EX 1 **WEB PAGE WITH HOT SPOTS IN HTML**

DATE:

Aim:

To create webpage and embed map and fix the hot spots in that map and show related information

Algorithm:

1. Start the program for embed map in web page
2. Create ImageMap.htm file
3. Set the coordination for the hot spot area.
4. Create separate html file for separate hot spots Like Tamilnadu, kerala, karanataka
5. Finally terminate the program .

Program:

ImageMap.html :

```
<HTML>
<HEAD>
<TITLE>Image Map</TITLE>
</HEAD>
<BODY>
<MAP id = "picture">
<AREA href = "TamilNadu.html" shape = "circle"
coords = "170, 490, 30" alt = "Tamil Nadu" />
<AREA href = "Karnataka.html" shape = "rect"
coords = "115, 390, 150, 450" alt = "Karnataka" />
<AREA href = "AndhraPradesh.html" shape = "poly"
coords = "165, 355, 200, 355, 220, 380, 170, 425, 165,
355" alt = "Andhra Pradesh" />
<AREA href = "Kerala.html" shape = "poly"
coords = "115, 455, 160, 470, 140, 485, 150, 505, 150,
530, 135, 500, 115, 455" alt = "Kerala" />
</MAP>
<IMG src = "India.Jpg" alt = "India" usemap = "#picture" />
</BODY>
</HTML>
```

TamilNadu.html:

```
<HTML>
```

```
<HEAD>
<TITLE>About Tamil Nadu</TITLE>
</HEAD>
<BODY>
<CENTER><H1>Tamil Nadu</H1></CENTER>
<HR>
<UL>
<LI>Area : 1,30,058 Sq. Kms.</LI>
<LI>Capital : Chennai</LI>
<LI>Language : Tamil</LI>
<LI>Population : 6,21,10,839</LI>
</UL>
</BODY>
</HTML>
```

AndhraPradesh.html:

```
<HTML>
<HEAD>
<TITLE>About Andhra Pradesh</TITLE>
</HEAD>
<BODY>
<CENTER><H1>Andhra Pradesh</H1></CENTER>
<HR>
<UL>
<LI>Area : 2,75,068 Sq. Kms</LI>
<LI>Capital : Hyderabad</LI>
<LI>Language : Telugu</LI>
<LI>Population : 7,57,27,541</LI>
</UL>
</BODY>
</HTML>
```

Kerala.html

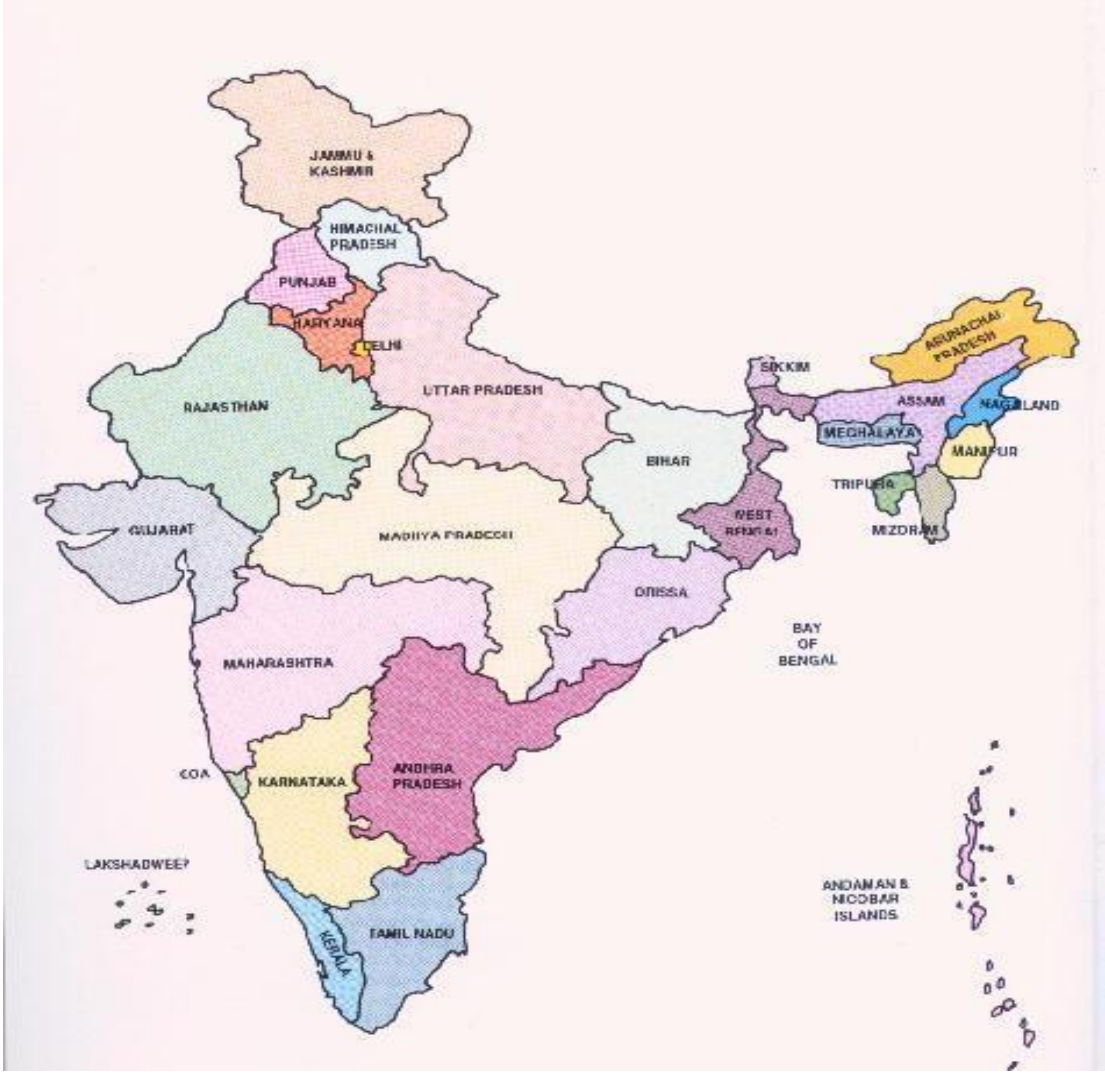
```
<HTML>
<HEAD>
<TITLE>About Kerala</TITLE>
</HEAD>
<BODY>
<CENTER><H1>Kerala</H1></CENTER>
<HR>
<UL>
<LI>Area : 38,863 Sq. Kms.</LI>
<LI>Capital : Thiruvananthapuram</LI>
<LI>Language : Malayalam</LI>
<LI>Population : 3,18,38,619</LI>
```

```
</UL>
</BODY>
</HTML>
```

Karnataka.html

```
<HTML>
<HEAD>
<TITLE>About Karnataka</TITLE>
</HEAD>
<BODY>
<CENTER><H1>Karnataka</H1></CENTER>
<HR>
<UL>
<LI>Area : 1,91,791 Sq. Kms</LI>
<LI>Capital : Bangalore</LI>
<LI>Language : Kannada</LI>
<LI>Population : 5,27,33,958</LI>
</UL>
</BODY>
</HTML>
```

OUTPUT



Tamil Nadu

Area : 1,30,058 Sq. Kms.
Capital : Chennai
Language : Tamil
Population : 6,21,10,839

Andhra Pradesh

Area : 2,75,068 Sq. Kms
Capital : Hyderabad
Language : Telugu
Population : 7,57,27,541

Kerala

Area : 38,863 Sq. Kms.
Capital : Thiruvananthapuram
Language : Malayalam
Population : 3,18,38,619

Karnataka

Area : 1,91,791 Sq. Kms
Capital : Bangalore
Language : Kannada
Population : 5,27,33,958

RESULT

A web page which includes an embedded map which displays the related information about the place when a hot spot is clicked on the map is implemented successfully.

EX 2 **WEB PAGE WITH CSS**

Date :

Create a web page with all types of Cascading style sheets.

Aim:

To create a webpage using Cascading Style Sheet.

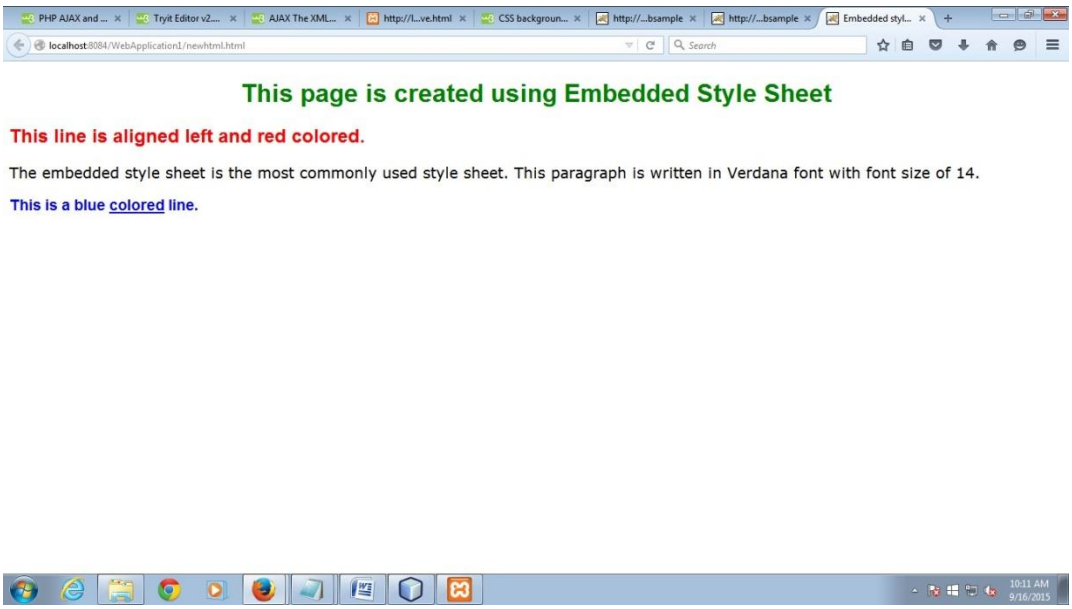
Algorithm:

Step 1: Start the cascading program.
Step 2: Give link from main page to other like cascading, Embedded.
Step 3: Write the code for separate page. Finally terminate program Source code for html Programming for Home page and Cascading, Embedded, Inline style sheet.
Step 4: find the style changes in your page.

Program

```
<!DOCTYPE html >
        <head>
        <title>Embedded style sheet</title>
        <style type="text/css">
                h1
                {
                 font-family:Arial;
                 color:green
                }
                h2
                {
                 font-family:Arial;
                 color:red;
                 left:20px
                }
                h3
                {
                 font-family:arial;
                 color:blue;
                }
                p
                {
                 font-size:14pt;
                 font-family:verdana
                }
        </style>
```

```
</head>
<body>
        <h1>
                <center>
                This page is created using Embedded Style Sheet
                </center>
        </h1>
        <h2>
                This line is aligned left and red colored.
        </h2>
        <p>
                The embedded style sheet is the most commonly used style sheet.
                This paragraph is written in Verdana font with font size of 14.
        </p>
        <h3>
        This is a blue <a href=”colorname.html”>colored</a> line.
        </h3>
</body>
</html>
```



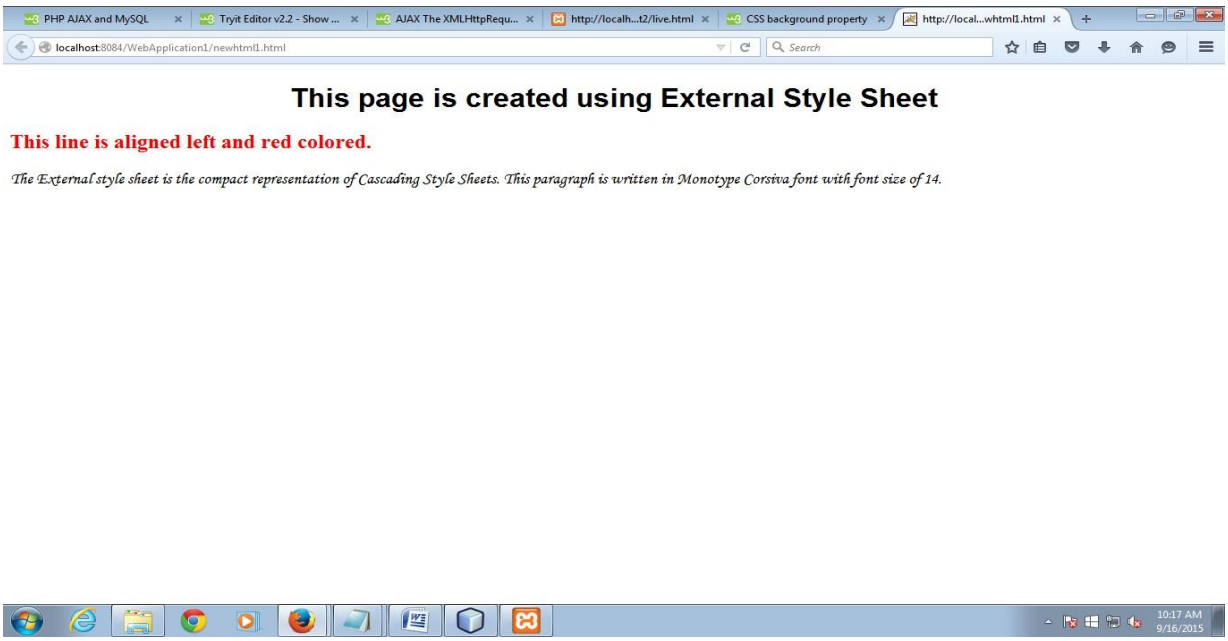
External Style Sheet

```
<!DOCTYPE html >
        <head>
        <link rel="stylesheet" type="text/css" href="ex1.css" />
        </head>
        <body>
    <h1 class="special"> <center> This page is created using External Style
      Sheet</center>  </h1>
```

```
                    <h2>
                            This line is aligned left and red colored.
                        </h2>
                        <p>The External style sheet is the compact representation of
Cascading Style Sheets. This paragraph is written in Monotype Corsiva font with font size of 14.
                    </p>
                    <h3>
                            This is a blue <a href=”colorname.html”>colored</a> line.
                        </h3>
            </body>
</html>
```

The cascading style sheet ex1.css can be

```
<!- - The file name ex1.css and can be opened in notepad.-->

h1
{
 font-family:Arial
}
h2
{
 font-family:times new roman;
 color:red;
left:20px
}
h3
{
font-family:arial;
color:blue;
}
p
{
 font-size:14pt;
 font-family:Monotype Corsiva
}
```



RESULT

Thus a web page with cascading style sheet was created successfully.

EX-3 **Form Validation using JavaScript**
Date :

AIM:
To Validate the Registration, user login, user profile and payment by credit card pages using JavaScript.

PROCEDURE:

1. Create a webpage for registration and login for online book storage.
2. Create a webpage for user profile
3. Validate the user by javascript
4. Validate the proper input is given by user with the help of javascript
5. Check the amount entered by the user is correct or not with the help of javascript

PROGRAM
Home page:
Main.html:

```
<frameset rows=”25%, 75 %”>

<frame src=”top.html” name=”top”>

<frameset cols=”25%,75%”>

<frame src=”left.html” name=”left”>

<frame src=”right.html” name=”right”>

</frameset>

</frameset>
```

Top.html:

```
<html>

<body bgcolor=”pink”>

<br><br>

<marquee><h1 align=”center”><b><u>ONLINE BOOK

STORAGE</u></b></h1></marquee>

</body>

</html>
```

Right.html:

```
<html>
<body bgcolor=”pink”>
<br><br><br><br><br>
<h2 align=”center”>
<b><p> welcome to online book storage. Press login if you are
having id otherwise press registration.
</p></b></h2>
</body>  </html>
```

Left.html:

```
<html>
<body bgcolor=”pink”>
<h3>
<ul>
<li><a href=”login.html” target=”right”><font color=”black”>
LOGIN</font></a></li><br><br>
<li><a href=”profile.html” target=”right”><fontcolor=”black”>
USER PROFILE</font></a></li><br><br>
<li><a href=”catalog.html” target=”right”><fontcolor=”black”>
BOOKS CATALOG</font></a></li><br><br>
<li><a href=”scart.html” target=”right”><font color=”black”>
SHOPPINGCART</font></a></li><br><br>
<li><a href=”payment.html” target=”right”><fontcolor=”black”>
PAYMENT</font></a></li><br><br>
```

```
<li><a href=”order.html” target=”right”><font color=”black”>
ORDER CONFIRMATION</font></a></li><br><br>
</ul>
</body>
</html>
```

- **Registration and user Login**
  Login.html:

```
<html>
<body bgcolor="pink"><br><br><br>
<script language="javascript">
function validate()
{
var flag=1;
if(document.myform.id.value==""||
document.myform.pwd.value=="")
{
flag=0;
}
if(flag==1)
{
alert("VALID INPUT");
}
else
{
alert("INVALID INPUT");
```

```
document.myform.focus();
}
}
</script>
<form name="myform">
<div align="center"><pre>
LOGIN ID    :<input type="text" name="id"><br>
PASSWORD:<input type="password" name="pwd"></pre><br><br>
</div>
<br><br>
<div align="center">
<input type="submit" value="ok" onClick="validate()">    
<input type="reset" value="clear" >
</form>
</body>
</html>
```

- **User profile page**
  Profile.html:

```
<html>
  <body bgcolor=”pink”><br><br>
  <script language=”javascript”>
   function validate()
    {
     var flag=1;
      if(document.myform.name.value==””||
```

```
document.myform.addr.value==””||
document.myform.phno.value==””||
document.myform.id.value==””||
document.myform.pwd.value==””)
 {
   flag=0;
 }
  var str=document.myform.phno.value;
  var x;
  for(var i=0;i<str.length;i++)
   {
     x=str.substr(i,1)
      if(!(x<=9))
        {
            flag=0;
             break;
            }
          }
         if(flag==1)
               {
                alert("VALID INPUT");
                  }
                     else
                   {
```

```
                    alert("INVALID INPUT");
                    document.myform.focus();
                  }
                  }
                </script>
                <form name="myform">
                 <div align="center"><pre>
                  NAME              :<input  type="text" name="name"><br>
                  ADDRESS           :<input type="type" name="addr"><br>
                  CONTACT NUMBER:<iput type="text" name="phno"><br>
                  LOGINID            :<input  type="text" name="id"><br>
                  PASSWORD  :<input type="password" name="pwd"></pre><br><br>
                 </div>
<br><br>
<div align="center">
<input type="submit" value="ok" onClick="validate()">   
<input type="reset" value="clear">
 </form></body></html>
```

- **Books catalog:**

Scart.html:

```
<html>
<body bgcolor="pink"><br><br><br>
<script language="javascript">
   function validate()
    {
```

```
var flag=1;
 if(document.myform.title.value=="")
    {
      flag=0;
    }
        str=document.myform.title.value;
        if(str=="c")
              {
               document.writeln("<body bgcolor=pink>");
               document.writeln("title-->c"+"  cost-->444");
               }
        else if(str=="jsp")
              {
               document.writeln("<body bgcolor=pink>");
               document.writeln("title-->jsp"+"  cost-->555");
               }
        else
              {
               flag=0;
              }
           if(flag==1)
                {
                 alert("VALID INPUT");
                   }
```

```
                    else
                   {
                        alert("INVALID INPUT");
                        document.myform.focus();
                      }
                      }
                </script>
<form name="myform" >
<div align="center"><pre>
BOOK TITLE :<input type="text" name="title"><br>
</pre><br><br>
</div>
<br><br>
<div align="center">
<input type="submit" value="ok" onClick="validate()">    
<input type="reset" value="clear">
</form>
</body>
</html>
```

- **Shopping cart:**

Catalog.html:

```
<html>
<body bgcolor="pink"><br><br><br>
<script language="javascript">
   function validate()
```

```
{
  var flag=1;
   if(document.myform.id.value==""||
      document.myform.title.value==""||
      document.myform.no.value==""||
      document.myform.cost.value==""||
      document.myform.date.value=="")
       {
          flag=0;
      }
   var str=document.myform.no.value;
   var x;
        for(var i=0;i<str.length;i++)
        {
           x=str.substr(i,1)
            if(!(x<=9))
              {
                  flag=0;
                   break;
                  }
                }
   str=document.myform.title.value;
   var str1=document.myform.cost.value;
   if(!((str=="c"&& str1==444) || (str=="jsp" && str1==555)))
```

```
                {
                 flag=0;
                 }
      if(flag==1)
                 {
                  alert("VALID INPUT");
                   }
     else
                 {
                  alert("INVALID INPUT");
                  document.myform.focus();
                   }
     }
</script>
<form name="myform" >
<div align="center"><pre>
LOGIN ID          :<input type="text" name="id"><br>
TITLE             :<input type="text" name="title"><br>
NO.OF BOOKS       :<input type="text" name="no"><br>
COST OF BOOK      :<input type="text"name="cost"><br>
DATE              :<input type="text" name="date"><br></pre><br><br>
</div>
<br><br>
<div align="center">
```

<input type="submit" value="ok" onClick="validate()">

<input type="reset" value="clear">

</form>

</body>

</html>

- **Payment by credit card**
  Payment.html:

<html>

<body bgcolor="pink">

<script language="javascript">

function validate()

{

var flag=1;

if(document.myform.id.value==""||

document.myform.pwd.value==""||

document.myform.amount.value==""||

document.myform.num.value=="")

{

flag=0;

}

var str=document.myform.amount.value;

var x;

for(var i=0;i<str.length;i++)

{

x=str.substr(i,1);

```
if(!(x<=9))
{
flag=0;
break;
}
}
 str=document.myform.num.value;
for(var i=0;i<str.lenght;i++)
{
x=str.substr(i,1);
if(!(x<=9))
{
flag=0;
break;
}
}
if(flag==1)
{
alert("VALID INPUT");
}
else
{
alert("INVALID INPUT");
document.myform.focus();
```

```
}
}
</script>
<form name="myform">
<div align="center"><pre>
LOGIN ID                :<input type="text" name="id"><br>
PASSWORD             :<input type="password" name="pwd"><br>
AMOUNT                :<input type="text" name="amount"><br>
CREDITCARDNUMBER:<input type="PASSWORD" name="num+"><br></pre><br><br>
</div>
<br><br>
<div align="center">
<input type="submit" value="ok" onClick="validate()">    
<input type="reset" value="clear" >
</form>
</body>
</html>
```

- **Order Confirmation**
  Order.html:

```
<html>
<head><title>order conformation</title><M/head>
<body bgcolor="cyan">
<center>
<h1><b>AMAZON</h1>
<pre><strong>
```

<b>Your order Is Conformed

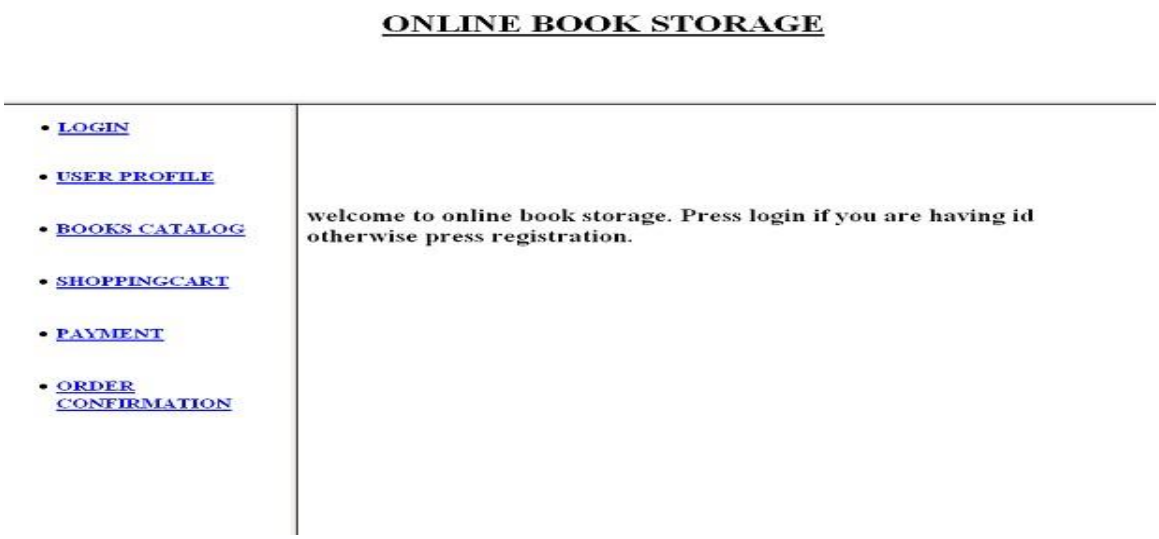
</pre>

<h2><b>THANK YOU</h2>

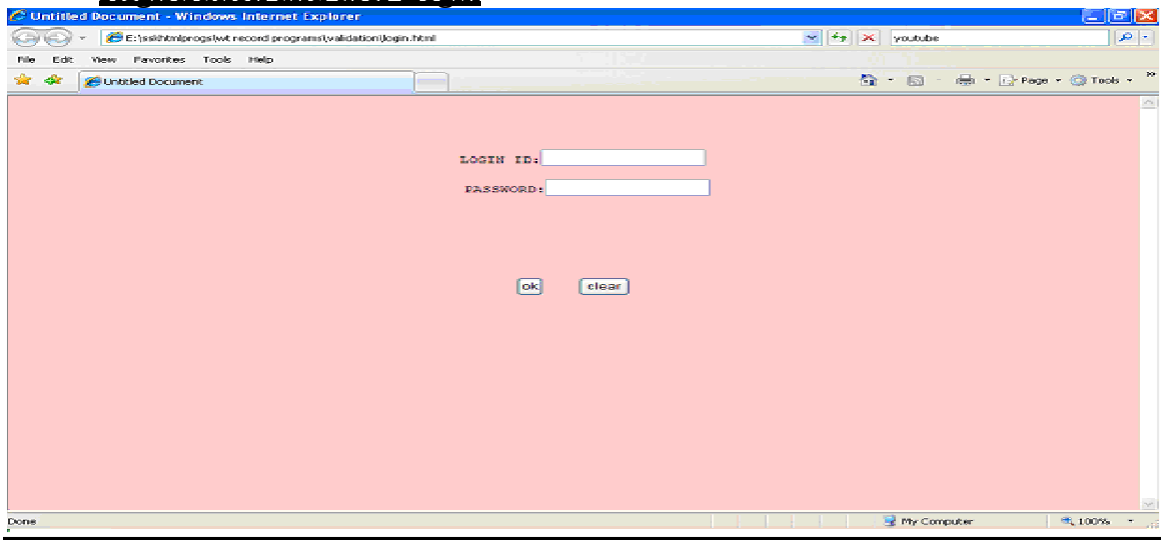
</body></html>

Output

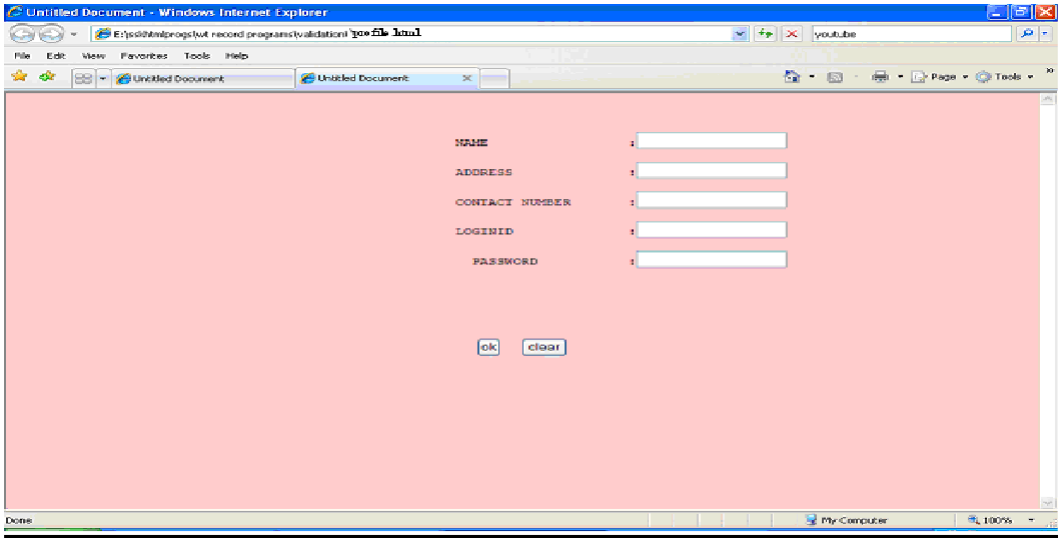
- **Home page**



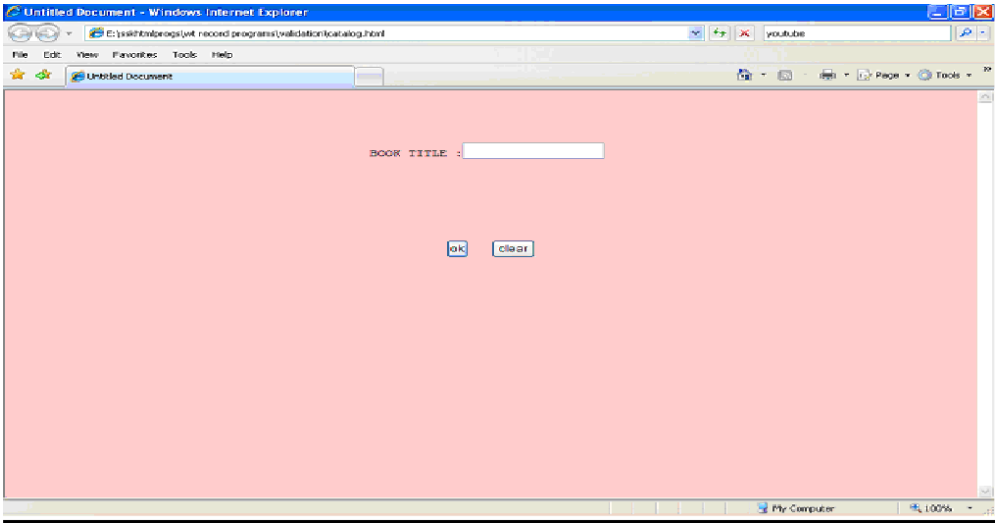
- **Registration and user Login**



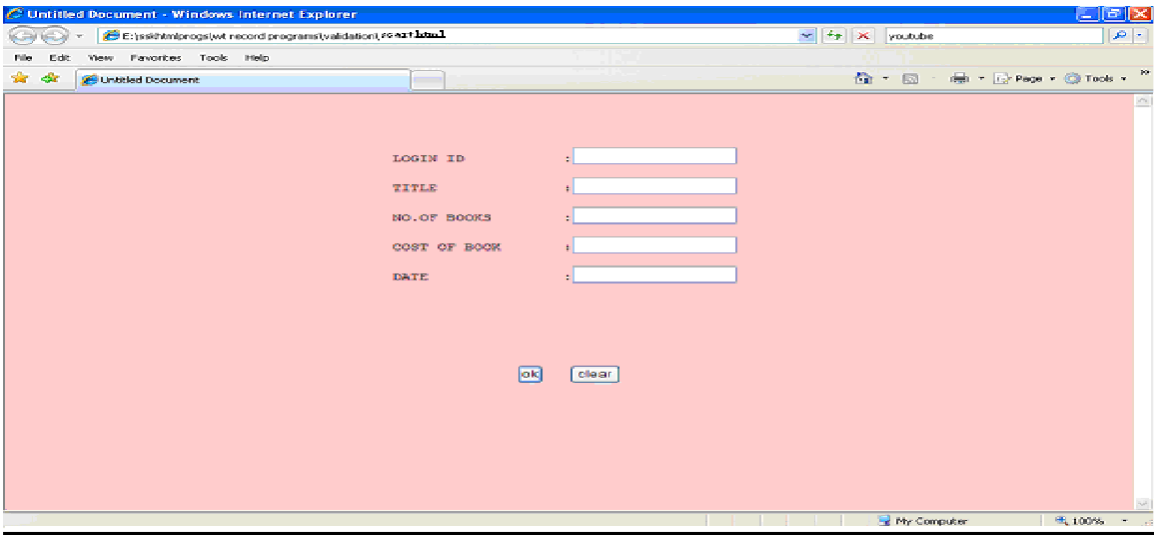
Userprofile



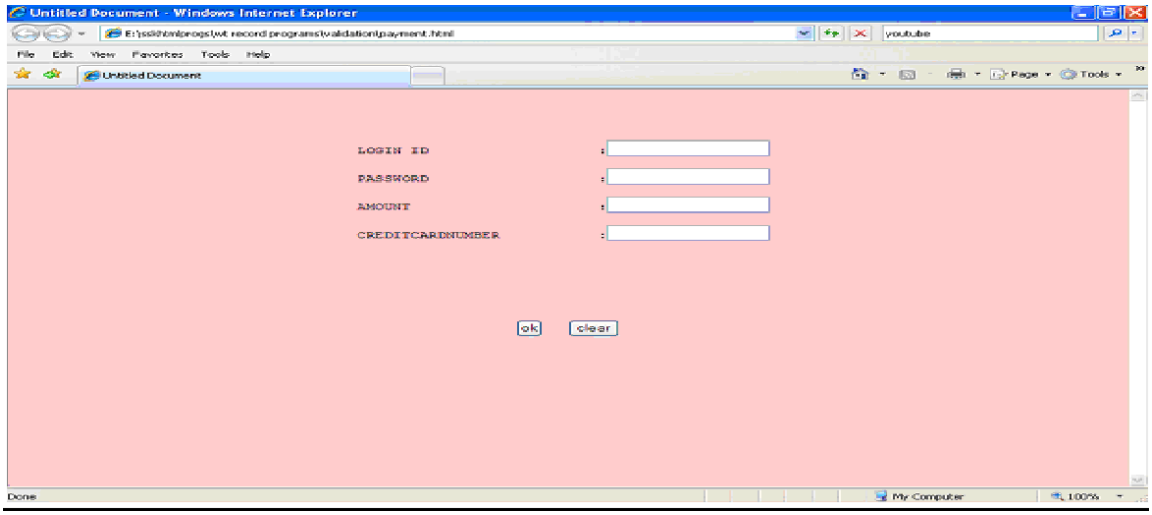
- **Books catalog**



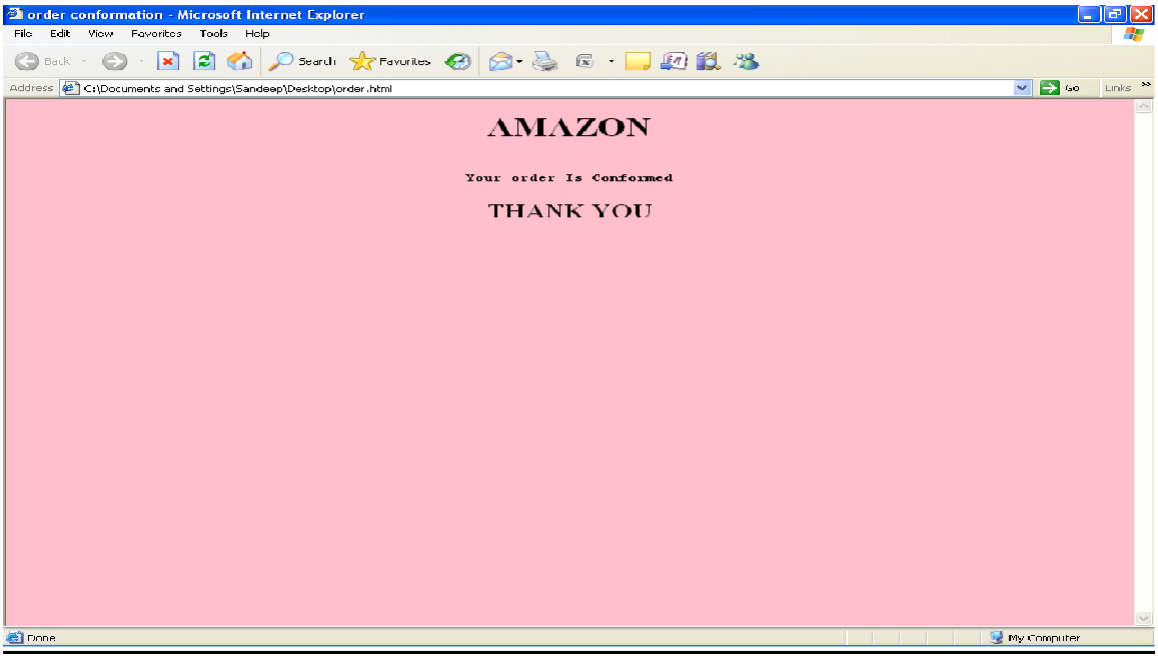
- **Shopping cart**



- **Payment by credit card**



Order Conformation



RESULT

A credit card web page which includes registration, user login, user profile and payment was validated using JavaScript successfully.

EX 4 (a) **JAVA USING SERVLETS**

Date :

i. To invoke servlets from HTML forms

Aim:

To write a program to invoke servlets from HTML forms.

Algorithm

1. Write the html file with form whose action attribute is set to the location of servlet and method is set to post
2. Create an input in the html to trigger calling servlet
3. Write a servlet program with doPost method which will give a response to the user as an html file

Program:

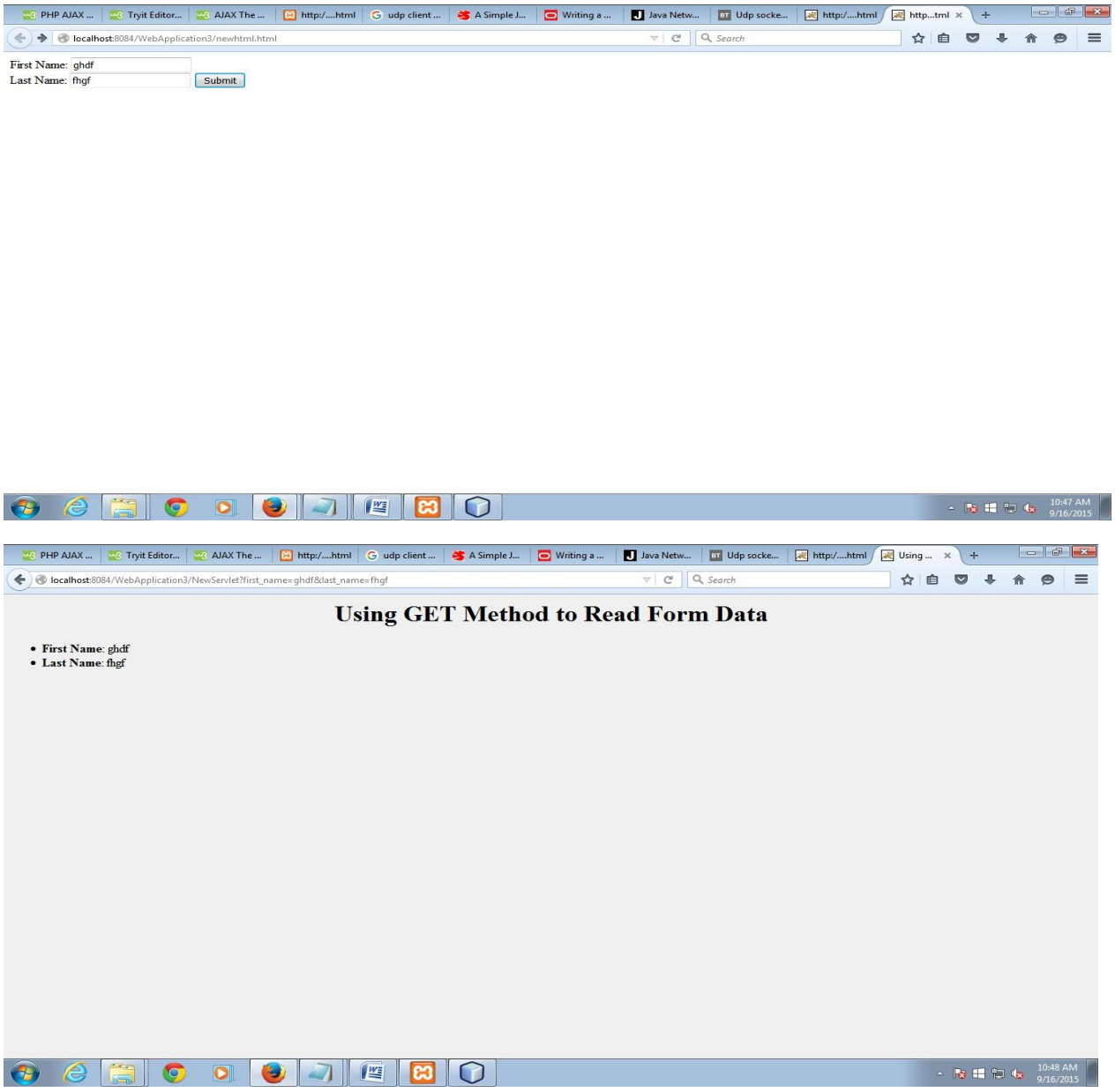
```
<html>
<body>
<form action="HelloForm" method="GET">
First Name: <input type="text" name="first_name">
<br />
Last Name: <input type="text" name="last_name" />
<input type="submit" value="Submit" />
</form>
</body>
</html>
```

HelloForm.java

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
// Extend HttpServlet class
public class HelloForm extends HttpServlet {
  // Method to handle GET method request.
  public void doGet(HttpServletRequest request,
```

```
                HttpServletResponse response)
        throws ServletException, IOException
{
    // Set response content type
    response.setContentType("text/html");
    PrintWriter out = response.getWriter();
            String title = "Using GET Method to Read Form Data";
    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" +
            "<ul>\n" +
            "  <li><b>First Name</b>: "
            + request.getParameter("first_name") + "\n" +
            "  <li><b>Last Name</b>: "
            + request.getParameter("last_name") + "\n" +
            "</ul>\n" +
            "</body></html>");
  }
  // Method to handle POST method request.
  public void doPost(HttpServletRequest request,
                HttpServletResponse response)
    throws ServletException, IOException {
    doGet(request, response);
  }
}
```

OUTPUT



RESULT

Thus the servlet program has been invoked from an HTML successfully and the output was verified.

Ex.No: 4 (b)

Date :

ii. a) Session tracking using hidden form fields. b) Session tracking for a hit count

Aim:

To write programs to implement session tracking using hidden form fields and for hit count using java.

Procedure:

1. Create a program to access the session parameter.
2. Display the data.
3. Stop

a) Session tracking using hidden form fields

index.html

```
<form action="FirstServlet ">
Name:<input type="text" name="userName"/><br/>
<input type="submit" value="go"/>
</form>
```

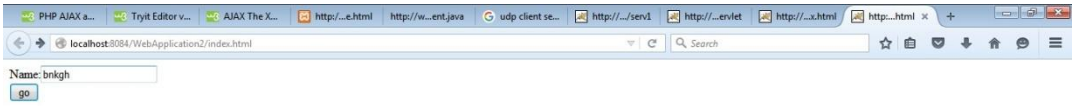
FirstServlet.java

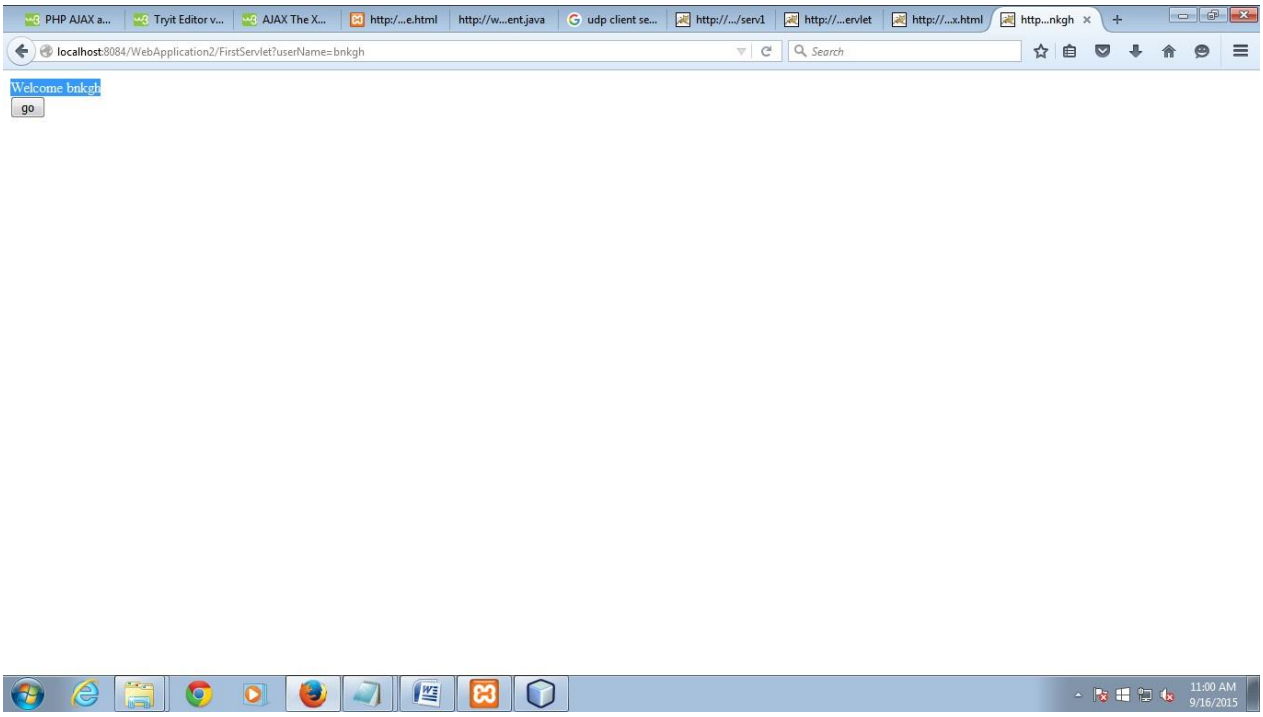
```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class FirstServlet extends HttpServlet {
public void doGet(HttpServletRequest request, HttpServletResponse response){
    try{
 response.setContentType("text/html");
       PrintWriter out = response.getWriter();
       String n=request.getParameter("userName");
       out.print("Welcome "+n);
       //creating form that have invisible textfield
       out.print("<form action=' SecondServlet '>");
       out.print("<input type='hidden' name='uname' value='"+n+"'>");
      out.print("<input type='submit' value='go'>");
      out.print("</form>");
       out.close();
            }catch(Exception e){System.out.println(e);}
   }
}
```

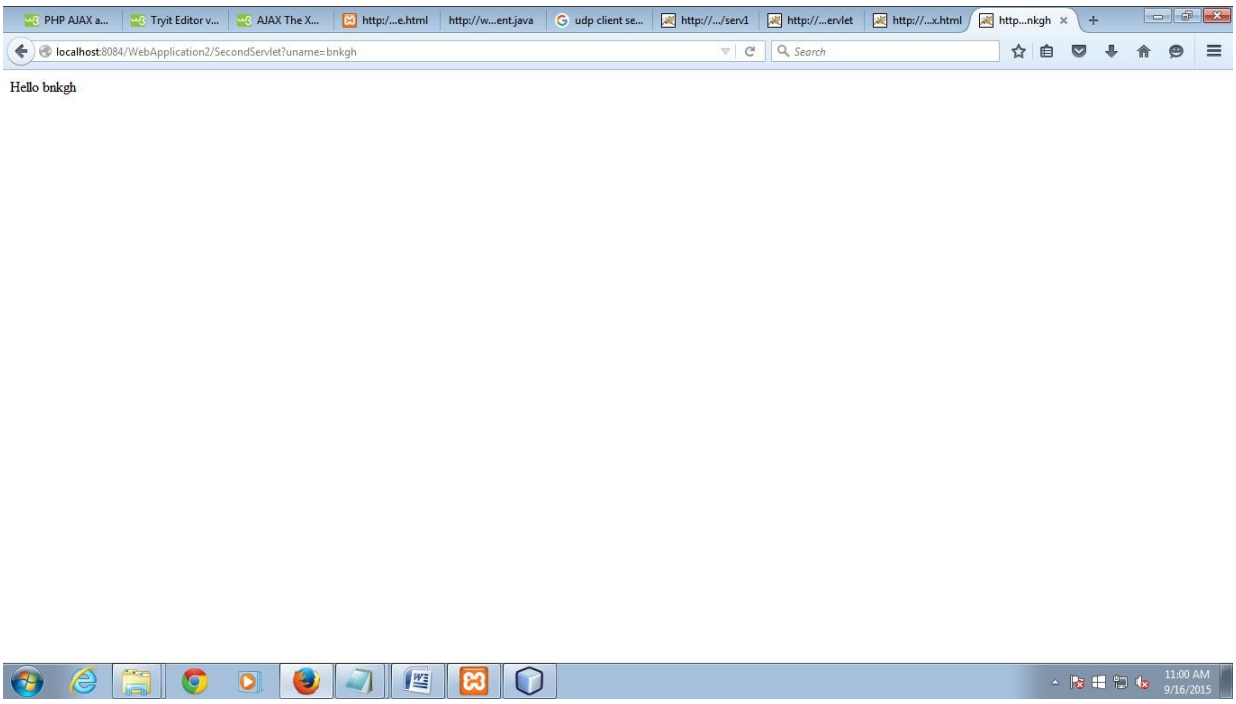
SecondServlet.java

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class SecondServlet extends HttpServlet {
public void doGet(HttpServletRequest request, HttpServletResponse response)
      try{
      response.setContentType("text/html");
      PrintWriter out = response.getWriter();

      //Getting the value from the hidden field
      String n=request.getParameter("uname");
      out.print("Hello "+n);
      out.close();
           }catch(Exception e){System.out.println(e);}
   }
}
```

OUTPUT




PHP AJAX a...
Tryit Editor v...
AJAX The X...
http://...e.html
http://w...ent.java
udp client se...
http://.../serv1
http://...ervlet
http://...x.html
http...nkgh
localhost:8084/WebApplication2/FirstServlet?userName=bnkgh
Search
Welcome bnkgh
go
11:00 AM
9/16/2015


PHP AJAX a...
Tryit Editor v...
AJAX The X...
http://...e.html
http://w...ent.java
udp client se...
http://.../serv1
http://...ervlet
http://...x.html
http...nkgh
localhost:8084/WebApplication2/SecondServlet?uname=bnkgh
Search
Hello bnkgh
11:00 AM
9/16/2015

b) Session Tracking for Hit Count

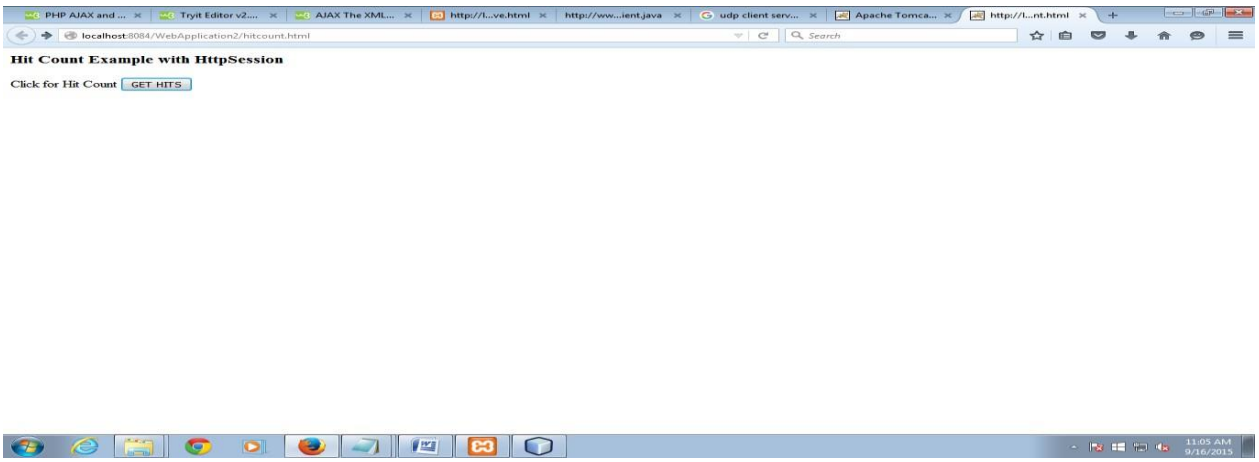
HitCount.html

```
<body>
<h3>Hit Count Example with HttpSession</h3>
<form method="get" action="http://localhost:8080/w3schools.com">  Click for Hit Count
<input type="submit" value="GET HITS">
 </form>
</body>
```

HitCount Servlet

```
import java.io.*;
import javax.servlet.*;
 import javax.servlet.http.*;
import java.util.*;
 public class HitCount extends HttpServlet {
public void service(HttpServletRequest req, HttpServletResponse res) throws ServletException,
IOException {
res.setContentType("text/html") ;
PrintWriter out = res.getWriter( );
 HttpSession session = req.getSession(); // this is how to get a session object
 Integer hitNumber = (Integer) session.getAttribute("rama"); // retrieving value from session
object  if(hitNumber == null) { hitNumber = new Integer(1);
} else
{
 hitNumber = new Integer(hitNumber.intValue()+1) ;
 } session.setAttribute("rama", hitNumber); // storing the value with session object
out.println("Your Session ID: " + session.getId()); // never changes in the whole session
out.println("<br>Session Creation Time: " + new Date(session.getCreationTime())); // never
changes in the whole session
 out.println("<br>Time of Last Access: " + new Date(session.getLastAccessedTime())); //
changes for every hit
out.println("<br>Latest Hit Count: " + hitNumber); // increments by 1 for every hit
 }
}
```

OUTPUT



RESULT

Thus the program for session tracking was implemented successfully.

EX 5 **ON-LINE EXAMINATION WITH JDBC**

Date :

Aim:
To write a program in Java to create three-tier applications using servlets for conducting on-line examination for displaying student mark list. Assume that student information is available in a database which has been stored in a database server.

Procedure:

1. Start the three-tier application in servlets
2. Create the student.html
3. Use the Form post method
4. In the Form when click submit it is link to
5. http://localhost:8080/Student/Student
6. Use the textbox get the student Roll no
7. Then create java coding Student.java for getting the data from the database
8. Use jdbc:odbc:Student connect to the database
9. And list out the data

Program:

Main.jsp

```
<%@page language="java" import="java.sql.*"%>
<%@page import="java.io.*" %>
<%@page import="java.util.*"  %>
<%
String SeatNum,Name;
String ans1,ans2,ans3,ans4,ans5;
int a1,a2,a3,a4,a5;
a1=a2=a3=a4=a5=0;
Connection connect=null;
Statement stmt=null;
ResultSet rs=null;
Class.forName("oracle.jdbc.driver.OracleDriver");
connect =
DriverManager.getConnection("jdbc:oracle:thin:@172.16.34.183:1521:orcl","exam1","exam1");
SeatNum = request.getParameter("Seat_no");
        Name = request.getParameter("Name");
        ans1 =request.getParameter("group1");
        if(ans1.equals("True"))
          a1=2;
        else
```

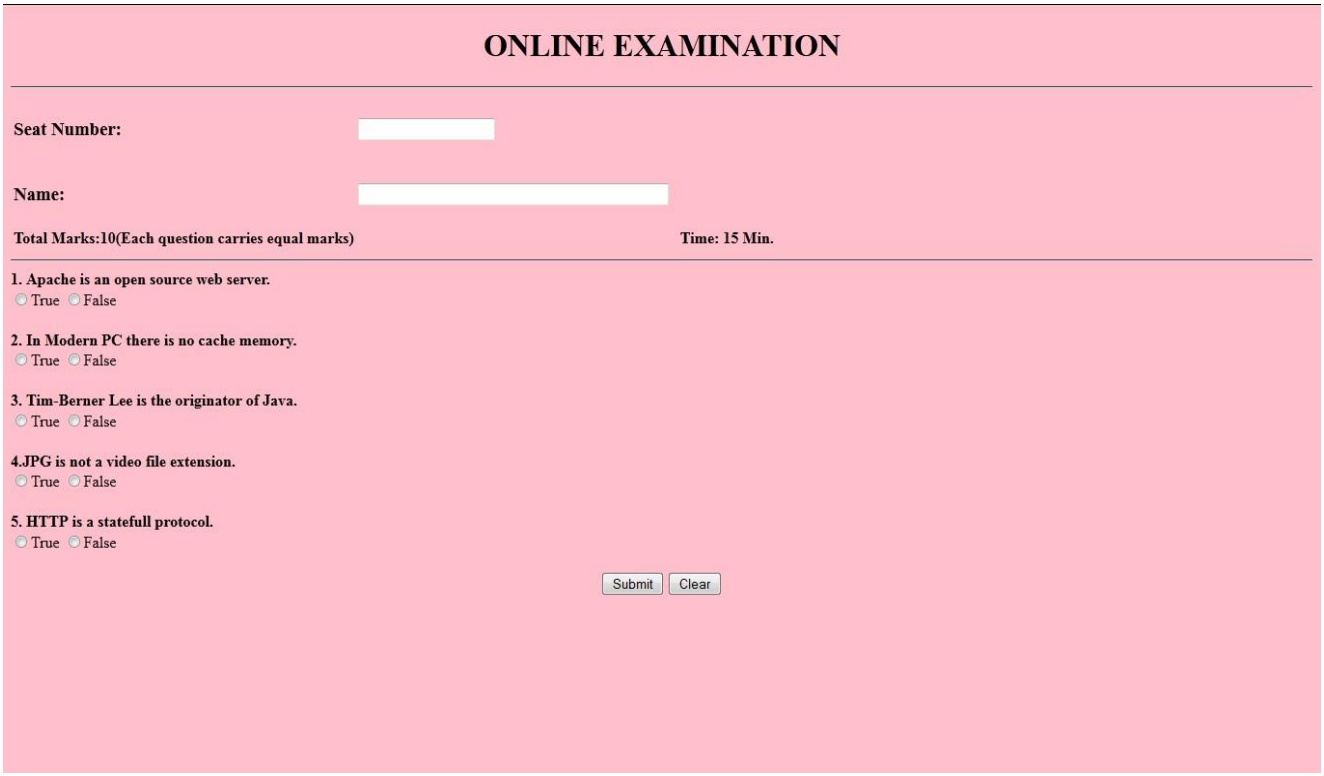
```
            a1=0;
           ans2 = request.getParameter("group2");
          if(ans2.equals("True"))
            a2=0;
          else
            a2=2;
          ans3 = request.getParameter("group3");
          if(ans3.equals("True"))
            a3=0;
          else
            a3=2;
          ans4 = request.getParameter("group4");
          if(ans4.equals("True"))
            a4=2;
          else
            a4=0;
          ans5 = request.getParameter("group5");
          if(ans5.equals("True"))
            a5=0;
          else
            a5=2;
          int Total=a1+a2+a3+a4+a5;
       stmt = connect.createStatement();
          String query = "INSERT INTO Studentable (" + "Seat_no,Name,Marks" + ")
VALUES ('" +SeatNum + "', '" + Name + "', '"+Total+ "')";
          stmt.executeQuery(query);
       out.println("inserted");
          stmt.close();
       connect.close();
%>
```

Main.html

```
<!DOCTYPE html>
<html>
   <head>
      <title>Online Examination</title>
    </head>
   <body bgcolor="pink">
      <center>
          <h1>ONLINE EXAMINATION</h1>
       </center>
       <hr/>
   <form action="main.jsp" method="post">
        <table>
            <tr>
                <td><h3>Seat Number:</h3></td>
```

```
            <td><input type="text" name="Seat_no"></td>
          </tr>
          <tr>
            <td><h3>Name:</h3></td>
            <td><input type="text" name="Name" size="50"></td>
          </tr>
          <tr>
            <td><b>Total Marks:10(Each question carries equal marks) </b></td>
          <td></td><td></td><td></td><td></td><td><b>Time: 15 Min.</b></td>
          </tr>
        </table>
         <hr/>
              <b><h2>1. Apache is an open source web server.</h2></b><br/>
               <input type="radio" name="group1" value="True"/>True
               <input type="radio" name="group1" value="False"/>False<br>
               <br/>
               <b><h2>2. In Modern PC there is no cache memory.</h2></b><br/>
               <input type="radio" name="group2" value="True">True
               <input type="radio" name="group2" value="False">False<br>
               <br/>
               <b><h2>3. Tim-Berner Lee is the originator of Java.</h2></b><br/>
               <input type="radio" name="group3" value="True"/>True
               <input type="radio" name="group3" value="False"/>False<br>
               <br/>
               <b><h2>4.JPG is not a video file extension.</h2></b><br/>
               <input type="radio" name="group4" value="True">True
               <input type="radio" name="group4" value="False">False<br>
               <br/>
               <b><h2>5. HTTP is a statefull protocol.</h2></b><br/>
               <input type="radio" name="group5" value="True">True
               <input type="radio" name="group5" value="False">False<br>
               <br/>

               <center>
                 <input type = "Submit" value="Submit"/>
                 <input type = "reset" value="Clear"/><br><br>
               </center>
    </form>
  </body>
</html>
```

OUTPUT



Main.jsp
Inserted

RESULT

Thus the three tier application for displaying student mark list using servlet and database has been implemented successfully and output was verified.

EX 6 Convert the static webpages of into dynamic webpages using servlets and cookies

Date:

Aim:

To write a program to convert static web pages into dynamic web pages using servlets.

Procedure:

First install the tomcat into the system.

Then make a subdirectly(eg., tr) in the \tomcat\webapps.

Under tr create WEB-INF directory and also place the html files in this tr directory only.

Next under WEB-INF create two subclasses lib,classes and web.xml

Next place all the class files under the classes and jar files(servlet-api.jar,classes12.jar etc…) under lib subdirectories.

After this start tomcat by giving the following command at the instll_dir>tomcat>bin

Catalina.bat run

At the I.E(web browser) give the url as http;//localhost:8080//tr/htmlfile or servlet url pattern

Port no 8080 is assigned for the tomcat.

Program

index.jsp

```
<%--
Document : index
Created on : Dec 12, 2022, 8:34:37 PM

--%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>JSP Page</title>
</head>
<body>
<br /><br /><br /><br /><br />
```

```
<h1 align="center"><U>ONLINE BOOK STORAGE</U></h1><br /><br /><br />
<h2 align="center"><pre>
<b>Welcome to online book storage.
Press LOGIN if you are having id
otherwise press REGISTRATION
</b></pre></h2>
<br /><br /><pre>
<div align="center"><a href="login.html">LOGIN</a></div></pre>
</body>
</html>
```

login.html

```
<!--
To change this template, choose Tools | Templates
and open the template in the editor.

-->
<!DOCTYPE html>
<html>
<head>
<title></title>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
</head>
<body>
><br /><br /><br />
<form name="myform" method="post" action="login">
<div align="center"><pre>
LOGIN ID :<input type="text" name="id" /><br />
PASSWORD :<input type="password" name="pwd" /></pre><br /><br />
</div>
<br /><br />
<div align="center">
<input type="submit" value="ok" onclick="validate()" />
<input type="reset" value="clear" />
</div>
</form>
</body>
</html>
```

login.java(servlet)

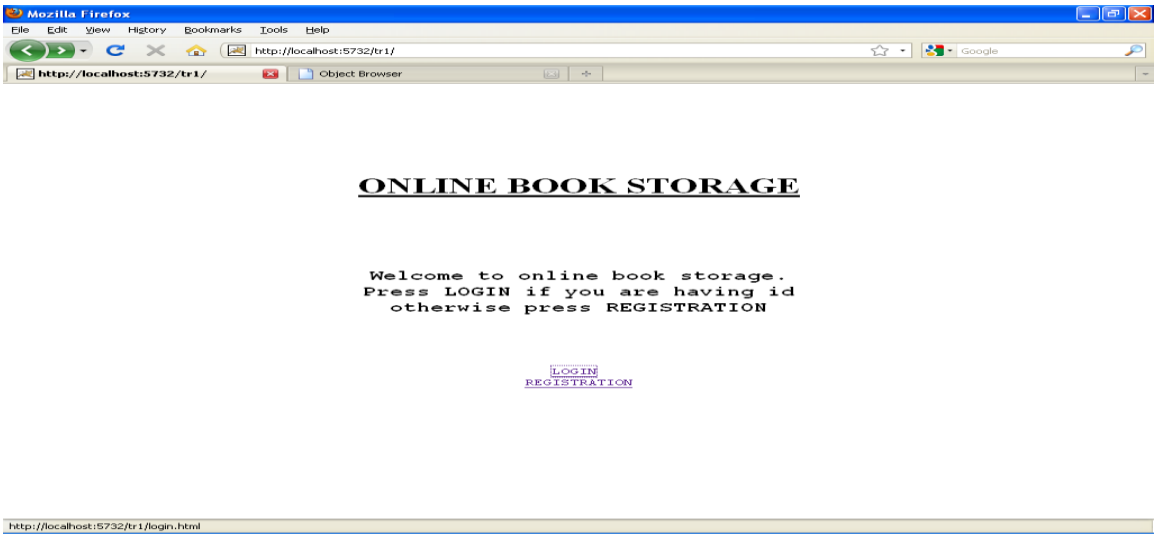
```
/*
* To change this template, choose Tools | Templates
* and open the template in the editor.
*/
```

```
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.*;


public class login 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
*/
public void service(HttpServletRequest req,HttpServletResponse resp)
throws ServletException,IOException
{
PrintWriter pw=resp.getWriter();
pw.println("<html><body>");
String id=req.getParameter("id");
String pwd=req.getParameter("pwd");
try
{
Class.forName("oracle.jdbc.driver.OracleDriver");

Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@172.16.53.70:1521:orcl","exam1","exam1");

Statement stmt=con.createStatement();
String sqlstmt="select id,pwd from login";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0;
while(rs.next())
{
if(id.equals(rs.getString(1))&&pwd.equals(rs.getString(2)))
{
```

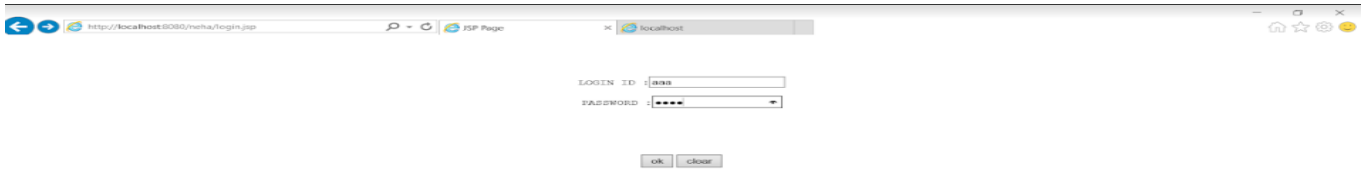
```
flag=1;
}
}
if(flag==0)
{

pw.println("<br><br>SORRY INVALID ID TRY AGAIN ID<br><br>");
pw.println("<a href=\"login.html\">press LOGIN to RETRY</a>");

}
else
{
pw.println("<br><br>VALID LOGIN ID<br><br>");
pw.println("<h3><ul>");

}

pw.println("</body></html>");
}
catch(Exception e)
{
resp.sendError(500,e.toString());
}
}
}
```

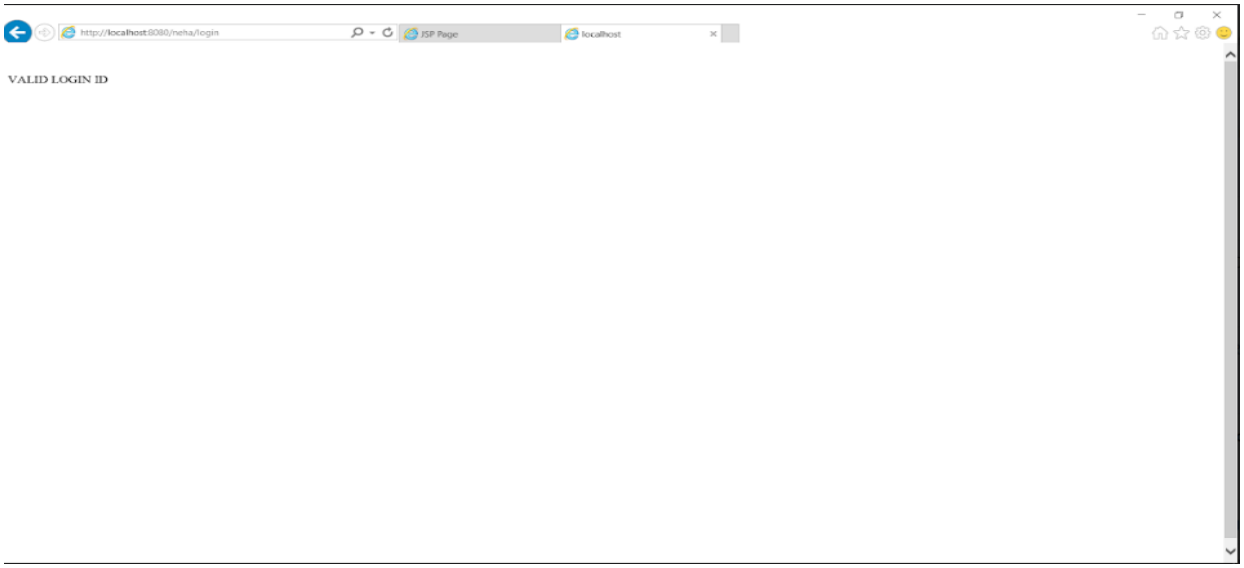
Output:

- **Home page:**



- **Login page:**


http://localhost:8080/neha/login.jsp
JSP Page
localhost
LOGIN ID :aaa
PASSWORD :
ok
clear


http://localhost:8080/neha/login
JSP Page
localhost
VALID LOGIN ID

RESULT

Thus an application for convert static web page to dynamic web page using servlet was implemented successfully.

EX 7 Converting the static web pages into dynamic web pages using JSP

Date:

Aim:

Redo the previous task using JSP by converting the static web pages into dynamic web pages. Create a database with user information and books information. The books catalogue should be dynamically loaded from the database. Follow the MVC architecture while doing the website.

Procedure:

1) Create your own directory under tomcat/webapps (e.g. tr1)
2) Copy the html files in tr1
3) Copy the jsp files also into tr1
4) Start tomcat give the following command

   Catalina.bat run

   At install-dir/bin
5) at I.E give url as http://localhost:8081/tr1/main.html

Program

Home page:

index.jsp

```
<%--

Document : index

Created on : Dec 12, 2022, 9:05:37 PM

--%>

<%@page contentType="text/html" pageEncoding="UTF-8"%>

<!DOCTYPE html>

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
```

```
<title>JSP Page</title>
</head>
<body>
<br /><br /><br /><br /><br />
<h1 align="center"><U>ONLINE BOOK STORAGE</U></h1><br /><br /><br />
<h2 align="center"><pre>
<b>Welcome to online book storage.
Press LOGIN if you are having id
otherwise press REGISTRATION
</b></pre></h2>
<br /><br /><pre>
<div align="center"><a href="login.html">LOGIN</a></div></pre>
</body>
</html>
```

login.html

```
<!--
To change this template, choose Tools | Templates
and open the template in the editor.

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

```
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
</head>
<body>
><br /><br /><br />
<form name="myform" method="post" action="login.jsp">
<div align="center"><pre>
LOGIN ID :<input type="text" name="id" /><br />
PASSWORD :<input type="password" name="pwd" /></pre><br /><br />
</div>
<br /><br />
<div align="center">
<input type="submit" value="ok" onclick="validate()" />
<input type="reset" value="clear" />
</div>
</form>
</body>
</html>
```

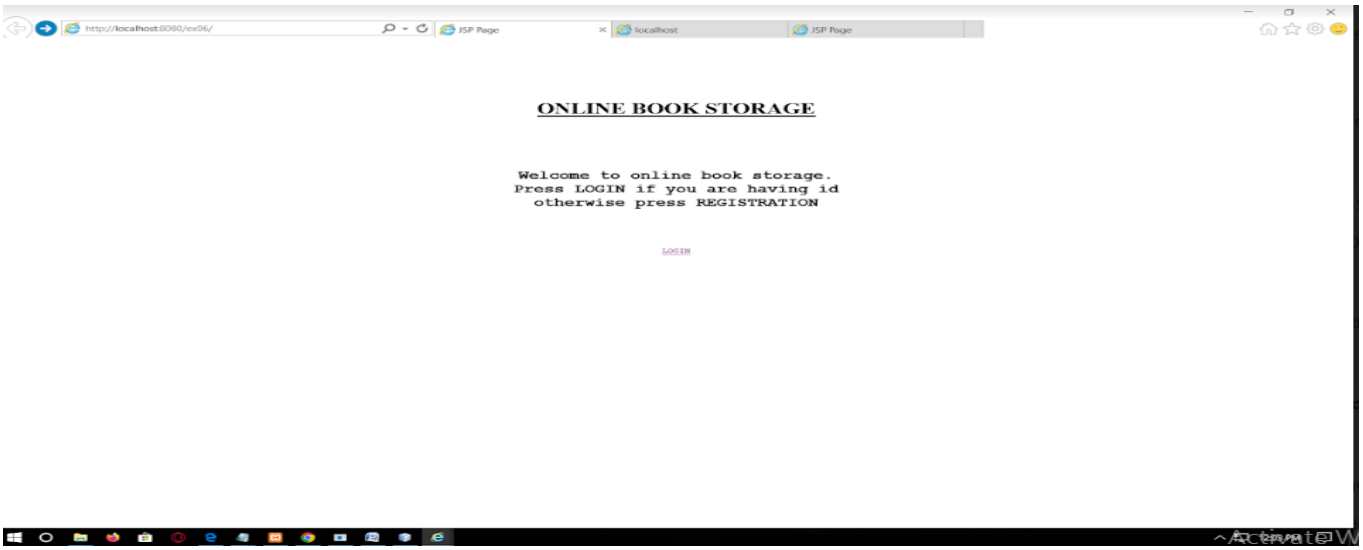
login.jsp

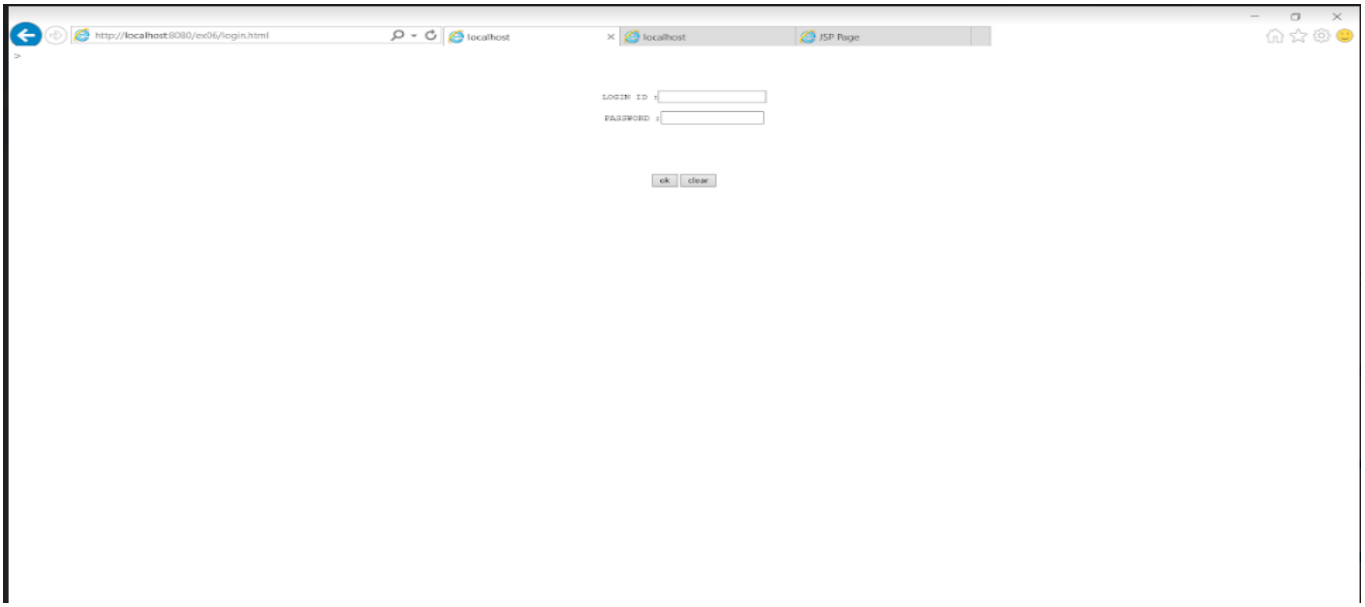
```
<%--
Document : login
Created on : Dec 12, 2022, 9:10:52 PM

--%>
```

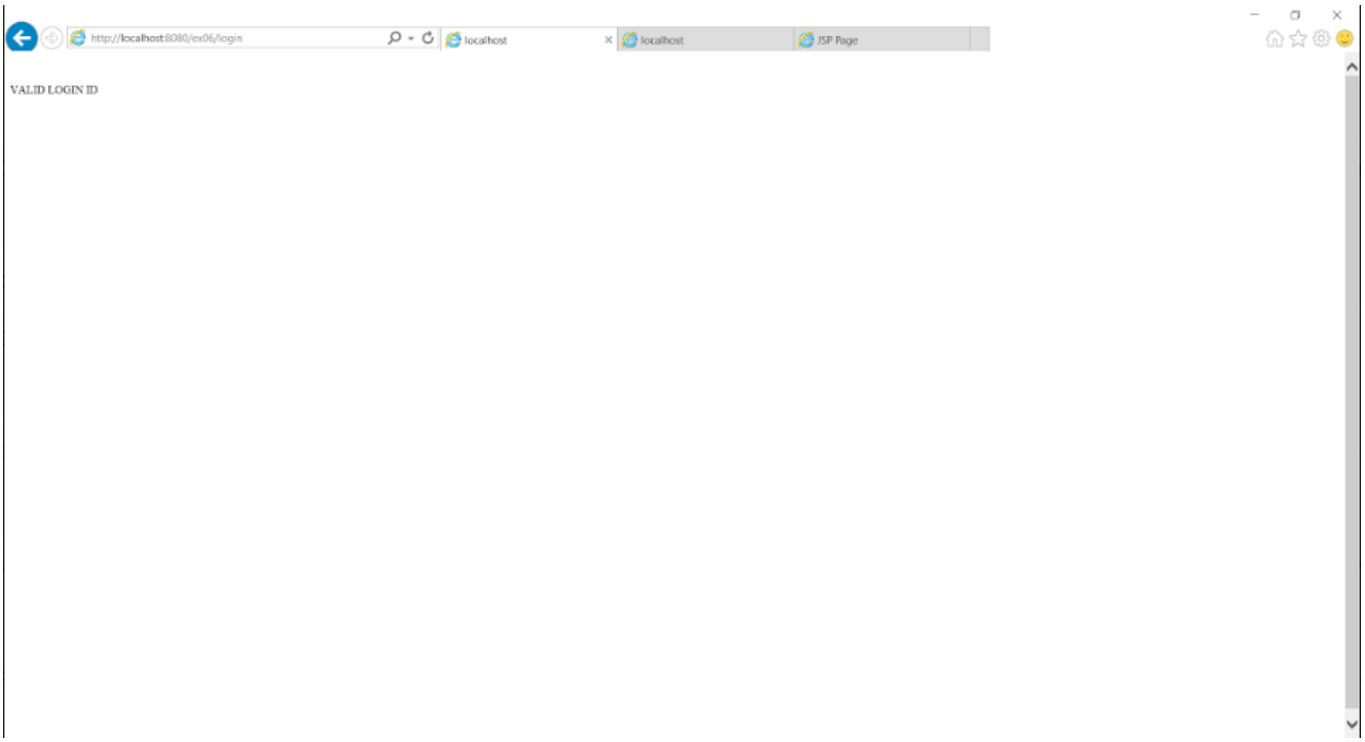
```
<%@page contentType="text/html" pageEncoding="UTF-8"%>

<%@page import="java.sql.*"%>
<%@page import="java.io.*"%>

<!DOCTYPE html>
<% out.println("<html><body>");
String id=request.getParameter("id");
String pwd=request.getParameter("pwd");
Class.forName("oracle.jdbc.driver.OracleDriver");

Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@172.16.53.70:1521:orcl","exam1","exam1");

Statement stmt=con.createStatement();
String sqlstmt="select id,pwd from login";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0;
while(rs.next())
{
if(id.equals(rs.getString(1))&&pwd.equals(rs.getString(2)))
{
flag=1;
}
}
```

```
if(flag==0)
{

out.println("<br><br>SORRY INVALID ID TRY AGAIN ID<br><br>");
out.println("<a href=\"login.html\">press LOGIN to RETRY</a>");

}
else
{ out.println("<br><br>VALID LOGIN ID<br><br>");
out.println("<h3><ul>");

}

out.println("</body></html>");

con.close();
%>
```

- **Login page:**


http://localhost:8080/ex06/
JSP Page
localhost
JSP Page
ONLINE BOOK STORAGE
Welcome to online book storage.
Press LOGIN if you are having id
otherwise press REGISTRATION
LOGIN


http://localhost:8080/ex06/login.html
localhost
localhost
JSP Page
LOGIN ID :
PASSWORD :
ok
clear


http://localhost:8080/ex06/login
localhost
localhost
JSP Page
VALID LOGIN ID

RESULT

Thus an application for convert static web page to dynamic web page using JSP was implemented successfully.

EX 8 **XML with Javascript**

Date:

Aim:

To write a program, which takes user id as input and displays the user details by taking the user information from the XML document.

Procedure:

1. Create a XML document that contains 10 user information.
2. Write a html program to get the user ID as input.
3. Display the user information extracted from XML as per user ID.

Program:

Login Page:

Std.html:

```
<html>

<head>

<script>

function LoadXmlDoc(dname)

{

xmldoc=new ActiveXObject("Microsoft.XMLDOM");

xmldoc.async="false";

xmldoc.load(dname);

return xmldoc;

}

function validate()

{

var i,k,j=0;

xmldoc=LoadXmlDoc("student.xml");
```

```
var v1=myform.n2.value;
if(v1.length==0)
window.alert("enter the roll no.");
else
{
v1=parseInt(v1);
arr=xmldoc.getElementsByTagName("students");
for(i=0;i<arr.length;i++)
{
var txt=xmldoc.getElementsByTagName("rollno")[i].childNodes[0].nodeValue;
if(txt==v1)
{k=i;
j=1;
}
}
if(j==1)
{
nam=xmldoc.getElementsByTagName("name")[k].childNodes[0].nodeValue;
rol=xmldoc.getElementsByTagName("rollno")[k].childNodes[0].nodeValue;
per=xmldoc.getElementsByTagName("percentage")[k].childNodes[0].nodeValue;
document.write("<body bgcolor='pink'>");
document.write("<table border=1 align='center'><tr><th colspan='2'>USER
DETAILS</th></tr>");
document.write("<tr><th>Name::</th><td>"+nam+"</td></tr>");
document.write("<tr><th>RollNumber::</th><td>"+rol+"</td></tr>");
```

```
document.write("<tr><th>Percentage::</th><td>"+per+"</td></tr>");
document.write("</table></body>");
}
else
window.alert("roll number not found");
}
}
</script>
</head>
<body bgcolor="pink" text="red">
<form name="myform">
<table align="center">
<tr><td><B>RollNumber</B></td><td><input type="text" size=15 name="n2"></td></tr>
</table>
<br>
<center><input type=submit value="submit" name="b1" onClick="validate()"></center>
</form>
</body>
</html>
```

- **Student XML Document:**

Student.xml:

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

<rollno>501</rollno>

<name>ABC</name>

<percentage>65%</percentage>

</students>

<students>

<rollno>502</rollno>

<name>DEF</name>

<percentage>67%</percentage>

</students>

<students>

<rollno>503</rollno>

<name>GHI</name>

<percentage>69%</percentage>

</students>

<students>

<rollno>504</rollno>

<name>JKL</name>

<percentage>65%</percentage>

</students>

<students>

<rollno>505</rollno>

<name>MNO</name>

<percentage>73%</percentage>

</students>

<students>

<rollno>506</rollno>

<name>PQR</name>

<percentage>74%</percentage>

</students>

<students>

<rollno>507</rollno>

<name>stu</name>

<percentage>65%</percentage>

</students>

<students>

<rollno>508</rollno>

<name>VWX</name>

<percentage>70%</percentage>

</students>

<students>

<rollno>509</rollno>

<name>YZ</name>

<percentage>72%</percentage>

</students>

<students>

<rollno>510</rollno>

<name>PQR</name>

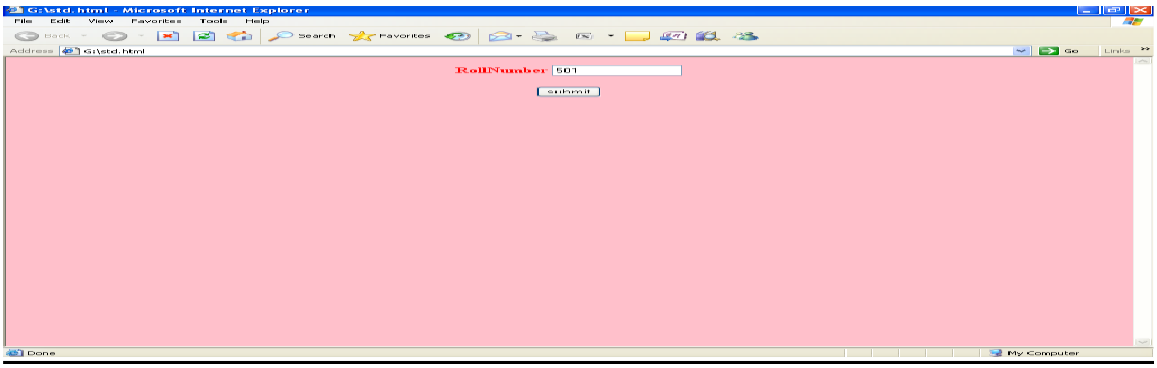
<percentage>75%</percentage>

</students>

</cse>

Output:

- **Login page:**



RESULT

Thus the XML document contains 10 users information has been created successfully and displayed the user details by taking the user information from the XML document.

EX-9 **PHP with MYSQL Database**

Date:

Aim:

To validate the form using php regular expression

Procedure

1. Define a regular expression for validating email address
2. Check if the input value matches with regular expression
3. If it does match, send an print stating “valid email address”
4. If it doesn’t match, send an print stating “invalid email address”

Program

i) Validate the form using php regular expression

email1.html

```
<html>
<head>
<title> gmail </title>
</head>
<body>
<form method ="post" action="email2.php">
<label>Email</label>
<input type="text" name="email"/>
<br/>
<input type="submit" value="Submit">
</form>
</body>
</html>
```

email2.php

```
<?php
$reg = '/^\w+([\.-]?\w+)*@\w+([\.-]?\w+)*(\.\w{2,3})+$/';
$email= $_POST["email"];
if(preg_match($reg, $email))
{
echo "Valid Email ID";
}
```

```
else
{
echo "Invalid Email ID";
}
?>
```

RESULT

Thus the form has been validated successfully using php regular expression

Aim:

To store and retrieve form data using PHP Database

Procedure

1.First, establish the connection with Database
2. Create the database, then create the table for data.
3.Use PHPMyAdmin for the database handling.
4.Write PHP script to store and Fetch data from Database.
5. Start the server in the XAMPP to enable APACHE AND MYSQL.

ii) PHP stores a form data into database

a)Inserting data in to database
firstform.html

```
<html>
<head>
<title>form</title>
</head>
<body>
<form method="post" action="insert1.php">
Name:<input type="text" name="fname"><br>
Age:<input type="text" name="Age"><br>
<input type="submit" value="submit">
</form>
</body>
</html>
```

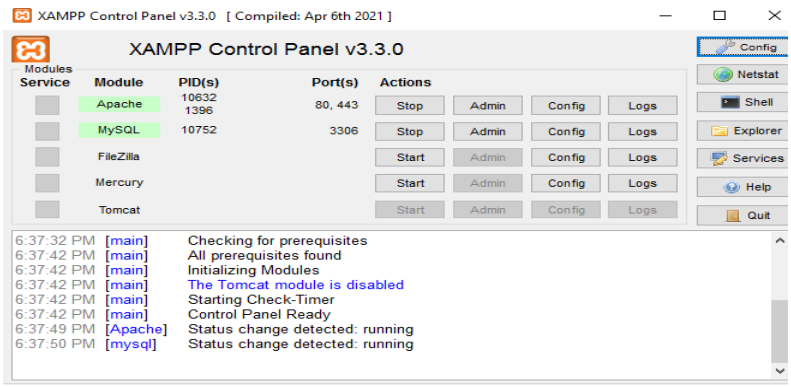
insert1.php

```
<?php
$n=$_POST['fname'];
$a=$_POST['Age'];
$con=mysqli_connect("localhost","root","","test");
$sql="INSERT INTO stu_info(stu_name,stu_age)values('$n','$a')";
$r=mysqli_query($con,$sql);
if($r)
{
 echo "student details added";
}
else
{
 echo "student details not added";
```

```
}
?>
```

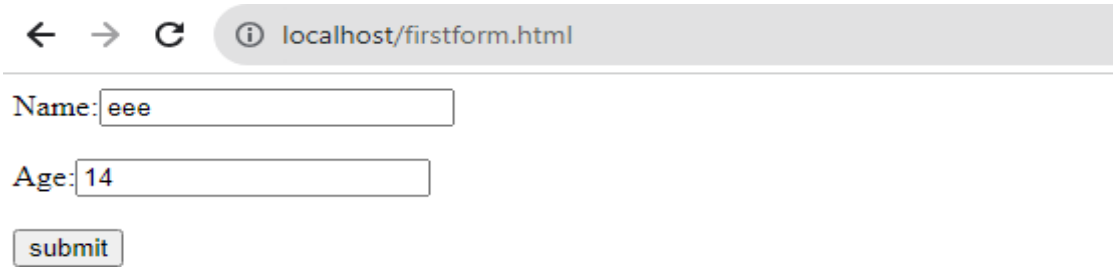
b)Fetching Data from database

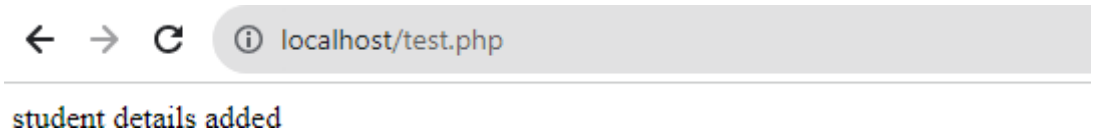
```
<?php
$con=mysqli_connect("localhost","root","","info");
if(!$con){
die('connection error' .mysqli_connect_error());
}
else
{
echo 'success<br>';
}
$query="select * from stu_info";
$result=mysqli_query($con,$query);
print_r($result);
$numrow=mysqli_num_rows($result);
if($numrow>0)
{
//echo $numrow. 'record found';
//while($row=mysqli_fetch_assoc($result)){
echo '<table border=1>';
echo '<tr>';
echo '<th>stuname</th>';
echo '<th>age</th>';
echo '</tr>';
while($row=mysqli_fetch_assoc($result)){
echo '<tr>';
echo '<td>' . $row['stu_name'] . '</td>';
echo '<td>' . $row['age'] . '</td>';
echo '</tr>';
}
echo '</table>';
}
else{
echo 'record not found';
}
?>
```



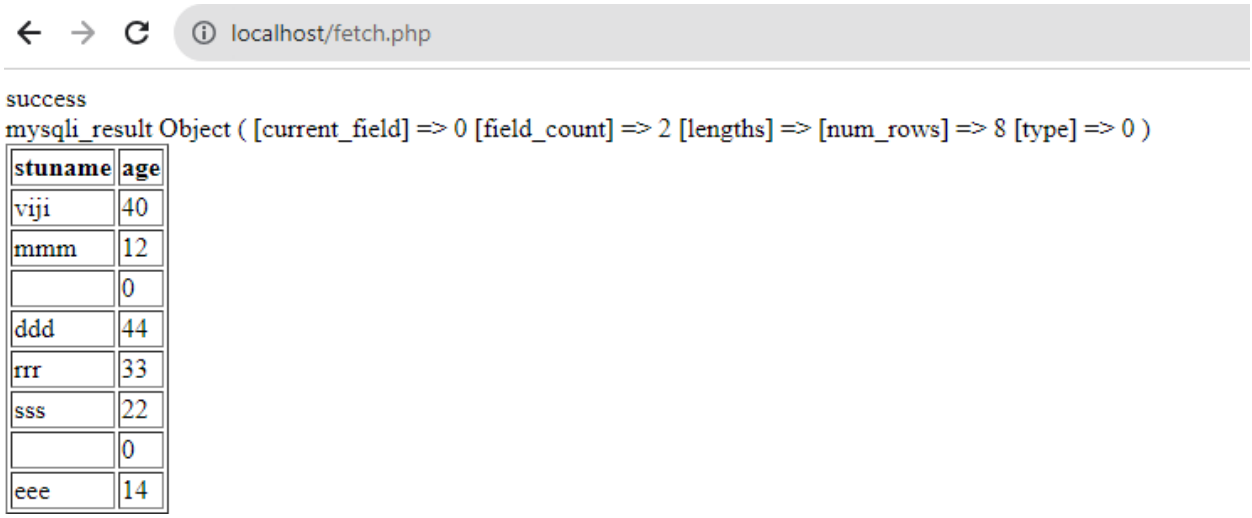
Output:

//inserting form data into mysql database





//fetching data from mysql and display it in browser



RESULT

Thus the Form Data has been successfully stored and retrived using PHP Database.

EX-10 **AJAX using XMLHttpRequest**

Date:

Aim:

To create an HTML page using Ajax and XMLHttpRequest.

Algorithm

1. Create a HTML page with one button type.
2. Call the loaddoc() function by clicking the button.
3. Use XMLHttpRequest method to open the url.
4. Display the details.

Program

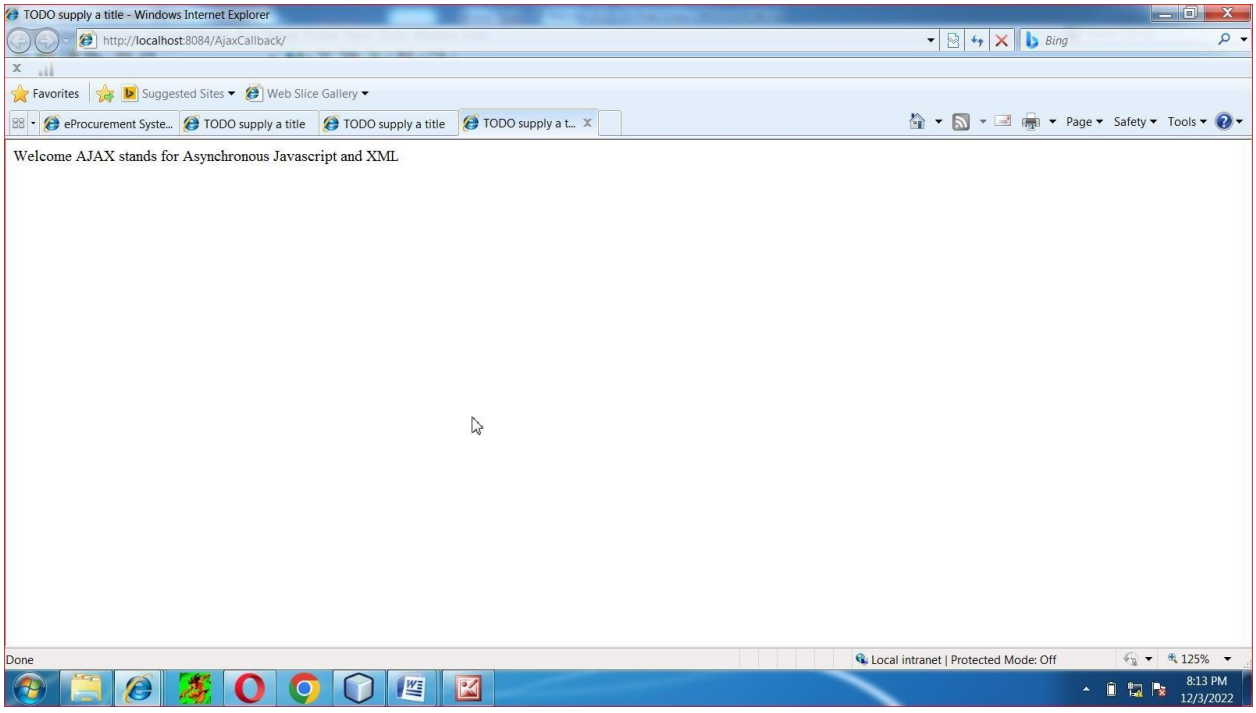
index.html:

```
<!DOCTYPE html>
<html>
<body>
<div id="demo">
<h2>The XMLHttpRequest Object</h2>
<h3>Lets Ajax Change this content</h3>
<button type="button" onclick="loadDoc()">Change Content</button>
</div>
<script>
function loadDoc()
{
 var xhttp = new XMLHttpRequest();
xhttp.onreadystatechange = function()
{
 if (this.readyState == 4 && this.status == 200) {
document.getElementById("demo").innerHTML = this.responseText;
}
 };
 xhttp.open("GET", "ajax_info.txt", true);
 xhttp.send();
}
</script>
</body>
</html
```

file.txt:

Welcome AJAX stands for Asynchronous Javascript And XML.

OUTPUT



RESULT

Thus the Ajax using XMLHttpRequest object was executed successfully.