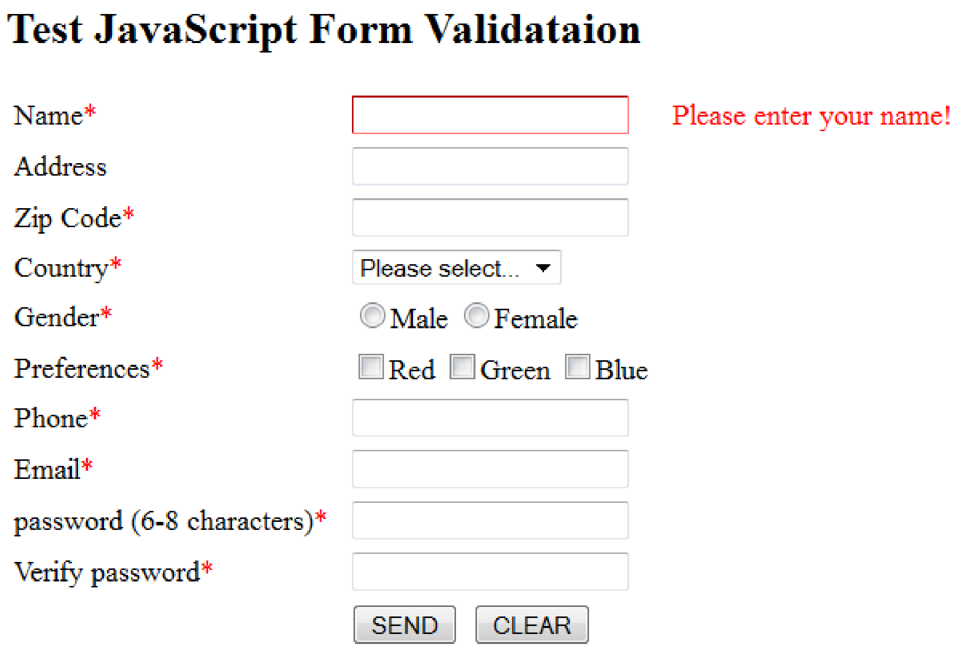
Observation	
Record	
Total	

RESULT:

Thus, the Java Script code for above programs are written and executed successfully.

EX. NO: 3B **DATE: 26/04/2022**	**FORM VALIDATION USING JAVASCRIPT**

QUESTION:



Test JavaScript Form Validataion

Name*		Please enter your name!
Address		
Zip Code*		
Country*	Please select... ▾	
Gender*	○ Male ○ Female	
Preferences*	□ Red □ Green □ Blue	
Phone*		
Email*		
password (6-8 characters)*		
Verify password*		
	SEND CLEAR	

1. Ensure that all the fields have some entry.
2. Name should be of minimum 6 characters and maximum 12 characters, should have only alphabets
3. Address field should have some entry
4. Zip code must be a 6-digit number
5. Country field should have some selection
6. Gender and Preferences field should have some selection
7. Phone number must be a 10-digit number
8. Email field should follow email format, should have @ and . symbols, e.g.,aaa@gmail.com
9. Password should be 6-8 characters, should have both numbers and alphabets
10. Password and verify password field should have the same content

When you click the send button if all the fields have entries and if it satisfies all the constraints mentioned above, it should display successfully registered message…

If any one of the constraints is not satisfied, it should display the message as not a valid entry nearby that field. Example is also mentioned in the image. (Note the name field) Dharwin R V J

AIM:

To create a form validation using Java Script.

ALGORITHM:

1. Open Netbeans and create a new project.
2. Use form tag to display the details that are needed to be filled.
3. Give separate div tags for easy modifications at a particular place.
4. Use script tag for validation.
5. Some basics constraints are email id must definitely contain ‘@’ symbol.
6. If all the constraints are satisfied, then display registration successful.
7. Else display the alert message for which the content must be changed.
8. Display the output.

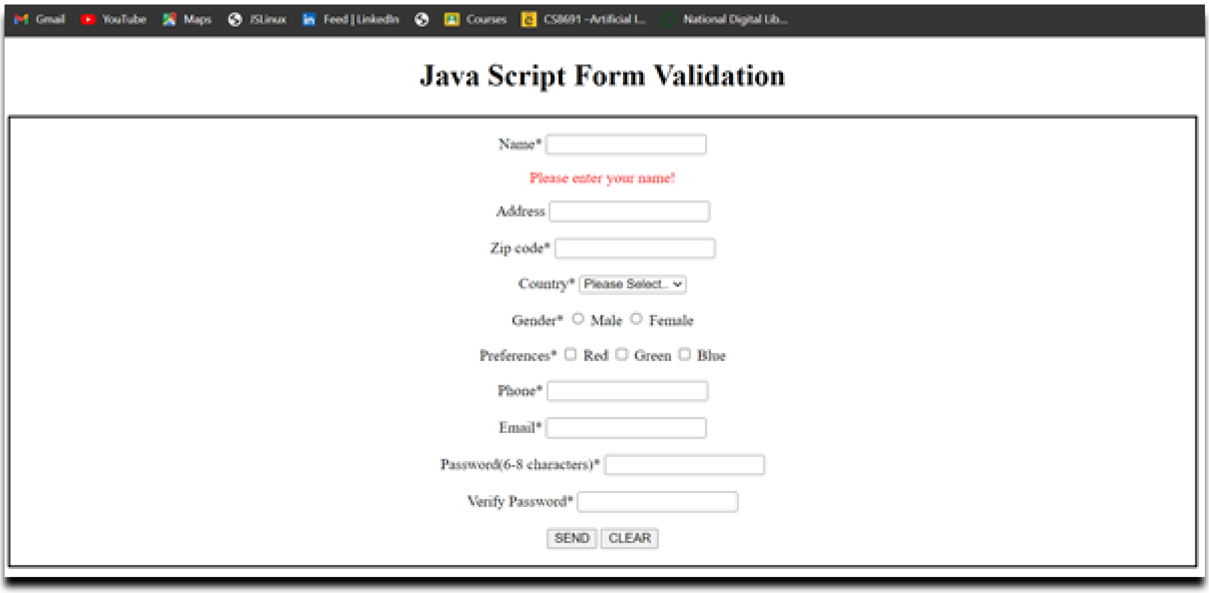
PROGRAM:

index.html:

```
<!DOCTYPE html>
<html>
    <head>
        <title>Form Validation</title>
        <style>
            h1{
                text-align: center;
            }
            div{
                text-align: center;
                border: 2px solid black;
                margin-top: 2%;
            }
            p{
                color: red;
            }
        </style>
    </head>
    <body>
        <h1>Java Script Form Validation</h1>
        <div>
            <form name="form" onsubmit="return validate()" method="post"><br>
                <label for="fname">Name*</label>
                <input type="text" name="fname" id="fname" required><br>
                <p>Please enter your name!</p>
                <label for="address">Address</label>
                <input type="text" name="address" id="address"required><br><br>
                <label for="code">Zip code*</label>
                <input type="number" name="code" id="code" required><br><br>
                <label for="cselect">Country*</label>
                <select name="country" id="country" required><br><br>
                    <option value="select">Please Select..</option>
                    <option value="india">India</option>
                    <option value="australia">Australia</option>
                    <option value="canada">Canada</option>
                    <option value="vietnam">Vietnam</option>
                    <option value="malaysia">Malaysia</option>
                    <option value="singapore">Singapore</option>
                    <option value="sri lanka">Sri Lanka</option>
                    <option value="usa">USA</option>
                </select><br><br>
                <label for="gender">Gender*</label>
                <input type="radio" name="gender" id="male">
                <label for="male">Male</label>
                <input type="radio" name="gender" id="female">
                <label for="female">Female</label><br><br>
                <label for="prefer">Preferences*</label>
                <input type="checkbox" name="prefer" id="red">
                <label for="red">Red</label>
                <input type="checkbox" name="prefer" id="green">
                <label for="green">Green</label>
                <input type="checkbox" name="prefer" id="blue">
                <label for="blue">Blue</label><br><br>
                <label for="phone">Phone*</label>
                <input type="number" name="number" id="number" required><br><br>
                <label for="mail">Email*</label>
                <input type="text" name="email" id="email" required><br><br>
                <label for="password">Password(6-8 characters)*</label>
                <input type="text" name="password" id="password" required><br><br>
                <label for="verify">Verify Password*</label>
                <input type="text" name="verify" id="verify" required><br><br>
                <input type="submit" value="SEND">
                <input type="submit" value="CLEAR">
            </form><br>
        </div>

        <script>
            function validate(){
                var name=document.getElementById("fname").value;
                var code=document.getElementById("code").value;
                var n=document.getElementById("number").value;
                var pw=document.getElementById("password").value;
                var vp=document.getElementById("verify").value;
                var e=document.getElementById("email").value;
                if(name.match(/^[A-Za-z]+$/)){
                if(code.length==6){
                    if(n.length==10){
                        if(e.match(/^\w+@[a-zA-Z_]+?\.[a-zA-Z]{2,3}$/)){
                            if(pw===vp){
                                if(pw.length>=6||pw.length<=8){
                                    alert("Registration Successful");
```

```
                                    return true;
                                }
                                else{
                                    alert("Use 6-8 characters in passwords");
                                    return false;
                                }
                            }
                            else{
                                alert("Paswords does not match");
                                return false;
                            }
                        }
                        else{
                            alert("Enter valid email address");
                            return false;
                        }
                    }
                    else{
                        alert("Please enter 10 digit phone number");
                        return false;
                    }
                }
                else{
                    alert("Please enter 6 digit zip code");
                    return false;
                }
                }
                else{
                    alert("Enter valid name");
                    return false;
                }
        }
        </script>
    </body>
</html>
```

OUTPUT:



Java Script Form Validation

Name*

Please enter your name!

Address

Zip code*

Country* Please Select...

Gender* ○ Male ○ Female

Preferences* □ Red □ Green □ Blue

Phone*

Email*

Password(6-8 characters)*

Verify Password*

Observation	
Record	
Total	

RESULT:

Thus, form validation using Java Script were created successfully.

EX:NO: 04 **DATE: 05-05-2022**	**Java Servlets**

(1)

AIM:

To write a servlet program to find the gross salary for an employee .Test this by a client program to get the form data inputs (name, empid, basicpay, HRA) and display the result (name, empid, basic pay, HRA along with calculated DA(50% of Basic pay) and gross pay(basic pay+hra+DA)).

ALGORITHM:

```
1) Start
2) Write the html code
3) Create the new package and servlet class.
4) String ename=request.getParameter("ename");
      String empid=request.getParameter("empid");
         int bpay=Integer.parseInt(request.getParameter("bp"));
         int hra=Integer.parseInt(request.getParameter("hrapay"));
         float da=0.50f*bpay;
         double grosspay=bpay+hra+da;
         out.println("<!DOCTYPE html>");
         out.println("<html>");
         out.println("<head>");
         out.println("<title>Servlet firstserv</title>");
         out.println("</head>");
         out.println("<body>");
         out.println("<h1>Employee Information:</h1>");
         out.println("<div><ul><li>Employee Name: "+ename+"</li>"
              + "<li>Employee ID: "+empid+"</li>"
              + "<li>Employee Basic pay: "+bpay+"</li>"
              + "<li>Employee hra: "+hra+"</li>"
              + "<li>Employee da: "+da+"</li>"
              + "<li>Employee gross pay: "+grosspay+"</li></ul></div>");
         out.println("</body>");
         out.println("</html>");
5) Link the servlet code to the htmlcode.
6) run the program.
```

PROGRAM:

HTMLCODE:

```
<!DOCTYPE html>
<html>
   <head>
      <title></title>
```

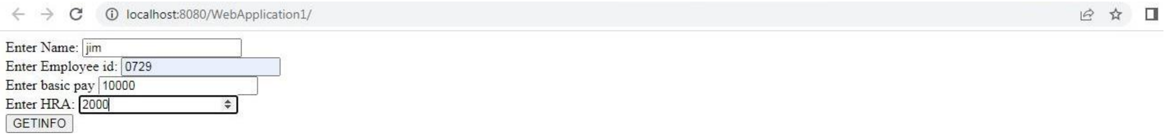
```
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    </head>
    <body>
        <form action="firstserv" method="get">
            <label>Enter Name:</label>
            <input type="text" name="ename">
             <label>Enter Employee id:</label>
            <input type="text" name="empid">
             <label>Enter basic pay</label>
            <input type="number" name="bp">
             <label>Enter HRA:</label>
            <input type="number" name="hrapay"><br>
            <input type="submit" value="GETINFO">
        </form>
    </body>
</html>
```

SERVLET CODE:

FIRSTSERVLET:

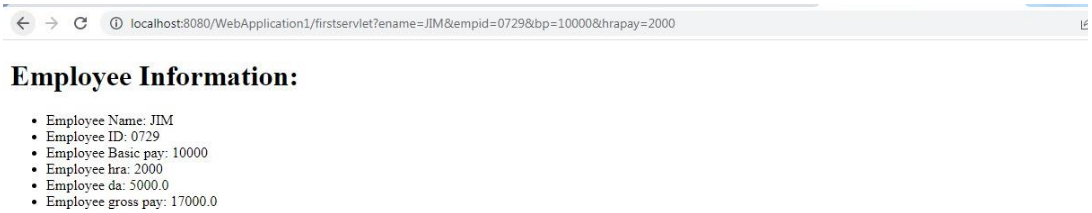
```
/*
 * To change this template, choose Tools | Templates
 * and open the template in the editor.
 */
package newpackage;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 *
 * @author
 */
public class firstserv extends HttpServlet {

    /**
     * Processes requests for both HTTP
     * <code>GET</code> and
     * <code>POST</code> methods.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */
    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        PrintWriter out = response.getWriter();
        try {
            /* TODO output your page here. You may use following sample code. */
            String ename=request.getParameter("ename");
            String empid=request.getParameter("empid");
            int bpay=Integer.parseInt(request.getParameter("bp"));
            int hra=Integer.parseInt(request.getParameter("hrapay"));
            float da=0.50f*bpay;
            double grosspay=bpay+hra+da;
            out.println("<!DOCTYPE html>");
            out.println("<html>");
            out.println("<head>");
            out.println("<title>Servlet firstserv</title>");
            out.println("</head>");
            out.println("<body>");
            out.println("<h1>Employee Information:</h1>");
            out.println("<div><ul><li>Employee Name: "+ename+"</li>"
                    + "<li>Employee ID: "+empid+"</li>"
                    + "<li>Employee Basic pay: "+bpay+"</li>"
                    + "<li>Employee hra: "+hra+"</li>"
                    + "<li>Employee da: "+da+"</li>"
                    + "<li>Employee gross pay: "+grosspay+"</li></ul></div>");
            out.println("</body>");
            out.println("</html>");
        } finally {
            out.close();
        }
    }

    // <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to edit the code.">
    /**
     * Handles the HTTP
     * <code>GET</code> method.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */
    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        processRequest(request, response);
    }

    /**
     * Handles the HTTP
     * <code>POST</code> method.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */
    @Override
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        processRequest(request, response);
    }

    /**
     * Returns a short description of the servlet.
     *
     * @return a String containing servlet description
     */
    @Override
    public String getServletInfo() {
        return "Short description";
    }// </editor-fold>
}
```

OUTPUT:



localhost:8080/WebApplication1/

Enter Name: jim
Enter Employee id: 0729
Enter basic pay 10000
Enter HRA: 2000



localhost:8080/WebApplication1/firstservlet?ename=JIM&empid=0729&bp=10000&hrapay=2000

Employee Information:

- Employee Name: JIM
- Employee ID: 0729
- Employee Basic pay: 10000
- Employee hra: 2000
- Employee da: 5000.0
- Employee gross pay: 17000.0

(2)

AIM:

To write the servlet program ofHamen’s Book shop maintains the inventory of books that are being sold at theshop. The list includes details such as author, title, price, publisher and stock position. Whenever a customer wants a book, the sales person inputs the title and author and the system searches the list and displays whether it is available or not. If it is not, an appropriate message is displayed. If it is, then the system displays the book details and requests for the number of copies required. If the requested copies are available, the total cost of the requested copies is displayed; otherwise the message “Required copies not in stock” is displayed.

ALGORITHM:

1) Start
2) Write the html code
3) Create the new package and servlet class

```
4)     throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        PrintWriter out = response.getWriter();
        int flag=0;
        obj[0]=new bookdetailsinventory("thefaultinourstars","green",500,"abc publications",8);
        obj[1]=new bookdetailsinventory("fivefeetapart","rowling",1500,"xyz publications",12);
        obj[2]=new bookdetailsinventory("2states","chetan bhagat",800,"ko publications",16);
        obj[3]=new bookdetailsinventory("3mistakesofmylife","athvik",200,"keert publications",10);
        obj[4]=new bookdetailsinventory("fivepointsomeone","chetan",900,"okk publications",8);
        try {
            String title=request.getParameter("title");
            String author=request.getParameter("author");
            out.println("<!DOCTYPE html>");
            out.println("<html>");
            out.println("<head>");
            out.println("<title>Details of Book</title>");
            out.println("</head>");
            out.println("<body>");
            for(int i=0;i<5;i++){
                if(title.equalsIgnoreCase(obj[i].title) && author.equalsIgnoreCase(obj[i].author)){
            out.println("<h1>Book "+title+ " found </h1>");
            out.println("<h3> Title : "+ obj[i].title + "</h3>");
            out.println("<h3> Author : "+ obj[i].author + "</h3>");
            out.println("<h3> Price : "+ obj[i].price + "</h3>");
            out.println("<h3> Publisher : "+ obj[i].publisher + "</h3>");
            out.println("<br><br><br><form action='firstserv' method='post' ><label >Number of Copies
required </label>"
                    + "<span><input type='text' name='count'></span><br><input type='hidden' name='posn'
value="+i+">"
                        + "<br><input type='submit' value='SEARCH'></form>");
            out.println("</body>");
            out.println("</html>");
```

5) Link the servlet code to the htmlcode.

6) run the program.

PROGRAM:

HTML CODE:

```
<!DOCTYPE html>
<html>
    <head>
        <title>TODO supply a title</title>
        <meta charset="UTF-8">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
    </head>
    <body>
        <form action="pro1" method="get">
            Enter book name:<input type="text" name="title" id="title"><br><br>
            Enter book author:<input type="text" name="author" id="author"><br><br>
            <input type="submit" value="GET INFO">
        </form>
    </body>
</html>
```

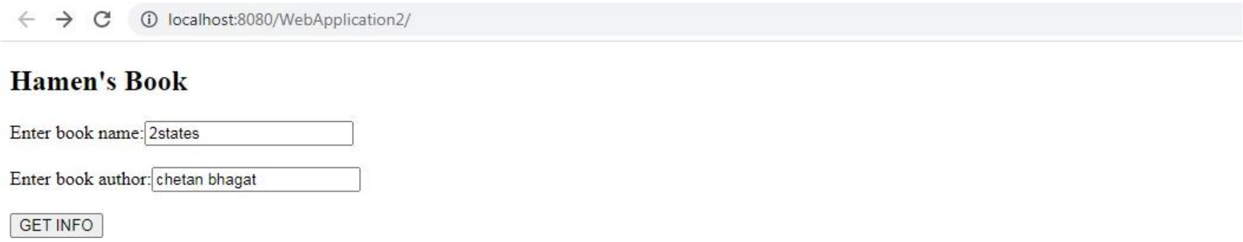
SERVLET CODE:

```
 import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet(name = "BookServlet", urlPatterns = {"/BookServlet"})
public class firstserv extends HttpServlet {
    bookdetailsinventory obj[]=new bookdetailsinventory[5];
    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        PrintWriter out = response.getWriter();
        int flag=0;
        obj[0]=new bookdetailsinventory("thefaultinourstars","green",500,"abc publications",8);
        obj[1]=new bookdetailsinventory("fivefeetapart","rowling",1500,"xyz publications",12);
        obj[2]=new bookdetailsinventory("2states","chetan bhagat",800,"ko publications",16);
        obj[3]=new bookdetailsinventory("3mistakesofmylife","athvik",200,"keert publications",10);
        obj[4]=new bookdetailsinventory("fivepointsomeone","chetan",900,"okk publications",8);
        try {
            String title=request.getParameter("title");
            String author=request.getParameter("author");
            out.println("<!DOCTYPE html>");
            out.println("<html>");
            out.println("<head>");
            out.println("<title>Details of Book</title>");
            out.println("</head>");
            out.println("<body>");
            for(int i=0;i<5;i++){
```

```
            if(title.equalsIgnoreCase(obj[i].title) && author.equalsIgnoreCase(obj[i].author)){
            out.println("<h1>Book "+title+ " found </h1>");
            out.println("<h3> Title : "+ obj[i].title + "</h3>");
            out.println("<h3> Author : "+ obj[i].author + "</h3>");
            out.println("<h3> Price : "+ obj[i].price + "</h3>");
            out.println("<h3> Publisher : "+ obj[i].publisher + "</h3>");
            out.println("<br><br><br><form action='firstserv' method='post' ><label >Number of Copies
required </label>"
                    + "<span><input type='text' name='count'></span><br><input type='hidden' name='posn'
value="+i+">"
                            + "<br><input type='submit' value='SEARCH'></form>");
            out.println("</body>");
            out.println("</html>");
                }}} finally {
            out.close();
        }
    }
    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        processRequest(request, response);
    }
    @Override
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        //processRequest(request, response);
            int count=Integer.parseInt(request.getParameter("count"));
            int pos=Integer.parseInt(request.getParameter("posn"));
            if(count<obj[pos].stock){
               PrintWriter out = response.getWriter();
               out.println("<html><body>");
               out.println("<h1>Total Bill Amount : "+((obj[pos].price)*count)+"</h1>");
               out.println("</html></body>");
            }
    }
    public String getServletInfo() {
        return "Short description";
    }// </editor-fold>
}
    class bookdetailsinventory{
        String title;
        String author;
        int price;
        String publisher;
        int stock;
        bookdetailsinventory(String t,String a, int pr,String pub,int st){
            title=t;
            author=a;
            price=pr;
            publisher=pub;
            stock=st;
```

```
}}
```

OUTPUT:

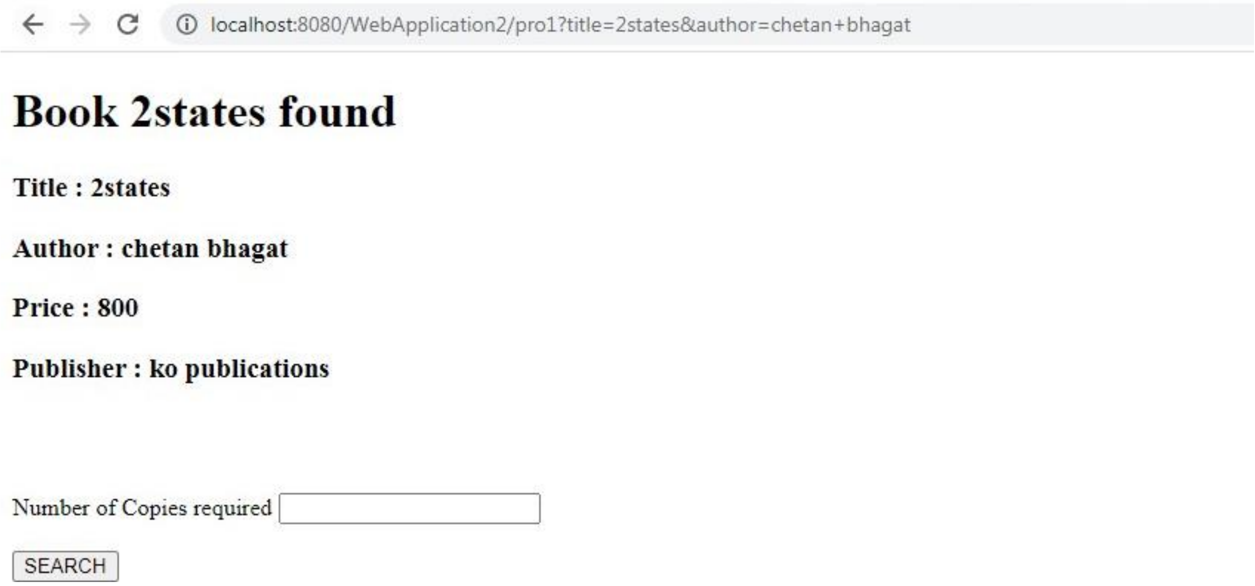


localhost:8080/WebApplication2/

Hamen's Book

Enter book name: 2states

Enter book author: chetan bhagat



localhost:8080/WebApplication2/pro1?title=2states&author=chetan+bhagat

Book 2states found

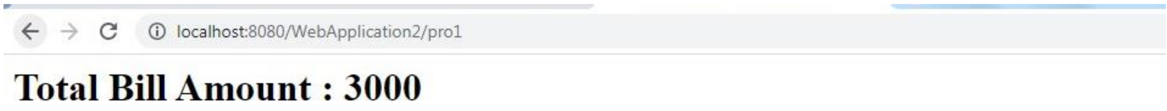
Title : 2states

Author : chetan bhagat

Price : 800

Publisher : ko publications

Number of Copies required



localhost:8080/WebApplication2/pro1

Total Bill Amount : 3000

OBSERVATION	
RECORD	
TOTAL	
SIGNATURE	

RESULT:

Thus, the java servlet program is coded and executed successfully.

EX. NO: 5 DATE: 12/05/2022	JAVA SERVLETS

AIM:

Create a studentdatabase which has a table to with student name, eollno, department,CGPA and average.

1. Create a HTML form which gets student rollno and displays the other details of the student using servlet
2. Create another HTML form to get the values about the student and store it in the student database.

ALGORITHM:

1)Start the program.
2)Create a necessary label,button and input form fields .
3)Create the table in the database with name, rollno, department, cgpa and average .
4)Create two servlets to getdetails and setdetails in a database.
5)First set the details in the database ,"sucessfully added" message will be displayed.
6)Now try to retrieve the details and it gives the student details.

PROGRAM:

INDEX.html

```
<!DOCTYPE html>
<!--
Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
Click nbfs://nbhost/SystemFileSystem/Templates/JSP_Servlet/Html.html to edit this template
-->
<html>
<head>
<title>STUDENT DETAILS</title>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
<body>
<form action="firstserv" method="get">
<h1>To get the student details</h1>
Enter rollno:<input type="text" name="rollno" id="rollno"> <br><br>
<input type="submit" value="getdetails">
</form>
<form action="secondserv" method="get">
<h1>To enter the student details</h1>
Enter name :<input type="text" name="sname" id="sname"><br><br>
Enter rollno :<input type="text" name="srollno" id="srollno"><br><br>
Enter department:<input type="text" name="department" id=department"><br><br>
Enter cgpa :<input type="number" name="cgpa" id="cgpa"><br><br>
Enter average :<input type="number" name="average" id="average"><br><br>
<input type="submit" value="SET DETAILS">
</form>
</body>
</html>
```

firstserv.java

```
/*
* Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this
license
* Click nbfs://nbhost/SystemFileSystem/Templates/JSP_Servlet/Servlet.java to edit this
template
*/
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

import java.sql.*;
//import javax.naming.spi.DirStateFactory.Result;
/**
*
* @author dharwin
*/
public class firstserv extends HttpServlet {
/**
* Processes requests for both HTTP <code>GET</code> and <code>POST</code>
* methods.
*
* @param request servlet request
* @param response servlet response
* @throws ServletException if a servlet-specific error occurs
* @throws IOException if an I/O error occurs
* @throws java.sql.SQLException
* @throws java.lang.ClassNotFoundException
*/
protected void processRequest(HttpServletRequest request, HttpServletResponse response)
throws IOException
{
response.setContentType("text/html;charset=UTF-8");
PrintWriter out = response.getWriter();
try {
```

```
out.println("inside servlet");
String rollno=request.getParameter("rollno");
Class.forName("org.apache.derby.jdbc.EmbeddedDriver");
// String dbURL = "localhost:1527//studentdb";
// String url="jdbc:derby://"+dbURL;
Connection conn =
DriverManager.getConnection("jdbc:derby://localhost:1527/studentdb","dharwin","dharwin@123
#");
Statement st=conn.createStatement();
out.println("statement created");
String query="select * from studenttable where srollno='"+rollno+"'";
ResultSet rs=st.executeQuery(query);
while(rs.next()){
out.println("<!DOCTYPE html>");
out.println("<html>");

out.println("<head>");
out.println("<title>Servlet firstserv</title>");
out.println("</head>");
out.println("<body>");
out.println("<h1>STUDENT DETAILS</h1>");
out.println("<ul><li>Name:" + rs.getString(1)+"</li><li>Rollno:" + rs.getString(2)+
"</li><li>Department:"

+rs.getString(3)+ "</li><li>Cgpa:"
+ rs.getString(4)+"</li><li>Average:"
+ rs.getString(5)+"</ul>");
out.println("</body>");
out.println("</html>");
}
}
catch(Exception e){
out.println(e.getMessage());
}
}
// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the
left to edit the code.">
/**
* Handles the HTTP <code>GET</code> method.
*
* @param request servlet request
* @param response servlet response
* @throws ServletException if a servlet-specific error occurs
* @throws IOException if an I/O error occurs
```

```
*/
@Override
protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
processRequest(request, response);
}
/**
* Handles the HTTP <code>POST</code> method.
*
* @param request servlet request
* @param response servlet response
* @throws ServletException if a servlet-specific error occurs
* @throws IOException if an I/O error occurs
*/

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
// processRequest(request, response);
}
/**
* Returns a short description of the servlet.
*
* @return a String containing servlet description
*/
@Override
public String getServletInfo() {
return "Short description";
}// </editor-fold>
}
```

secondserv.java

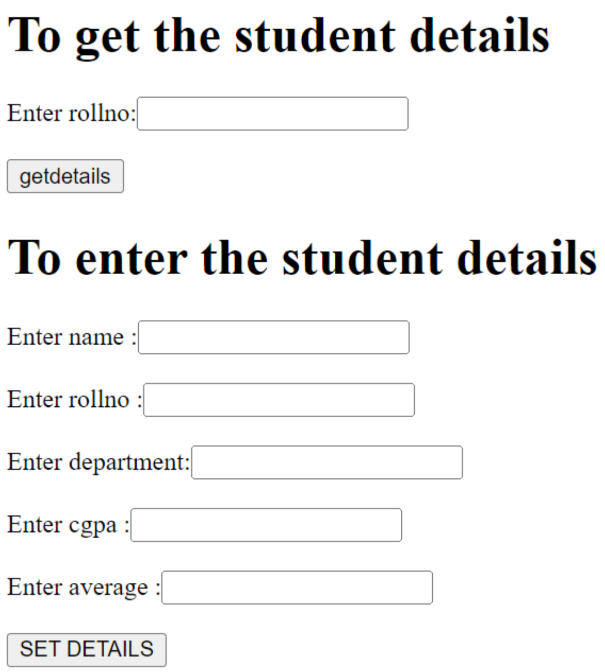
```
/*
* Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
* Click nbfs://nbhost/SystemFileSystem/Templates/JSP_Servlet/Servlet.java to edit this template
*/
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.sql.*;
```

```
/**
*
* @author dharwin
*/
public class secondserv extends HttpServlet {
/**
* Processes requests for both HTTP <code>GET</code> and <code>POST</code>
* methods.
*
* @param request servlet request
* @param response servlet response

* @throws ServletException if a servlet-specific error occurs
* @throws IOException if an I/O error occurs
*/
protected void processRequest(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
response.setContentType("text/html;charset=UTF-8");
PrintWriter out = response.getWriter();
String sname=request.getParameter("sname");
String srollno=request.getParameter("srollno");
String department=request.getParameter("department");
String cgpa=request.getParameter("cgpa");
String average=request.getParameter("average");
try{
Class.forName("org.apache.derby.jdbc.EmbeddedDriver");
Connection conn =
DriverManager.getConnection("jdbc:derby://localhost:1527/studentdb","dharwin","dharwin@123
#");
Statement st=conn.createStatement();
out.println("statement created");
String query="insert into studenttable values
('"+sname+"','"+srollno+"','"+department+"',"+cgpa+","+average+")";
st.executeUpdate(query);
String query2="select * from studenttable where srollno='"+srollno+"'";
ResultSet rs=st.executeQuery(query2);
out.println("<!DOCTYPE html>");
out.println("<html>");
out.println("<head>");
out.println("<title>Servlet secondserv</title>");
out.println("</head>");
out.println("<body>");
out.println("<h1> Added sucessfully</h1>");
while(rs.next()){
```

```
out.println("<ul><li>Name:" + rs.getString(1)+"</li><li>Rollno:" + rs.getString(2)+
"</li><li>Department:"

+rs.getString(3)+ "</li><li>Cgpa:"
+ rs.getString(4)+"</li><li>Average:"
+ rs.getString(5)+"</ul>");
}
out.println("</body>");
out.println("</html>");
}
catch(Exception e){
out.println(e.getMessage());

}
}
// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the
left to edit the code.">
/**
* Handles the HTTP <code>GET</code> method.
*
* @param request servlet request
* @param response servlet response
* @throws ServletException if a servlet-specific error occurs
* @throws IOException if an I/O error occurs
*/
@Override
protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
processRequest(request, response);
}
/**
* Handles the HTTP <code>POST</code> method.
*
* @param request servlet request
* @param response servlet response
* @throws ServletException if a servlet-specific error occurs
* @throws IOException if an I/O error occurs
*/
@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
processRequest(request, response);
}
/**
```

```
* Returns a short description of the servlet.
*
* @return a String containing servlet description
*/
@Override
public String getServletInfo() {
return "Short description";
}// </editor-fold
}
```

OUTPUT:



To get the student details

Enter rollno:

To enter the student details

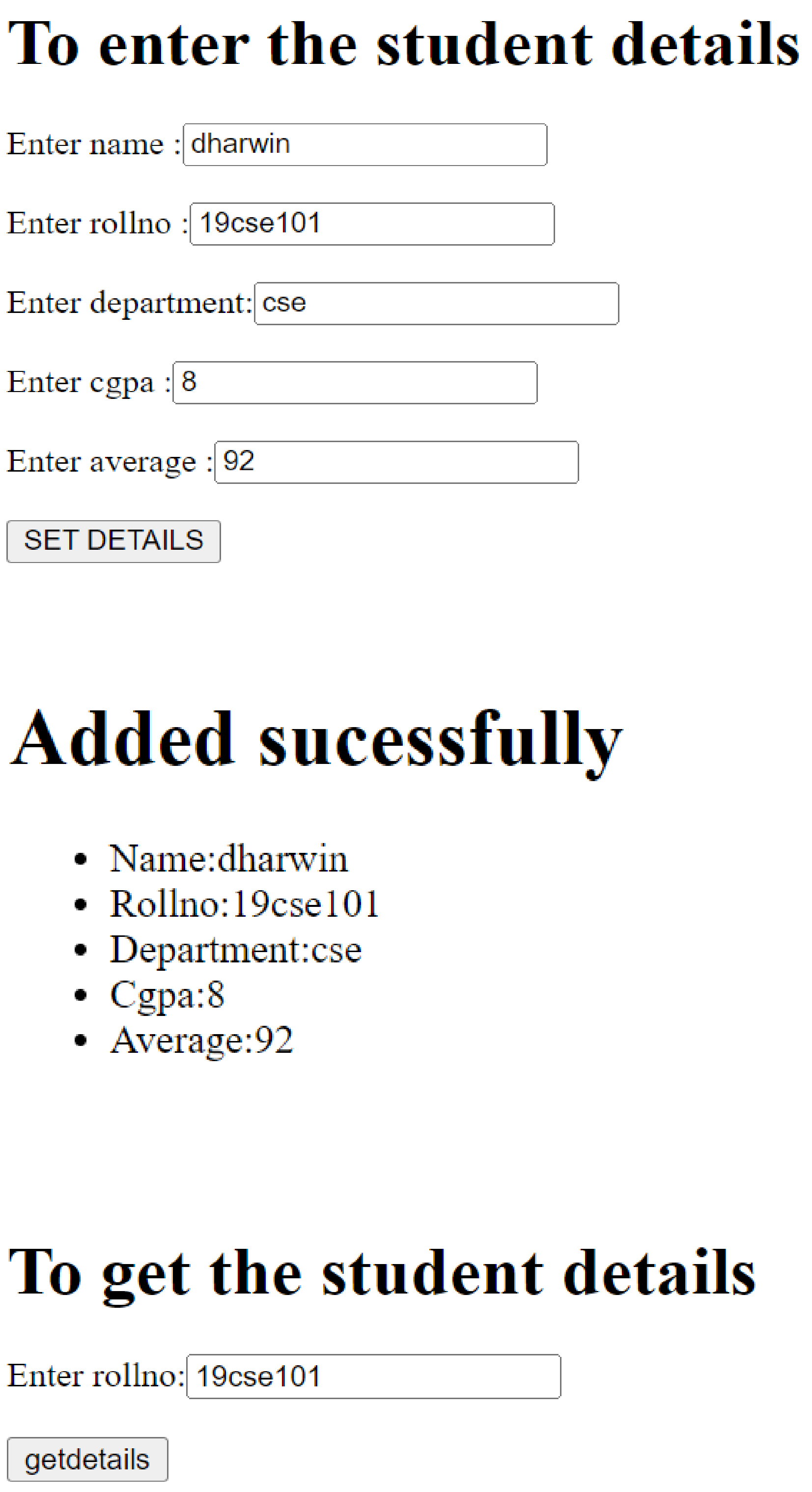
Enter name :

Enter rollno :

Enter department:

Enter cgpa :

Enter average :



To enter the student details

Enter name : dharwin

Enter rollno : 19cse101

Enter department: cse

Enter cgpa : 8

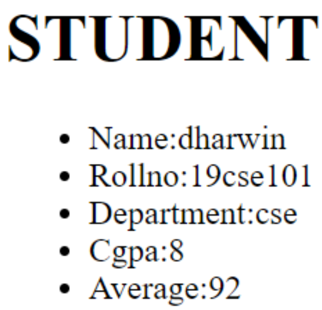
Enter average : 92

Added sucessfully

- Name:dharwin
- Rollno:19cse101
- Department:cse
- Cgpa:8
- Average:92

To get the student details

Enter rollno: 19cse101



STUDENT DETAILS

- Name:dharwin
- Rollno:19cse101
- Department:cse
- Cgpa:8
- Average:92

Observation	
Record	
Total	
Sign	

RESULT:

Thus, a JAVA Application using Java Servlets with Database Connectivity for the given scenario is written and executed successfully.

EX.NO:06 JSP USING DATABASE CONNECTIVITY AND COOKIES

DATE: 18.05.22

QUESTION:

Create an online examination portal using JSP, database and cookies

1. Create a login form which asks for username and password, when the user enters correct user name and password, it should be redirected to a jsp script which checks whether entered credentials are correct using database

2. If the credentials are wrong, display a message to enter correct user name and password

3. If the credentials are correct, display the questions to the user. Store the credentials in a cookie

4. User have to select the answers and press the submit button

5. When the submit button is clicked , a jsp script,

a. Have to calculate the score

b. store the score in the database

c. Address the user with his/her name using the cookie value as Hello “username”.Display all user’s score at the end.

ALGORITHM:

1. Create a Java Web Application in Netbeans IDE.
2. In the index.html file and fix the login form.
3. If credentials are wrong display error message
4. If the credentials are correct, goto newjsp.jsp and display questions.
5. Display questions with multiple choice answers.Select answers.
6. When submitted, goto newjsp2.jsp.Display total score and all users score.
7. Run the application.

CODE:

Index.html:

```
<!DOCTYPE html>
<html>
    <head>
        <title></title>
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    </head>
    <body style="text-align:center;margin:auto 50px;">
        <form method="get" action='newjsp.jsp'>
            <label>Username</label><br><br>
            <input type='text' name='username'><br><br>
            <label>Password</label><br><br>
            <input type='password' name='password'><br><br>
            <input type='submit' value="LOG IN" />
        </form>
    </body>
</html>
```

Newjsp.jsp:

```
<!DOCTYPE html>
<html>
    <head>
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8"
lang='java' import='java.sql.*'>
        <title>JSP Page</title>
    </head>
    <body>
        <%
            response.setContentType("text/html;charset=UTF-8");
            String username = request.getParameter("username");
            String password = request.getParameter("password");
            try {
                String dburl = "jdbc:derby://localhost:1527/ip-lab-6";
                Connection conn = DriverManager.getConnection(dburl, "dharwin",
"dharwin");
                Statement st = conn.createStatement();
                ResultSet rs = st.executeQuery("SELECT * FROM USERSDETAILS
WHERE USERNAME='" + username + "'");
                while(rs.next())
                {
                String retreivedpassword = rs.getString(1);

                if(retreivedpassword.equals(password)) {

                    Cookie ck1 = new Cookie("username", username);
                    Cookie ck2 = new Cookie("password", password);
                    response.addCookie(ck1);
                    response.addCookie(ck2);

                    out.println("<html>");
                    out.println("<body style='text-align:center; margin: auto 50px;'>");
                    out.println("<h2>Multiple Choice Questions</h2>");

                    out.println("<form action='newjsp1.jsp'>");

                    out.println("<h3>Who is the first Prime Minister of India?</h3><br>");
                    out.println("<input type='radio' name='ans1'
value='jawaharlalnehru'><label>Jawaharlal Nehru</label><br>");
                    out.println("<input type='radio' name='ans1'
value='mahatmagandhi'><label>Mahatma Gandhi</label><br>");
                    out.println("<input type='radio' name='ans1'
value='subhashchandrabose'><label>Subhash Chandra Bose</label><br><br>");
```

```
                    out.println("<h3>Which is the capital of India?</h3><br>");
                    out.println("<input type='radio' name='ans2'
value='tamilnadu'><label>Tamil Nadu</label><br>");
                    out.println("<input type='radio' name='ans2'
value='newdelhi'><label>New Delhi</label><br>");
                    out.println("<input type='radio' name='ans2'
value='maharastra'><label>Maharastra</label><br><br>");

                    out.println("<h3>Pick the odd one out</h3><br>");
                    out.println("<input type='radio' name='ans3'
value='lovestory'><label>Love story</label><br>");
                    out.println("<input type='radio' name='ans3'
value='blankspace'><label>Blank space</label><br>");
                    out.println("<input type='radio' name='ans3' value='takitaki'><label>Taki
Taki</label><br><br><BR>");

                    out.println("<input type='submit' value='SUBMIT'>");

                    out.println("</form>");
                } else {
                    out.println("<h3>Incorrect Username or Password ! </h3>");
                }
                out.println("</body></html>");
                }
            } catch(Exception e) {
                System.out.println(e);
            } finally {
                out.close();
            }

        %>
    </body>
</html>
```

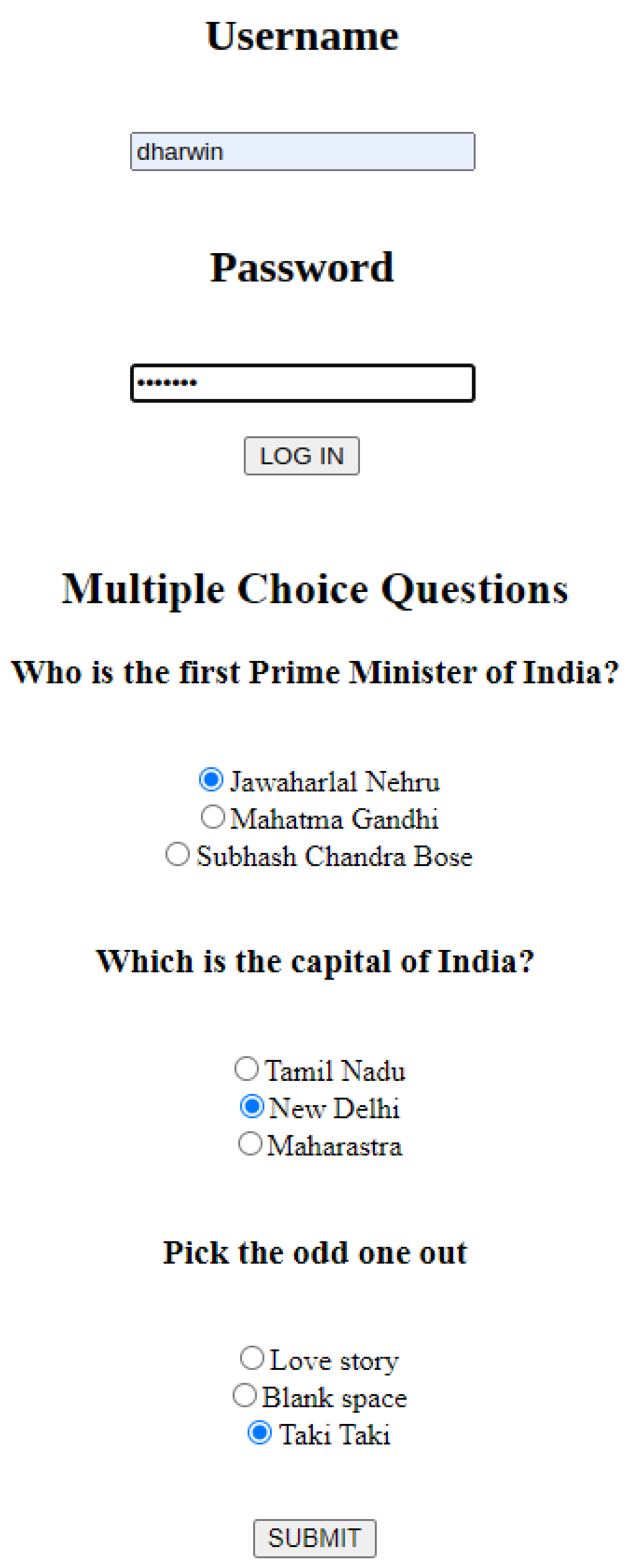
Newjsp1.jsp:

```
<!DOCTYPE html>
<html>
    <head>
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8 lang='java'
import='java.sql.*'">
        <title>JSP Page</title>
    </head>
    <body>
        <%
            Integer score = 0;
            response.setContentType("text/html;charset=UTF-8");
            String ans1 = request.getParameter("ans1");
            String ans2 = request.getParameter("ans2");
            String ans3 = request.getParameter("ans3");
            if (ans1.equals("jawaharlalnehru")) {
```

```
        score++;
      }
      if (ans2.equals("newdelhi")) {
        score++;
      }
      if (ans3.equals("takitaki")) {
        score++;
      }
      String dburl = "jdbc:derby://localhost:1527/ip-lab-6";
      Connection conn = DriverManager.getConnection(dburl, "dharwin", " dharwin ");
      Statement st = conn.createStatement();
      Cookie[] cookie = request.getCookies();
      String username = cookie[1].getValue();
      String password = cookie[2].getValue();
      st.executeUpdate("UPDATE USERSDETAILS SET SCORE=" + score + " WHERE
USERNAME='" + username + "'");

      out.println("<html>");
      out.println("<body style='text-align:center; margin: auto 50px;'>");
      out.println("<h2>Hello " + username + "! </h2>");
      out.println("<h3>Your score is " + score + "</h3>");
      ResultSet rs = st.executeQuery("SELECT USERNAME,SCORE FROM
USERSDETAILS");
    %>
    <table border='1' style='margin:auto;'>
      <tr>
        <th>USERNAME</th>
        <th>SCORE</th>
      </tr>
      <% while (rs.next()) {%>
      <tr>
        <td> <%= rs.getString(1)%></td>
        <td> <%= rs.getString(2)%></td>
      </tr>
      <% } %>
    </table>
    <%
      out.println("</body>");
      out.println("</html>");
    %>
  </body>
</html>
```

OUTPUT:

CORRECT USERNAME AND PASSWORD:



Username

dharwin

Password

•••••••

Multiple Choice Questions

Who is the first Prime Minister of India?

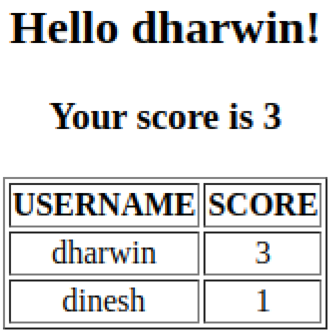
● Jawaharlal Nehru
○ Mahatma Gandhi
○ Subhash Chandra Bose

Which is the capital of India?

○ Tamil Nadu
● New Delhi
○ Maharastra

Pick the odd one out

○ Love story
○ Blank space
● Taki Taki

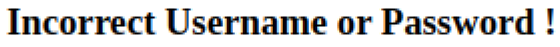


Hello dharwin!

Your score is 3

USERNAME	SCORE
dharwin	3
dinesh	1

INCORRECT USERNAME OR PASSWORD:



Incorrect Username or Password !

OBSERVATION	
RECORD	
TOTAL	

RESULT:

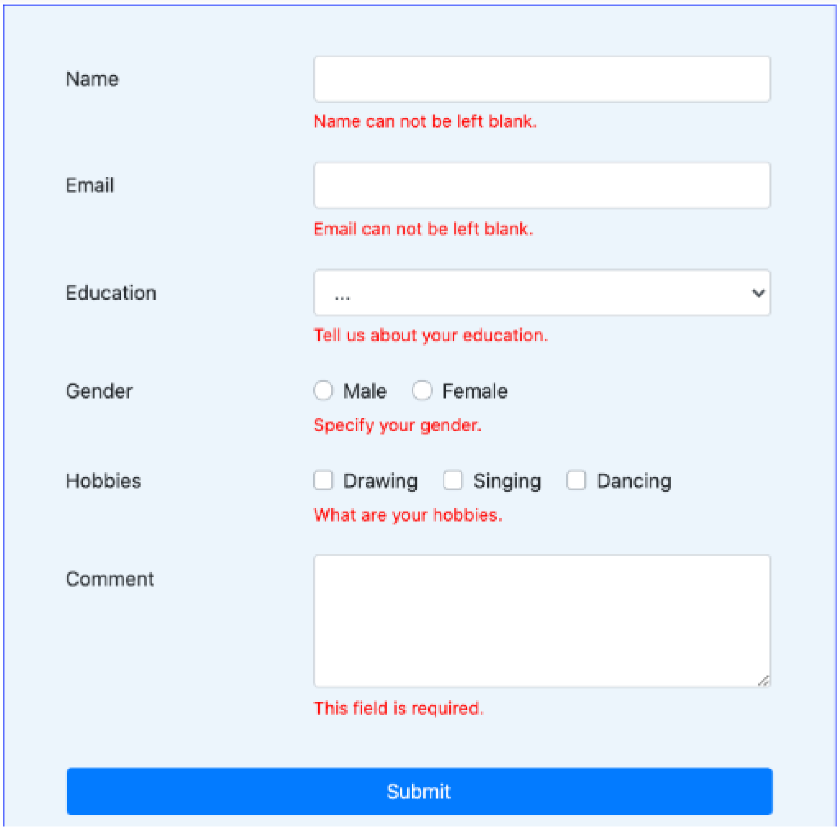
Thus the code for the given question was written and executed.

Ex No. 7 Date: 25/5/2022	PHP Form Validation & PHP Database Connectivity

AIM:

To create an application that validates the form and perform database connectivity using PHP.

A. Create a HTML form and validate it using PHP.



Name

Name can not be left blank.

Email

Email can not be left blank.

Education ...

Tell us about your education.

Gender ○ Male ○ Female

Specify your gender.

Hobbies □ Drawing □ Singing □ Dancing

What are your hobbies.

Comment

This field is required.

PROGRAM:

form.php:

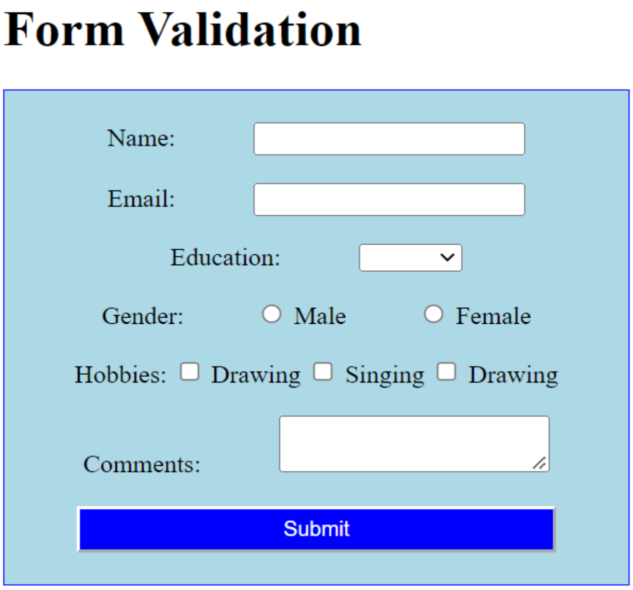
```
<html>

<head>

  <h1>Form Validation</h1>

</head>
<style>
  h1{
    margin-left:300px;
  }
  .formval{
    width:350px;
    border:1px solid blue;
    text-align:center;
    margin-left:300px;
    background-color: lightblue;
    padding:20px;
  }
  .inval{
    margin-left:45px;
  }
  </style>
    <h1>

<?php

    error_reporting(0);
  $error=array();

    function cleaninput($input)

        {
           foreach($input as $key=>$value)
           {
                $value=trim($value);
                $value=stripslashes($value);
                $value=htmlspecialchars($value);

            }

        return $input;

        }

  function validateinput($input)

  {

    if(!array_key_exists($input, $_POST))

    {

      $error["gender"] = "*Gender cannot be left blank";

    }

    if(!array_key_exists($input, $_POST))

    {

      $error["hobbies"] = "*What is your hobbies.";

    }
```

```
foreach($input as $key=>$value) {
    switch($key){
        case "usr":
            if(empty($value))
                $error["usr"]="*Name field Should not be empty";
                break;

        case "email":
            if(!filter_var($value,FILTER_VALIDATE_EMAIL))
             $error["email"]="*email is not valid";
             break;
        case "education":
            if(empty($value))
             $error["education"] = "*Tell us about your education";
             break;
        case "gender":
            if($value=="male" || $value=="female")
                {
                    $error["gender"] = "";
                }

                break;

        case "hobbies":
            if($value=="drawing" || $value=="Singing" || $value=="Dancing")
                          {

                            $error["hobbies"] = "";

                          }

                         break;



         case "comment":

                 if(empty($value))

                    $error["comment"] = "*This field is required";

                    break;



                 }
}//loop
   return $error;
}
    if(isset($_POST["submit-btn"]))
        {
          //Clean the data
            $cleandata=cleaninput($_POST);
//validate the data
$error=validateinput($cleandata);
        }?>
</h1>
<body>
<form action="form.php" method="post" class="formval">
<label>Name:</label>
<input type="    text" name="usr" class="inval"><br>
<div style="color:red"><?php echo $error["usr"]; ?></div>
<br>


<label>Email: </label>
<input type="text" name="email" class="inval"><br>
<div style="color:red"><?php echo $error["email"]; ?></div>
<br>



                             <label>Education:</label>
```

```
                    <select name="education" id="education" class="inval">
                    <option value="" class="inval"></option>
                    <option value="BE"class="inval">BE</option>
                    <option value="B.tech" class="inval">ME</option>
                    <option value="MBBS" class="inval">M.tech</option>
                    </select>
                    <div style="color:red"><?php echo
$error["education"];?></div>
                    <br>
<label>Gender: </label>
                    <input type="radio" id="male" name="gender" value="male"
class="inval">
                    <label>Male</label>
                    <input type="radio" id="female" name="gender"
value="female" class="inval">
                    <label>Female</label>
                    <div style="color: red">
                    <?php echo $error["gender"]; ?></div>
                    <br>
<label>Hobbies:</label>
                    <input type="checkbox" name="hobbies" value="drawing" >
                    <label>Drawing</label>
                    <input type="checkbox" name="hobbies" value="Singing">
                    <label>Singing</label>
                    <input type="checkbox" name="hobbies" value="Dancing">
                    <label>Drawing</label>
                    <br>
```

```
                              <div style="color: red">
                               <?php echo $error["hobbies"]; ?>
                              </div>
                              <br>
<label>Comments:</label>
                              <textarea name="comment" class="inval"></textarea> <br>
                              <div style="color: red; "><?php echo $error["comment"]; ?></div>
                              <br>


                              <input type="submit" value="Submit" name="submit-btn" style="height:30px;border-color:white;color:white;width:300px;background-color:blue">
</form>
</body>
</html>
```

OUTPUT:



Form Validation

Name:

Email:

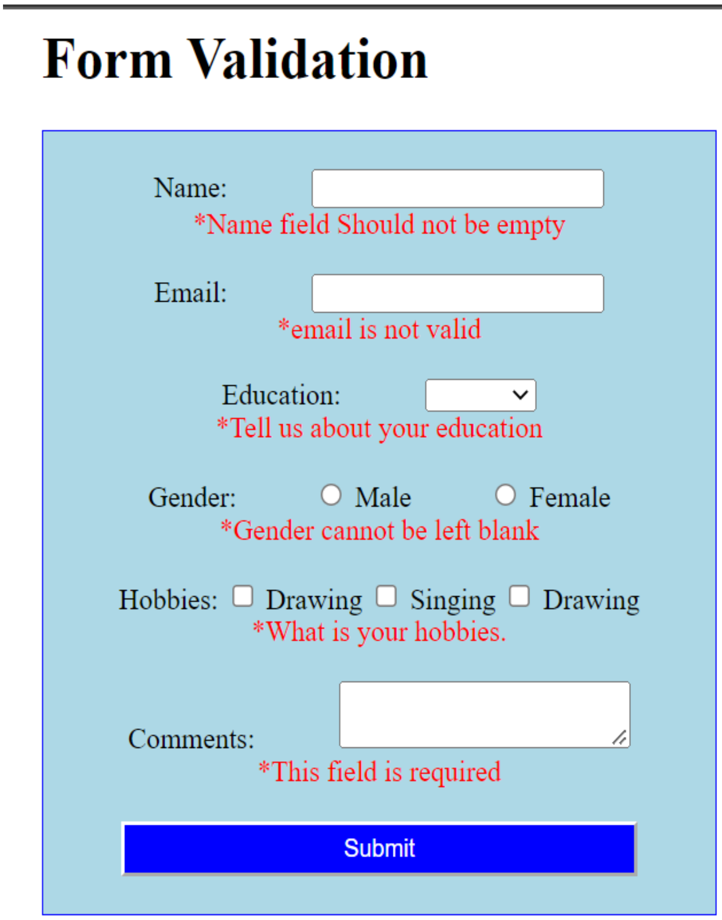
Education:

Gender: ○ Male ○ Female

Hobbies: □ Drawing □ Singing □ Drawing

Comments:

Submit



Form Validation

Name:
*Name field Should not be empty

Email:
*email is not valid

Education:
*Tell us about your education

Gender: ○ Male ○ Female
*Gender cannot be left blank

Hobbies: □ Drawing □ Singing □ Drawing
*What is your hobbies.

Comments:
*This field is required

B. Create a login form using PHP. When a user enters correct user name and password, display a message Logged in successfully. Else display an error message “enter correct user name and password”. Use MYSQL database to store user name and passwords.

PROGRAM:
saveform.php

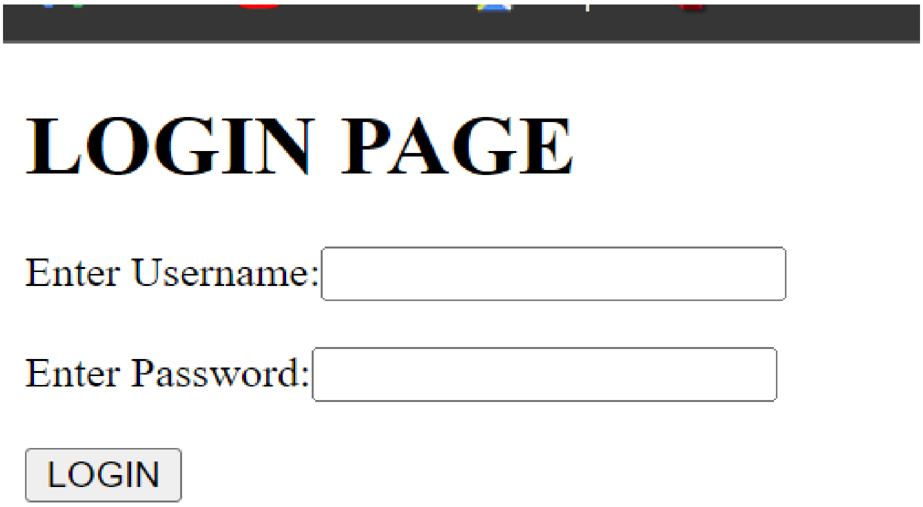
```
<html>
   <body>
   <?php

      if (isset($_POST["login-btn"])) {
         $username=$_POST["uname"];
         $password=$_POST["pword"];

         $conn=new mysqli("localhost","root","","classwork");
         if(empty($username)){
            die("<h2 style='color:red;'>Don't leave the fields empty</h2>");
         }
         else{
         if($conn->connect_error){
            die("connection failed : ".$conn->connect_error);
         }
```

```
            $sql="SELECT password from login where username='$username'";
            $result=$conn->query($sql);
            if($result->num_rows>0){
               while($row=$result->fetch_assoc()){
                  $dbpassword=$row["password"];
               }
            }
            else{
              //  echo "0 results";
            }
         }
            if(strcmp($password,$dbpassword)==0){
               echo "<h2 style='color:green;'>Hi $username, Your login is
successful</h2>";

            }
            else{
               echo "<h2 style='color:red;'>Please enter your username and password
correctly!</h2>";
            }
         }
         ?>
  </body>
</html>
```

login.php

```
   <!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>
   <style>

   </style>
</head>
<h1>LOGIN PAGE</h1>
<body>
   <form action="saveform.php" method="post">
      Enter Username:<input type="text" name="username"><br><br>
      Enter Password:<input type="password" name="password"><br><br>
      <input type="submit" name="login-btn" value="LOGIN">
   </form>
</body>
</html>
```

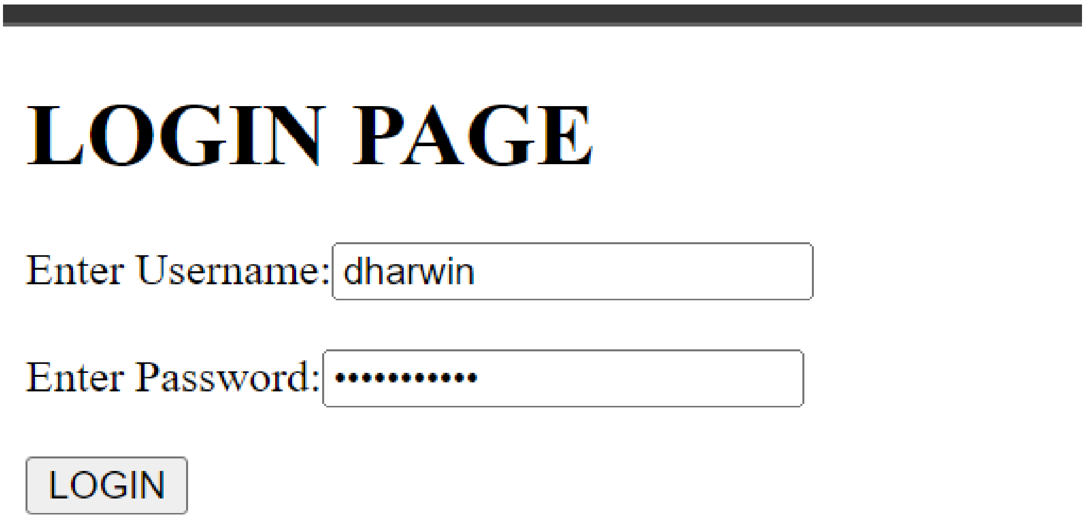
OUTPUT:



LOGIN PAGE

Enter Username:

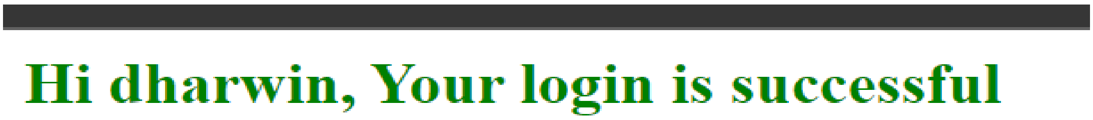
Enter Password:



LOGIN PAGE

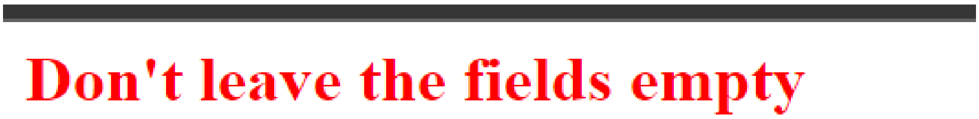
Enter Username: dharwin

Enter Password: •••••••••••



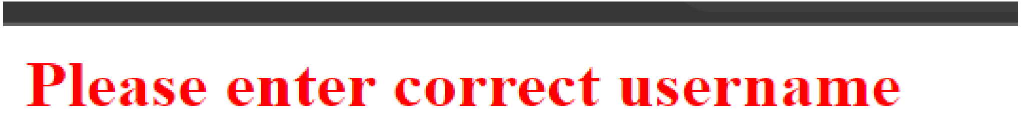
Hi dharwin, Your login is successful

If the field is left empty:



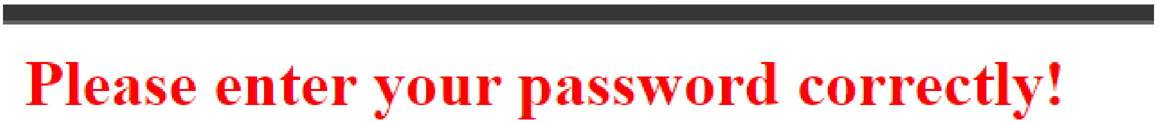
Don't leave the fields empty

If the username is incorrect,



Please enter correct username

If password is incorrect,



Please enter your password correctly!

OBSERVATION	
RECORD	
TOTAL	

RESULT:

Thus an application that validates the form and perform database connectivity using PHP are written and executed.

Ex.No:8 **AJAX**

Date: 04/06/22

1. Create and save an XML document at the server, which contains 10 users Information. Write a Program, which takes user Id as an input and returns the User details by taking the user information from the XML document

AIM:

To write AJAX program for given question.

ALGORITHM:

1) Create an index.html file and fix the form.

2) Get roll number through the form

3) Fetch the details of student corresponding to that particular roll number.

4) Display the details below the form

INDEX.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>
       <span><label>Enter Roll Number</label><span>
       <input type="text" id="roll" name="roll">
       <button onclick="fetch()">Search</button>
   <h1 id="demo"></h1>
```

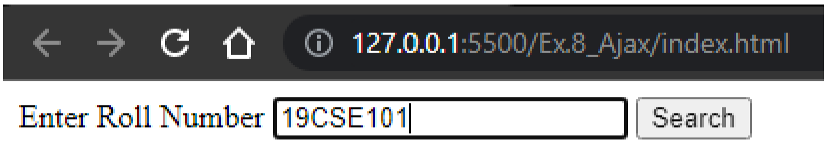
```
    <script>

        function fetch(){
            var txt="";
            var xhttp=new XMLHttpRequest();
           //document.getElementById("demo").innerHTML="hello";
            xhttp.onreadystatechange=function(){
                if(this.readyState==4 && this.status==200){
                    //alert("state changed");
                    var xmldoc=xhttp.responseXML;
                    var x=xmldoc.getElementsByTagName("student");
                    //txt="hi,"+x[0].childNodes[2].nodeValue;
                    var roll=document.getElementById("roll").value;
                    for(var i=0;i<x.length;i++){
                       if(roll==x[i].getElementsByTagName("Roll")[0].childNodes[0].nodeValue){
                            txt+="Name :
"+x[i].getElementsByTagName("Name")[0].childNodes[0].nodeValue+
                            "<br> Department :
"+x[i].getElementsByTagName("Dept")[0].childNodes[0].nodeValue+
                            "<br> Cgpa :
"+x[i].getElementsByTagName("cgpa")[0].childNodes[0].nodeValue;
                        }
                    }
                    document.getElementById("demo").innerHTML=txt;
                }
            };
            xhttp.open("GET","StudentDetails.xml",true);
            xhttp.send();

        }
    </script>
</body>
</html>
```

STUD.XML:

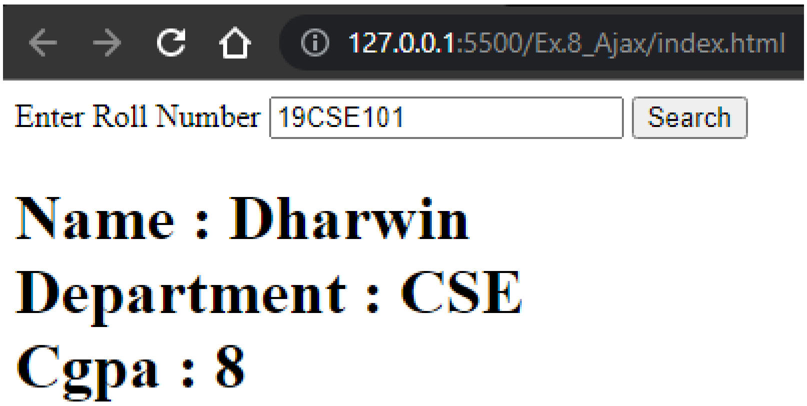
```
<?xml version="1.0" encoding="UTF-8" ?>
<college>
   <student>
<Roll>19CSE101</Roll>
<Name>Dharwin</Name>
<Dept>CSE</Dept>
<cgpa>8</cgpa>
</student>
   <student>
<Roll>19CSE099</Roll>
<Name>LMN</Name>
<Dept>CSE</Dept>
<cgpa>9.88</cgpa>
</student>
   <student>
<Roll>19ECE074</Roll>
<Name>EFG</Name>
<Dept>ECE</Dept>
<cgpa>9.44</cgpa>
</student>
   <student>
<Roll>19IT076</Roll>
<Name>PQR</Name>
<Dept>IT</Dept>
<cgpa>8.98</cgpa>
</student>
   <student>
<Roll>19EEE86</Roll>
<Name>XYZ</Name>
```

```
<Dept>EEE</Dept>
<cgpa>7.44</cgpa>
</student>
</college>
```

OUTPUT:



Enter Roll Number 19CSE101 Search



Enter Roll Number 19CSE101 Search

Name : Dharwin
Department : CSE
Cgpa : 8

OBSERVATION	
RECORD	
TOTAL	

RESULT:

Thus, AJAX Program is successfully written and executed.

Ex.No:9 **XML**

Date: 04/06/22

1. Create a XML document to store the details of 10 students like name , Roll no, department and marks. Create a XSLT to display the XML document in table format.Highlight the students who belongs to CSE department

AIM:

To write a XML and XSL Transformation program for given Question.

ALGORITHM:

1) Create an stud.xml file with required data.

2) Create a studstyle.xsl file for xsl transformation

3) Link both the files via a common tag

4) Display the XML Data in Table format

5) Highlight the records belonging to CSE department in yellow color

STUDSTYLE.XSL:

```
<?xml version="1.0" encoding="UTF-8"?>

<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform" version="1.0">
  <xsl:output method="html"/>

  <xsl:template match="/">
        <html>
        <body>
            <h1>Student Details</h1>
            <table border="1">
                <tr> <th>Name</th>
                     <th>Dept</th>
```

```
    <th>Cgpa</th>
</tr>
<xsl:for-each select="college/student">
    <xsl:choose>
        <xsl:when test="Dept = 'CSE'">
    <tr bgcolor="yellow">
        <td>
            <xsl:value-of select="Name"/>
        </td>
        <td>
            <xsl:value-of select="Dept"/>
        </td>
        <td>
            <xsl:value-of select="cgpa"/>
        </td>
    </tr>
        </xsl:when>
        <xsl:otherwise>
            <tr>
        <td>
            <xsl:value-of select="Name"/>
        </td>
        <td>
            <xsl:value-of select="Dept"/>
        </td>
        <td>
            <xsl:value-of select="cgpa"/>
        </td>
    </tr>
        </xsl:otherwise>
    </xsl:choose>
```

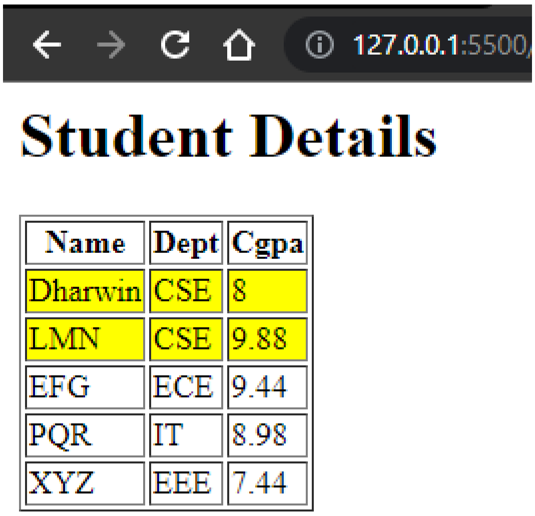
```
                    </xsl:for-each>
                </table>
            </body>
        </html>
    </xsl:template>
</xsl:stylesheet>
```

STUD.XML:

```
<?xml version="1.0" encoding="UTF-8" ?>
<?xml-stylesheet type="text/xsl" href="studstyle.xsl"?>
<college>
<student>
<Roll>19CSE101</Roll>
<Name>Dharwin</Name>
<Dept>CSE</Dept>
<cgpa>8</cgpa>
</student>
 <student>
<Roll>19CSE099</Roll>
<Name>LMN</Name>
<Dept>CSE</Dept>
<cgpa>9.88</cgpa>
</student>
 <student>
<Roll>19ECE074</Roll>
<Name>EFG</Name>
<Dept>ECE</Dept>
<cgpa>9.44</cgpa>
</student>
 <student>
<Roll>19IT076</Roll>
<Name>PQR</Name>
```

```
<Dept>IT</Dept>
<cgpa>8.98</cgpa>
</student>
 <student>
<Roll>19EEE86</Roll>
<Name>XYZ</Name>
<Dept>EEE</Dept>
<cgpa>7.44</cgpa>
</student>
</college>
```

OUTPUT:



Student Details

Name	Dept	Cgpa
Dharwin	CSE	8
LMN	CSE	9.88
EFG	ECE	9.44
PQR	IT	8.98
XYZ	EEE	7.44

OBSERVATION	
RECORD	
TOTAL	

RESULT:

Thus, XML-XSL Transformation is successfully written and executed.