PROGRAM

Student.xml

```xml
<?xml version="1.0"?>
<?xml-stylesheet type="text/xsl" href="Student.xsl"?>
<student>
    <details>
        <name> Divyesh </name>
        <class> CSE </class>
        <mark> 85</mark>
    </details>
    <details>
        <name> Jayesh </name>
        <class> ECE </class>
        <mark> 95</mark>
    </details>
    <details>
        <name> Rahul </name>
        <class> IT </class>
        <mark> 80</mark>
    </details>
    <details>
        <name> Sudhan </name>
        <class> EEE </class>
        <mark> 90</mark>
    </details>
</student>
```

Student.xsl

```xml
<?xml version="1.0"?>

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

<xsl:template match="/">

    <html>

        <body>

            <h2 ALIGN="CENTER">Student details</h2>

            <table border="5" ALIGN="CENTER">

            <tr bgcolor="gray">

                <th>Name</th>

                <th>Class</th>

                <th>Mark</th>

            </tr>

            <xsl:for-each select="student/details">

            <xsl:sort select="name"/>

            <tr>

                <td><xsl:value-of select="name"/></td>

                <td><xsl:value-of select="class"/></td>

                <td><xsl:value-of select="mark"/></td>

            </tr>

            </xsl:for-each>

            </table>

        </body>

    </html>

</xsl:template>

</xsl:stylesheet>
```
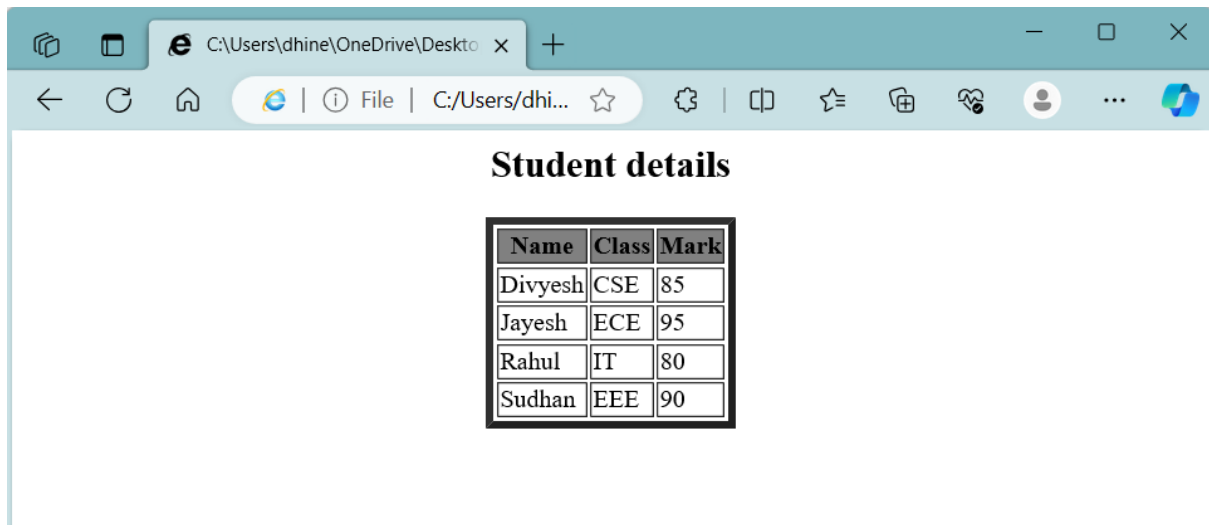
OUTPUT

Student details

Name	Class	Mark
Divyesh	CSE	85
Jayesh	ECE	95
Rahul	IT	80
Sudhan	EEE	90

PROGRAM

Login.jsp

```jsp
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Login Page</title>
<style>
    body{
        font-family: Arial, sans-serif;
    }
    .container{
        max-width:500px;
        padding:30px;
        border: 1px solid #ccc;
        box-shadow: 0 0 100px rgb(54, 150, 255, 0.35);
        margin: 200px auto;
        border-radius: 5px;
    }
    label{
        display:block;
        margin-bottom:5px;
    }
    #username {
        width: 95%;
```

```css
        padding: 10px;

        margin-bottom: 15px;

        border: 1px solid #ccc;

        border-radius: 5px;

    }

    #password {

        width: 95%;

        padding: 10px;

        margin-bottom: 15px;

        border: 1px solid #ccc;

        border-radius: 5px;

    }

    input[type="submit"] {

        background-color: #007bff;

        color: #fff;

        padding: 10px 20px;

        border: none;

        border-radius: 5px;

        cursor: pointer;

    }
</style>
</head>
<body>
        <div class="container">
        <h1 style="text-align:center;">Quiz App</h1>
        <form id="login" name="login" method="GET" action="Question.jsp">
            <label for="username">Username: </label>
```

```html
        <input type="text" id="username" name="username" placeholder="Enter your username">

        <label for="password">Password: </label>

        <input type="password" id="password" name="password" placeholder="Enter your password">

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

    </form>

    </div>

</body>

</html>
```

Question.jsp

```jsp
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Question</title>
</head>
<body>
    <%@page import="java.sql.*" %>
    <%@page import="javax.sql.*" %>
    <%
        Connection con=null;

        Statement s =null;

        ResultSet rs=null;

        String a1, a2, x, y;
```

```
int a =0;
try{
        /*

                ---------Using jdbc.odbc library------------
                Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
                a1=request.getParameter("username");
                a2=request.getParameter("password");
                con=DriverManager.getConnection();
        */



        // -----------Using ucanaccess library--------------
        Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
        String path = "D:\\log.accdb";
        String url = "jdbc:ucanaccess://"+path;
        a1=request.getParameter("username");
        a2=request.getParameter("password");
        System.out.println(a1+"\n"+a2);
        con=DriverManager.getConnection(url);



        s=con.createStatement();
        rs=s.executeQuery("SELECT *FROM log");
        //System.out.println(rs);
        while(rs.next()){
                x=rs.getString("username");
```

```java
if(a1.equals(x)){
        y=rs.getString("password");
                if(a2.equals(y)){
                        a=1;
                }
        }
if(a==1){
        out.println("<form style=\"font-family: Arial, sans-serif;\" id=\"form1\" method=\"get\" action=\"http://localhost:8080/JSP/Score.jsp\">");
        out.println("<div style=\"max-width:700px; padding:30px; border: 1px solid #ccc; box-shadow: 0 0 100px rgb(54, 150, 255, 0.35); margin: 200px auto; border-radius: 5px;\"><h1>Select any one of the options to answer...</h1>");


        out.println("<h2>Who is the Father of Atom Bomb?</h2>");
        out.println("<input type=\"radio\" name=\"r1\" value=\"Oppenheimer\"/>Oppenheimer<br>");
        out.println("<input type=\"radio\" name=\"r1\" value=\"Aristotle\"/>Aristotle<br>");
        out.println("<input type=\"radio\" name=\"r1\" value=\"Feynman\"/>Feynman<br>");
        out.println("<input type=\"radio\" name=\"r1\" value=\"Antonie van\"/>Antonie van<br>");


        out.println("<h2>Who is the Father of Electricity?</h2>");
        out.println("<input type=\"radio\" name=\"r2\" value=\"Karl Landsteiner\"/>Karl Landsteiner<br>");
        out.println("<input type=\"radio\" name=\"r2\" value=\"William Harvey\"/>William Harvey<br>");
        out.println("<input type=\"radio\" name=\"r2\" value=\"Benjamin Franklin\"/>Benjamin Franklin<br>");
```

```
        out.println("<input type=\"radio\" name=\"r2\" value=\"Robert Hooke\"/>Robert Hooke<br>");


        out.println("<h2>Who is the Father of Nuclear Physics?</h2>");

        out.println("<input type=\"radio\" name=\"r3\" value=\"Ernst Rutherford\"/>Ernst Rutherford<br>");

        out.println("<input type=\"radio\" name=\"r3\" value=\"Paul Berg\"/>Paul Berg<br>");

        out.println("<input type=\"radio\" name=\"r3\" value=\"John Locke\"/>John Locke<br>");

        out.println("<input type=\"radio\" name=\"r3\" value=\"James Hutton\"/>James Hutton<br>");


        out.println("<h2>Who is the Father of Comic Books?</h2>");

        out.println("<input type=\"radio\" name=\"r4\" value=\"Walter White\"/>Walter White<br>");

        out.println("<input type=\"radio\" name=\"r4\" value=\"John Snow\"/>John Snow<br>");

        out.println("<input type=\"radio\" name=\"r4\" value=\"James Hunter\"/>James Hunter<br>");

        out.println("<input type=\"radio\" name=\"r4\" value=\"Stan Lee\"/>Stan Lee<br>");


        out.println("<h2>Who is the Father of Computer?</h2>");

        out.println("<input type=\"radio\" name=\"r5\" value=\"Charles Darwin\"/>Charles Darwin<br>");

        out.println("<input type=\"radio\" name=\"r5\" value=\"Carl Linnaeus\"/>Carl Linnaeus<br>");

        out.println("<input type=\"radio\" name=\"r5\" value=\"Charles Babbage\"/>Charles Babbage<br>");
```

```java
			out.println("<input type=\"radio\" name=\"r5\" value=\"Claude Ba\"/>Stan Lee<br>");


			out.println("<input type=\"submit\" value=\"Submit\" style=\"background-color: #007bff; color: #fff; padding: 10px 20px; border: none;margin-top:30px;justify-content:center ; border-radius: 5px; cursor: pointer;\"/></div></form>");
		}
		else
			out.println("<h1>Invalid Login</h1>");

		}
}
catch(Exception e){
	e.printStackTrace();
}
%>
</body>
</html>
```

OUTPUT

Select any one of the options to answer...

Who is the Father of Atom Bomb?

◉ Oppenheimer
○ Aristotle
○ Feynman
○ Antonie van

Who is the Father of Electricity?

○ Karl Landsteiner
○ William Harvey
◉ Benjamin Franklin
○ Robert Hooke

Who is the Father of Nuclear Physics?

◉ Ernst Rutherford
○ Paul Berg
○ John Locke
○ James Hutton

Who is the Father of Comic Books?

○ Walter White
○ John Snow
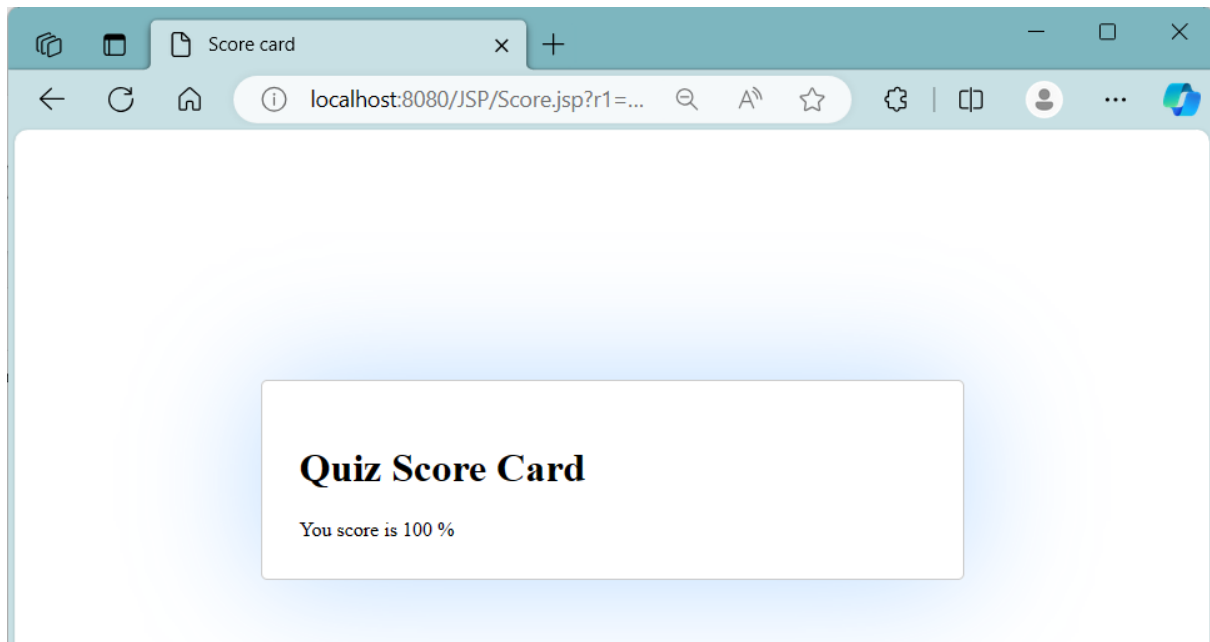○ James Hunter
◉ Stan Lee

Who is the Father of Computer?

○ Charles Darwin
○ Carl Linnaeus
◉ Charles Babbage
○ Stan Lee

Submit

Quiz Score Card

You score is 100 %

PROGRAM

XSLTransform.java

```java
import java.io.*;
import java.io.IOException;
import javax.xml.parsers.*;
import javax.xml.transform.*;
import javax.xml.transform.TransformerFactory;
import javax.xml.transform.stream.*;
class XSLTransform {
  public static void main(String args[])  {
    try  {
TransformerFactory tFactory=TransformerFactory.newInstance();
Transformer transformer=tFactory.newTransformer(new StreamSource(new
                                           File(args[0])));
transformer.transform(new StreamSource(new File(args[1])),new
                                           StreamResult(System.out));
    }
    catch(Exception e) {
       e.printStackTrace();
    }
   return;
  }
}
```
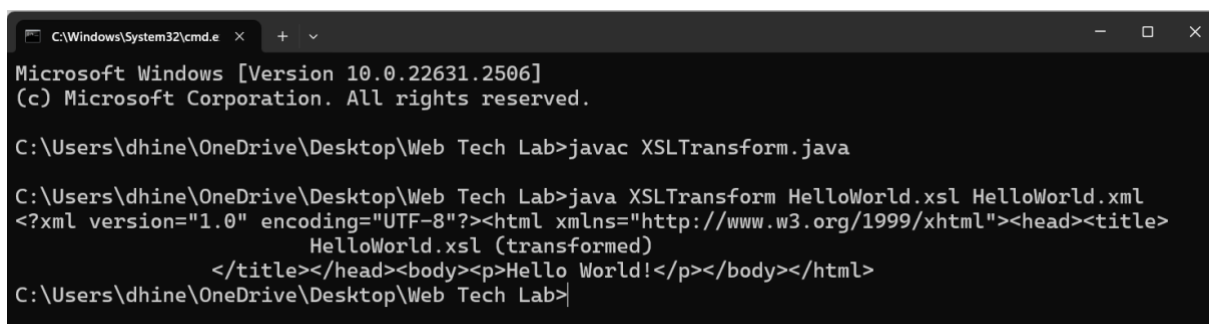
HelloWorld.xml

```xml
<?xml version="1.0" encoding="UTF-8"?>
<message>Hello World!</message>
```

HelloWorld.xsl

```xml
<?xml version="1.0" encoding="UTF-8"?>
<xsl:transform version="1.0"
xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
xmlns="http://www.w3.org/1999/xhtml">
<xsl:template match="/">
<html>
    <head>
        <title>
            HelloWorld.xsl (transformed)
        </title>
    </head>
    <body>
        <p><xsl:value-of select="child::message" /></p>
    </body>
</html>
</xsl:template>
</xsl:transform>
```

OUTPUT

```
Microsoft Windows [Version 10.0.22631.2506]
(c) Microsoft Corporation. All rights reserved.

C:\Users\dhine\OneDrive\Desktop\Web Tech Lab>javac XSLTransform.java

C:\Users\dhine\OneDrive\Desktop\Web Tech Lab>java XSLTransform HelloWorld.xsl HelloWorld.xml
<?xml version="1.0" encoding="UTF-8"?><html xmlns="http://www.w3.org/1999/xhtml"><head><title>
                HelloWorld.xsl (transformed)
        </title></head><body><p>Hello World!</p></body></html>
C:\Users\dhine\OneDrive\Desktop\Web Tech Lab>
```
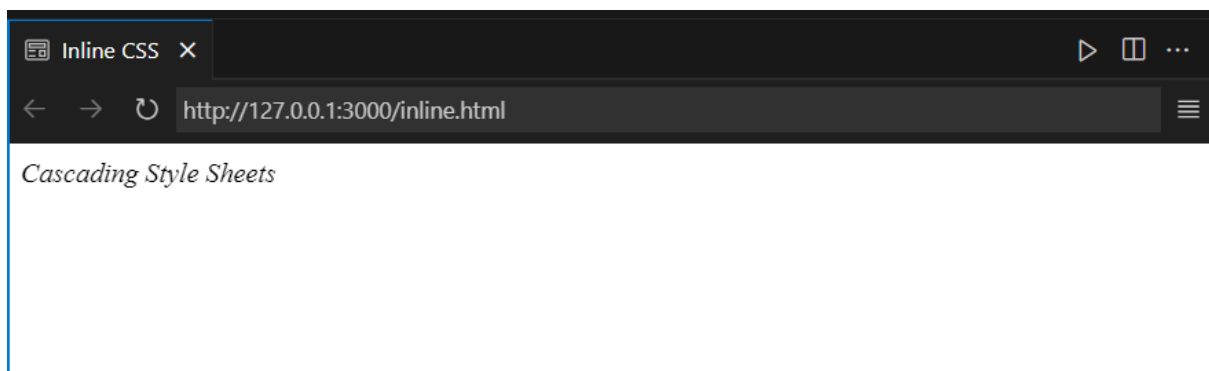
PROGRAM

```html
<html>
  <head>
    <title>Inline CSS</title>
  </head>
  <body>
    <p style="font-style: italic;">Cascading Style Sheets</p>
  </body>
</html>
```

OUTPUT

PROGRAM

```html
<html>
  <head>
    <title>Internal CSS</title>
    <style>
      .main{
        text-align: center;
        background-color: gray;
      }
      #demo{
        color: aqua;
        font-size: 40px;
      }
    </style>
  </head>
  <body>
    <div class="main">
      <div id="demo">Hello Web</div>
    </div>
  </body>
</html>
```
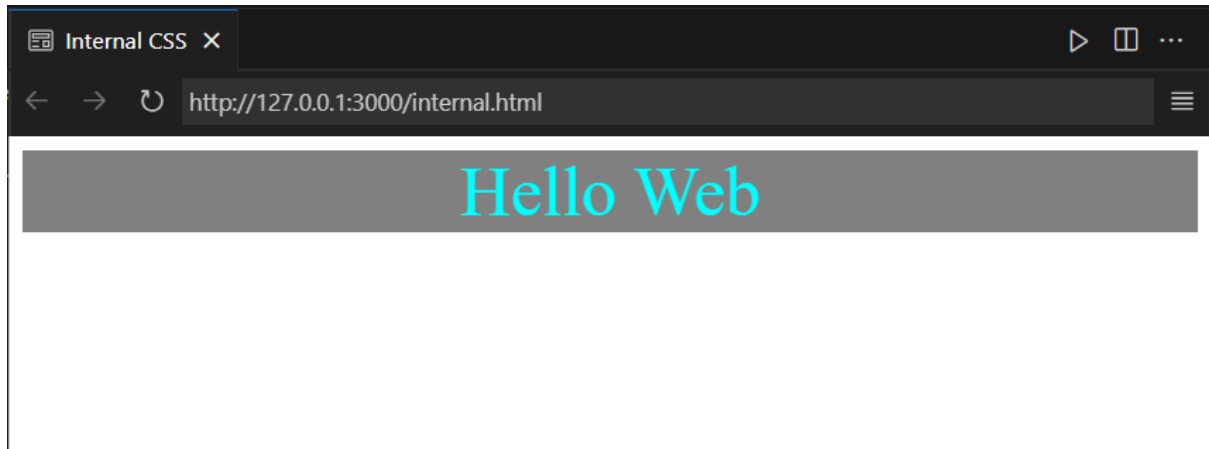
OUTPUT

PROGRAM

external.html

```html
<html>
  <head>
    <title>External CSS</title>
    <link rel="stylesheet" href="./styles.css">
  </head>
  <body>
    <h1>This is heading element</h1>
    <p>This is paragraph element</p>
  </body>
</html>
```
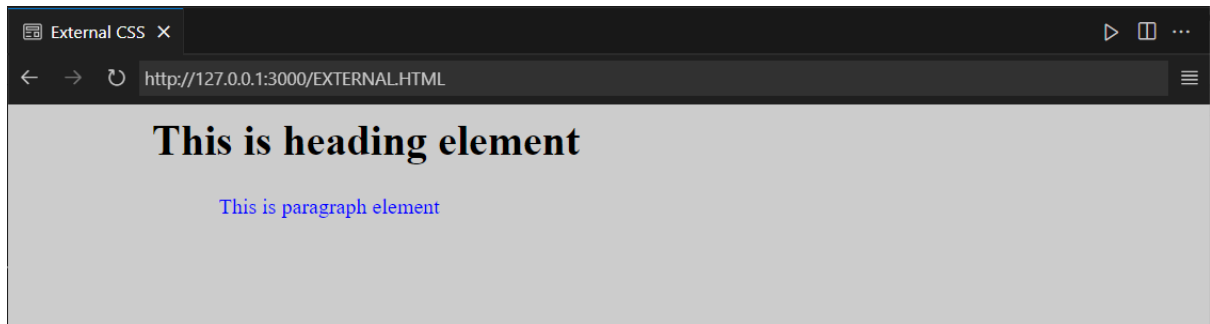
styles.css

```css
body{
  background-color: #cccccc;
}
h1{
  color: black;
  margin-left: 100px;
}
p{
  color: blue;
  margin-left: 150px;
}
```

OUTPUT

PROGRAM

formValidation.html

```html
<html>
  <head>
    <title>Form validation</title>
    <script type="text/javascript">
      function formValidation(){
          var name = document.getElementById('name');
          var addr = document.getElementById('addr');
          var zip = document.getElementById('zip');
          var state = document.getElementById('state');
          var username = document.getElementById('username');
          var email = document.getElementById('email');

          if(isAlphabet(name, "Please enter only letters"))
          {
            if(isAlphanumeric(addr, "Numbers and letters only"))
            {
              if(isNumeric(zip,"Please enter valid zip code"))
              {
                if(madeSelection(state,"Please choose a state"))
                {
                  if(lengthRestriction(username, 6, 8))
                  {
                    if(emailValidator(email,"Please enter a valid email"))
                    {
                        return true;
```

```
                    }
                  }
                }
              }
            }
          }
        return false;
      }
      function isAlphabet(elem, helperMsg){
        var alphaExp = /^[a-zA-Z]{3,15}$/;
        if(alphaExp.test(elem.value))
          return true;
        else{
          alert(helperMsg);
          elem.focus;
          return false;
        }
      }
      function isAlphanumeric(elem, helperMsg){
        var alphanumExp = /^[0-9a-zA-Z]{2,45}$/;
        if(alphanumExp.test(elem.value))
          return true;
        else{
          alert(helperMsg);
          elem.focus;
          return false;
        }
```

```javascript
}
function isNumeric(elem, helperMsg){
    var numExp = /^[0-9]{6}$/;
    if(numExp.test(elem.value))
        return true;
    else{
        alert(helperMsg);
        elem.focus;
        return false;
    }
}
function madeSelection(elem, helperMsg){
    if(elem.value == "TN" || elem.value == "KL" || elem.value == "AP")
        return true;
    else{
        alert(helperMsg);
        elem.focus;
        return false;
    }
}
function lengthRestriction(elem, min, max){
    var uInput = elem.value;
    if(uInput.length >= min && uInput.length <= max)
        return true;
    else{
        alert("Please enter between "+min+" and "+max+" characters");
        elem.focus;
```

```
				return false;

			}

		}

		function emailValidator(elem, helperMsg){

			var emailExp = /^[a-zA-Z0-9._%+-]+@[a-zA-Z0-9]{4,8}\.[a-zA-Z]{2,4}$/;

			if(emailExp.test(elem.value))

				return true;

			else{

				alert(helperMsg);

				elem.focus;

				return false;

			}

		}

	</script>

</head>

<body>

	<form onsubmit="return formValidation()" method="post" action="success.html">

		Name: <input type="text" id="name"/><br><br>

		Address: <input type="text" id="addr"/><br><br>

		Zip Code: <input type="text" id="zip"/><br><br>

		State: <select id="state">

			<option value="TN">Tamil Nadu</option>

			<option value="KL">Kerala</option>

			<option value="AP">Andhra Pradesh</option>

		</select></br><br>

		Username: <input type="text" id="username"/><br><br>
```
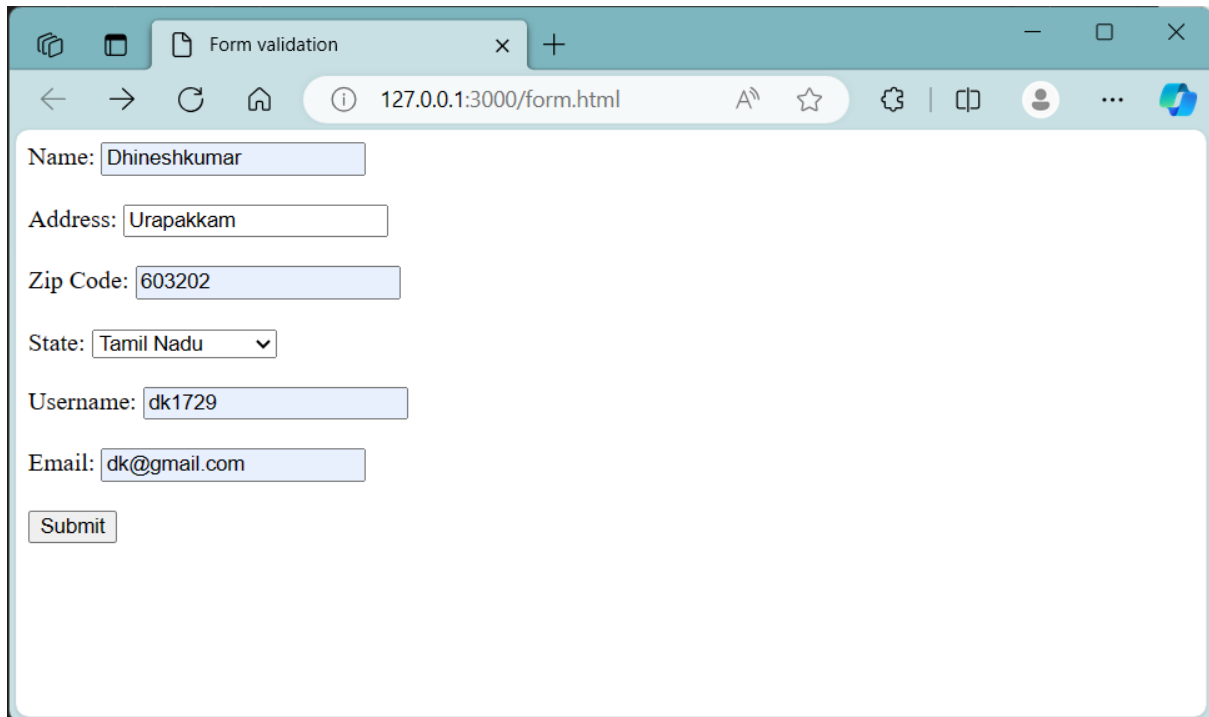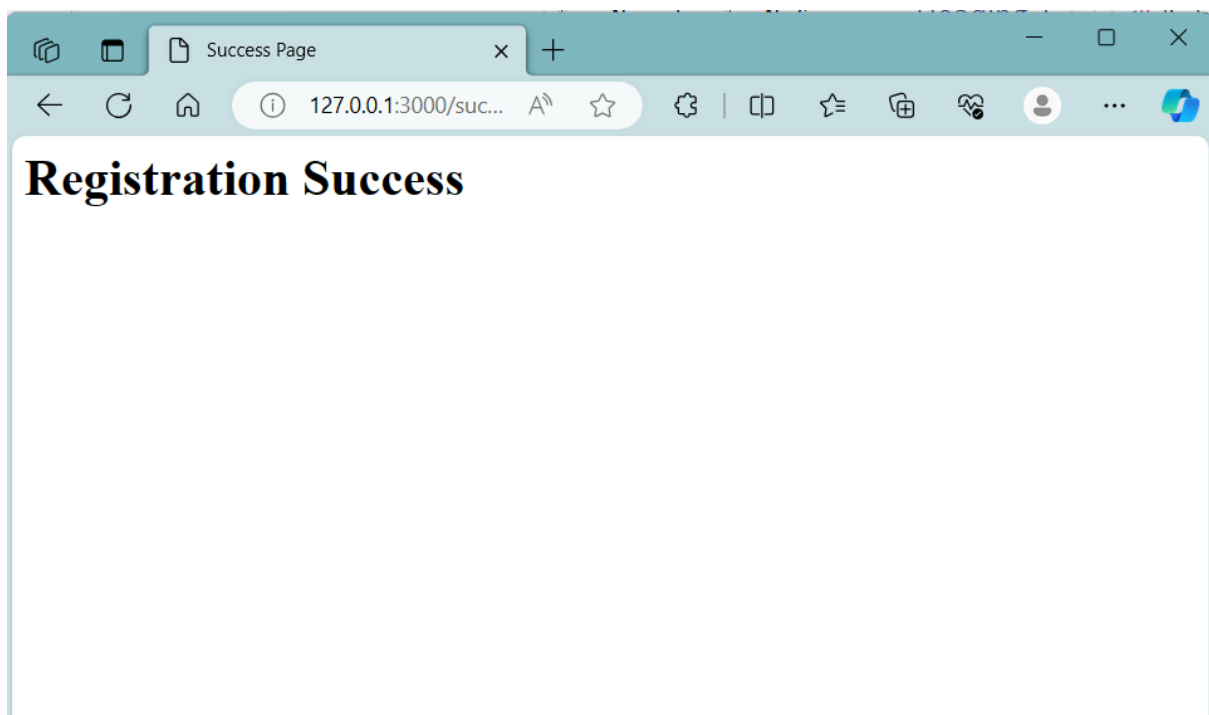
Email: <input type="text" id="email"/>

<input type="submit" value="Submit">

</form>

</body>

</html>

OUTPUT

PROGRAM

Login.html

```html
<!DOCTYPE html>
<html>
    <head>
        <title>Login</title>
    </head>
    <body>
        <form method="get" action="http://localhost:8080/lab/PostParam">
         <table align="center">
           <tr>
             <td><b>Employee Name</b></td>
             <td><input type="text" name="Employee Name" size="25" value=" "></td>
           </tr>
           <tr>
             <td><b>Phone Number</b></td>
             <td><input type="text" name="Phone Number" size="25" value=" "></td>
           </tr>
           <tr>
             <td></td>
             <td><input type="submit" value="submit"></td>
           </tr>
         </table>
        </form>
    </body>
</html>
```
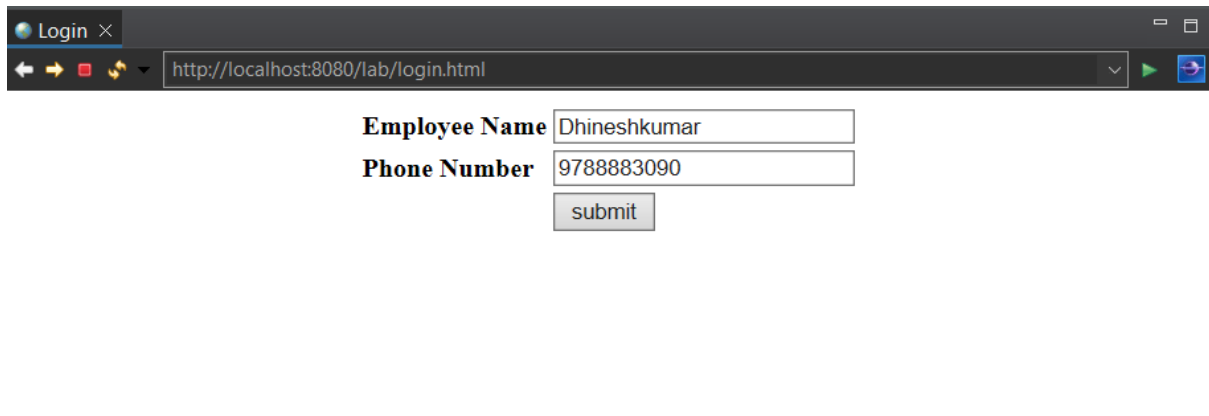
PostParam.java

```java
import java.io.*;

import java.util.Enumeration;

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("/PostParam")

public class PostParam extends HttpServlet {

        private static final long serialVersionUID = 1L;

    public PostParam() {

        super();

    }

        protected void doGet(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {

                PrintWriter pw = response.getWriter();

                Enumeration e = request.getParameterNames();

                while(e.hasMoreElements()) {

                        String pname = (String)e.nextElement();

                        pw.println(pname+ " = ");

                        String pvalue = request.getParameter(pname);

                        pw.println(pvalue);

                        pw.println();

                }

                pw.close();

        }

}
```
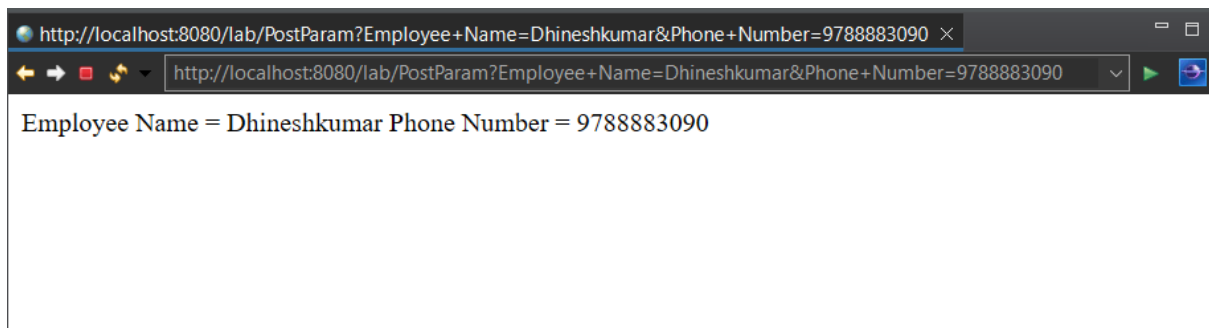
OUTPUT

PROGRAM

```java
import java.io.*;

import java.util.*;

import javax.servlet.*;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.*;


@WebServlet("/Session")

public class Session extends HttpServlet {

        private static final long serialVersionUID = -3628868596355743226L;

        public void doGet(HttpServletRequest request,

                                HttpServletResponse response)

            throws ServletException, IOException

        {

                HttpSession session = request.getSession(true);

                Date createTime = new Date(session.getCreationTime());

                Date lastAccessTime = new Date(session.getLastAccessedTime());

                String title = "Welcome Back to WebSite";

                Integer visitCount = new Integer(0);

                String visitCountKey = new String("visitCount");

                String userIDKey = new String("userID");

                String userID = new String("DK");

                if (session.isNew()) {

                        title = "Welcome to WebSite";

                        session.setAttribute(userIDKey, userID);

                }

                else {
```

```java
                visitCount = (Integer)session.getAttribute(visitCountKey);

                visitCount = visitCount + 1;

                userID = (String)session.getAttribute(userIDKey);

        }

        session.setAttribute(visitCountKey, visitCount);

        response.setContentType("text/html");

        PrintWriter out = response.getWriter();

        String docType

                = "<!doctype html public \"-//w3c//dtd html 4.0 "

                + "transitional//en\">\n";


        out.println(

                docType + "<html>\n"

                + "<head><title>" + title + "</title></head>\n"

                +


                "<body bgcolor = \"#f0f0f0\">\n"

                + "<h1 align = \"center\">" + title + "</h1>\n"

                + "<h2 align = \"center\">WebSite Session
Information</h2>\n"

                + "<table border = \"1\" align = \"center\">\n"

                +


                "<tr bgcolor = \"#949494\">\n"

                + " <th>Session info</th><th>value</th>"

                + "</tr>\n"

                +
```

```
"<tr>\n"
+ " <td>id</td>\n"
+ " <td>" + session.getId() + "</td>"
+ "</tr>\n"
+

"<tr>\n"
+ " <td>Creation Time</td>\n"
+ " <td>" + createTime + " </td>"
+ "</tr>\n"
+

"<tr>\n"
+ " <td>Time of Last Access</td>\n"
+ " <td>" + lastAccessTime + "</td>"
+ "</tr>\n"
+

"<tr>\n"
+ " <td>User ID</td>\n"
+ " <td>" + userID + "</td>"
+ "</tr>\n"
+

"<tr>\n"
+ " <td>Number of visits</td>\n"
+ " <td>" + visitCount + "</td>"
```
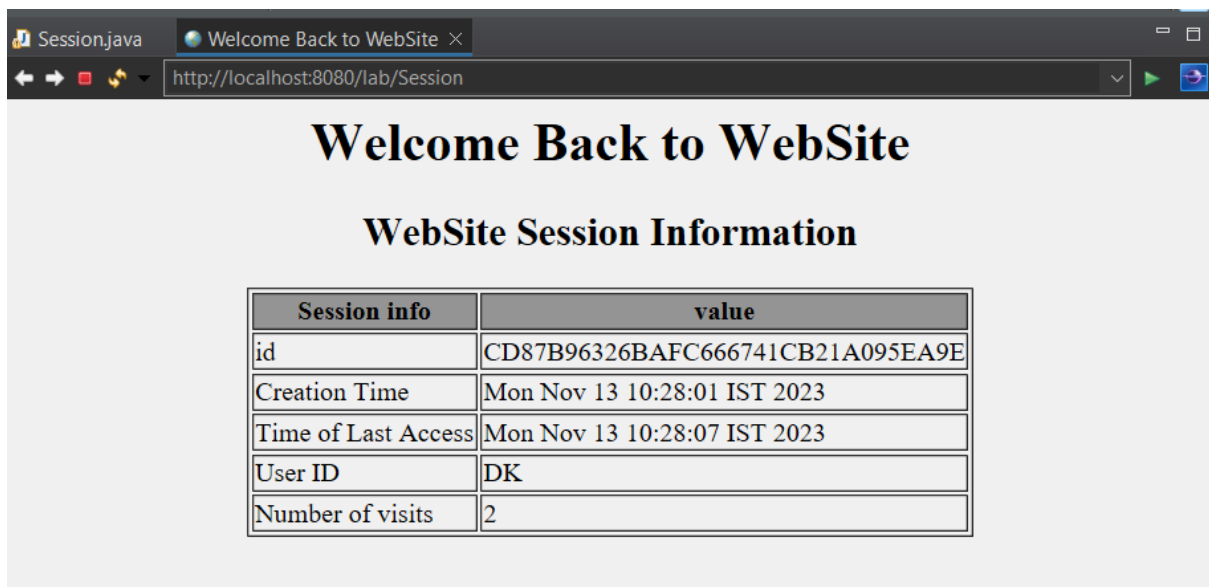
```
                    + "</tr>\n"

                    + "</table>\n"

                    + "</body>"

                    + "</html>");

        }
}
```

OUTPUT

PROGRAM

Map.html

```
<!DOCTYPE html>

<html>

<body>

<img src="india.jpg" alt="msp" usemap="#workmap" width="209" height="242">

<map name="workmap">

<area shape="rect" coords="83,41,57,63" alt="delhi" href="delhi.html">

<area shape="rect" coords="149,129,124,83" alt="calcutta" href="calcutta.html">

<area shape="rect" coords="89,184,56,226" alt="tamilnadu" href="tamilnadu.html">

</map>

</body>

</html>
```

tamilnadu.html

```
<html>

<body bgcolor="aliceblue">

<center style="margin-top: 100;">Chennai is the capital of Tamil Nadu<br> and <br>More IT companies are camped at Chennai</center>

</body>

</html>
```

calcutta.html

```
<html>

<body bgcolor="SKYBLUE">

<center><b><i>Calcutta is the wealthy city in WEST BENGAL<br> and <br>It
has Famous "Sunderbans Forests"</i></b></center>

</body>

</html>
```
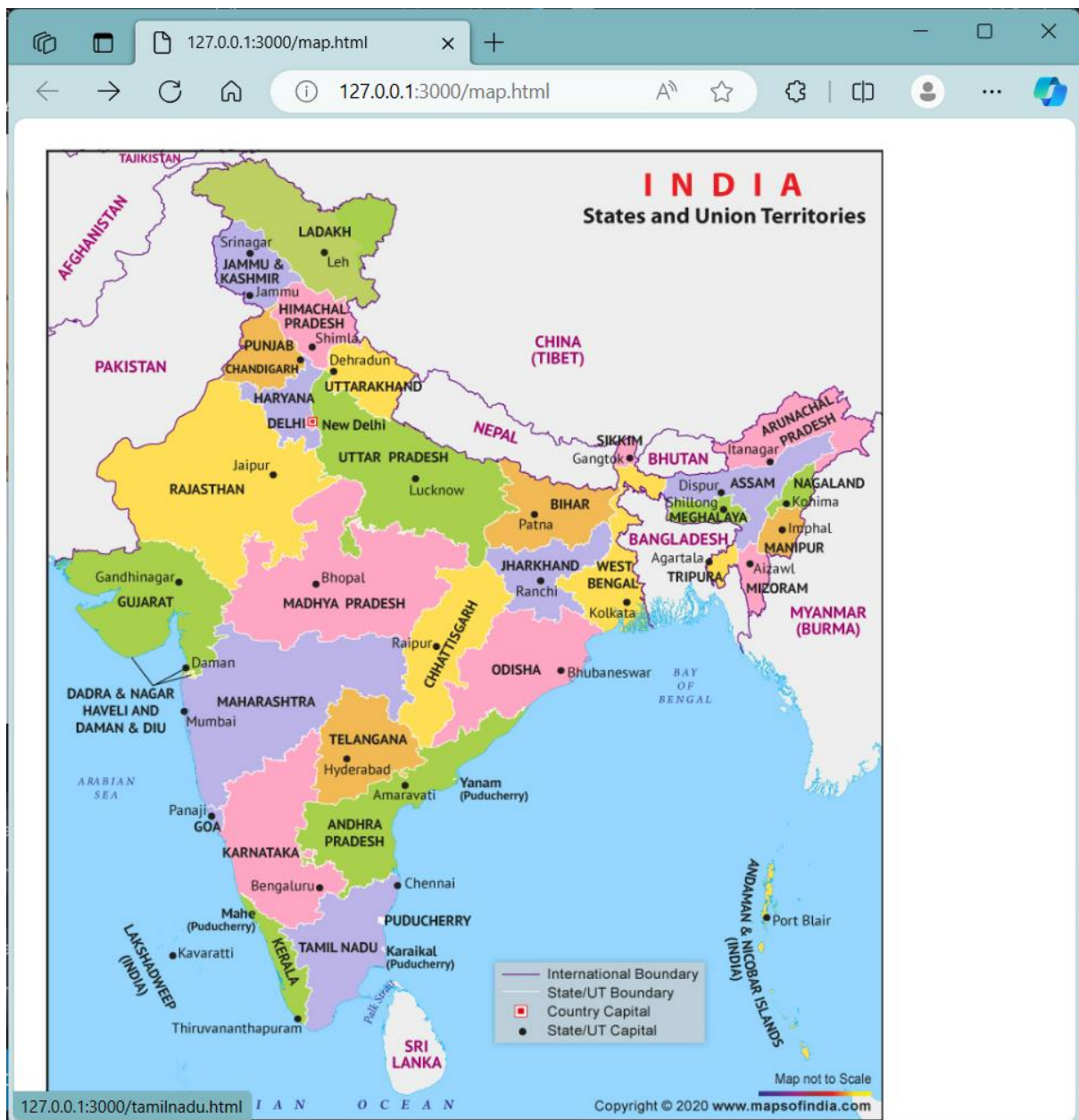
delhi.html

```
<html>

<body bgcolor="SKYBLUE">

<center><b><i><tt>Delhi is the capital of our INDIA<br> and <br>More IT
companies are Camped at Delhi</tt></i></b></center>

</body>

</html>
```

OUTPUT