Vel Tech High Tech Dr.Rangarajan Dr.Sakunthala Engineering College

Dr.Rangarajan Dr.Sakunthala Engineering College

An Autonomous Institution

(AN ISO 9001-2008 CERTIFIED INSTITUTION)

(Approved by AICTE, New Delhi & Affiliated to Anna University)

No.60, Avadi - Vel Tech Road, Chennai-600 062.

21CS67P - INTERNET PROGRAMMING LABORATORY YEAR/SEM:III/VI



PREPARED BY
P.BRINDA,
ASSISTANT PROFESSOR
CSE

VEL TECH HIGH TECH DR. RANGARAJAN DR. SAKUNTHALA ENGINEERINGCOLLEGE

INSTITUTION VISION

Pursuit of excellence in technical education to create civic responsibility with competency.

INSTITUTION MISSION

- 1. To impart the attributes of global engineers to face industrial challenges with social relevance.
- 2. To indoctrinate as front runners through moral practices.
- 3. To attain the skills through life long learning.

DEPARTMENT VISION

To blend academic learning process and innovative ideas producing self-confident graduates with skills and knowledge to compete in the changing world.

DEPARTMENT MISSION

M1: To provide strong basic knowledge in Computer Science and Engineering.

M2: To motivate the students to function as a team from their innovative ideas in collaboration with the industries.

M3: To enable the students to lead and adapt to the growing environment.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO 1:

Embark upon successful professional practice in Computer Science and Engineering, displaying supportive and leadership roles.

PEO 2:

Engage in professional projects requiring teamwork and making valuable contributions to design, development, and production in the practice of Computer Science and Engineering or application areas.

PEO 3:

Equip to adapt and grow with changes in technology and globalization, and to pursue higher studies and research activities.

PEO 4:

Be capable of productive employment in the field of Computer Science and Engineering with competing technical expertise, good interpersonal skill.

PEO 5:

Utilize their broad educational experience, ethics, and professionalism to make a positive impact on their local and professional communities.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO's	PROGRAMME SPECIFIC OUTCOMES (PSOs)
PSO1	Designing Computer/Electronic based components which would serve social environment.
PSO2	Applying the current and gained knowledge and modern techniques not only in the Computers but in all related fields.

PROGRAM OUTCOMES:

- 1. **Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. **Problem analysis**: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineeringsciences.
- 3. **Design/development of solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. **Modern tool usage**: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- 6. **The engineer and society**: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- 7. **Environment and sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. **Individual and team work**: Function effectively as an individual, and as a member or leaderin diverse teams, and in multi disciplinary settings.
- 10. **Communication**: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- 11. **Project management and finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multi disciplinary environments.
- 12. **Life Long Learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

VEL TECH HIGHTECH Dr. RANGARAJAN Dr. SAKUNTHALA ENGINEERING COLLEGE

COURSE OBJECTIVES:

- To be familiar with Web page design using HTML/XML and style sheets
- *To be exposed to creation of user interfaces using Java frames and applets.*
- To learn to create dynamic web pages using server side scripting.
- To learn to write Client Server applications.
- To be familiar with the PHP programming.
- To be exposed to creating applications with AJAX

COURSE OUTCOMES:

CO No	Course Outcomes	Knowledge Level
CO1	Construct Web pages using HTML/XML and style sheets.	<i>K</i> 2
CO2	Build dynamic web pages with validation using Java Script objects and by applying different event handling mechanisms.	<i>K</i> 3
CO3	Develop dynamic web pages using server side scripting.	<i>K</i> 2
CO4	Use PHP programming to develop web applications.	<i>K</i> 3
CO5	Construct web applications using AJAX and web services.	K2

COURSE OUTCOME AND PROGRAMME OUTCOME MAPPING:

СО	PO1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
CO 1	3	3	2	1	-	-	-	-	-	-	-	-	2	2
CO 2	3	3	2	1	-		•	-	-	•	•	-	2	2
CO 3	3	3	2	1	•	•	•	-	-	-	-	-	2	2
CO 4	3	3	2	1	-	•	-	-	-	-	-	-	2	3
CO 5	3	3	2	1	-	-	-	-	-	-	-	-	2	2

LIST OF EXPERIMENTS:

- 1. Create a web page with the following using HTML
- a. To embed a map in a web page
- b. To fix the hot spots in that map
- c. Show all the related information when the hot spots are clicked.
- 2. Create a web page with the following.
- a. Cascading style sheets.
- b. Embedded style sheets.
- c. Inline style sheets. Use our college information for the web pages.
- 3. Validate the Registration, user login, user profile and payment by credit card pages using JavaScript.
- 4. Write programs in Java using Servlets:
- i. To invoke servlets from HTML forms
- ii. Session tracking using hidden form fields and Session tracking for a hit count.
- 5. Write programs in Java to create three-tier applications using servlets for conducting online examination for displaying student mark list. Assume that student information is available in a database which has been stored in a database server.
- 6. Install TOMCAT web server. Convert the static web pages of programs into dynamic web pages using servlets (or JSP) and cookies. Hint: Users information (user id, password, credit card number) would be stored in web.xml. Each user should have a separate Shopping Cart.
- 7. 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.
- 8. 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.
- 9. i. Validate the form using PHP regular expression.
 - ii. PHP stores a form data into database.
- 10. Write a web service for finding what people think by asking 500 people's opinion for any consumer product.

TOTAL: 60PERIODS

SOFTWARE REQUIRED:

• Dream Weaver or Equivalent, MySQL or Equivalent, Apache Server, WAMP/XAMPP.

Ex. No: 1	CREATING A WEBPAGE USING HTML
DATE:	

To Create a web page with the following using HTML

- i) To embed an image map in a web page
- ii) To fix the hot spots
- iii) Show all the related information when the hot spots are clicked.

ALGORITHM:

Step1 : Open a notepad.

Step 2: Write the code for imagemap.html.

Step 3: Enter a program that includes tags for <MAP> and other tags.

Step 4: Insert Hyperlink using <A href>. Step5: Save the file with .html extension. Step6: Run the program in a web browser

Step7: Display Results.

Home.html

Districts<i> - 32</i>

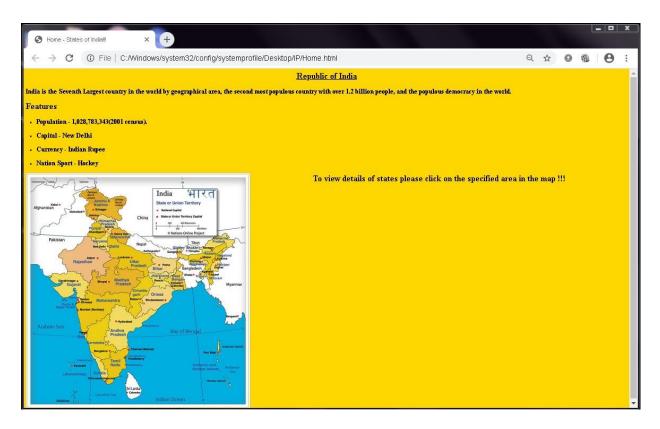
```
<html>
<head>
<title>Home - States of India!!!</title>
</head>
<body bgcolor="gold">
<h1><u><center>Republic of India</center></u></h1>
 < h2 >
India is the Seventh Largest country in the world by geographical area,
the second most populous country with over 1.2 billion people, and the populous democracy
in the world.</h2>
<h1> Features</h1>
<111>
<b><h2>Population</b> - 1,028,783,343(2001 census).</h2>
<b><h2>Capital</b> - New Delhi</h2>
<b><h2>Currency</b> - Indian Rupee</h2>
<b><h2>Nation Sport</b> - Hockey</h2>
<center>
<img align="left" size="8" src="IndiaMap.jpg" usemap="#india"/>
<map name="india">
<area shape="circle" coords="348,600,20" href="ANDHRAPRADESH.html">
<area shape="circle" coords="289,760,10" href="KERALA.html">
<area shape="circle" coords="266,620,35" href="KARNATAKA.html">
<area shape="circle" coords="336,730,35" href="TAMILNADU.html">
</map>
</center>
<h1><center> <b>To view details of states please click on the specified area in the map
!!!</b></center>
</h1>
</body>
</html>
Tamilnadu.html
<html>
<head>
<title>Tanil Nadu - India</title></head>
<body bgcolor="palegreen">
<h1><center>Tamil Nadu</center></h1>
<h3>It is one of the 28 states of India. Its capital and largest city is Chennai. Tamil Nadu lies
in the southernmost part of the Indian Peninsula and is bordered by the States of puducherry,
Kerala, Karnataka, Andhra Pradesh.</h3>
< h3 >
ul>
```

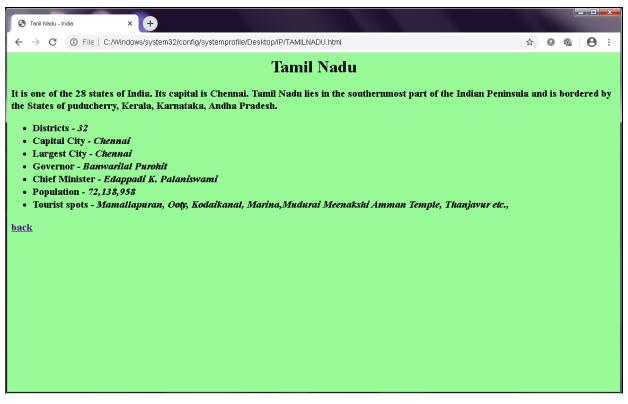
```
Capital City<i> - Chennai</i>
Largest City<i> - Chennai</i>
Governor<i> - Banwarilal Purohit</i>
Chief Minister<i> - Edappadi K. Palaniswami</i>
Population<i> - 72,138,958</i>
Tourist spots<i> - Mamallapuran, Ooty, Kodaikanal, Marina, Mudurai Meenakshi
Amman Temple, Thanjavur etc.,</i>
<a href="Home.html">back</a>
</h3>
</body>
</html>
Andhrapradesh.html
<html>
<head>
<title>Andhra Pradesh - India</title>
</head>
<body bgcolor="tan">
<h1><center>Andhra Pradesh</center></h1>
<h3>A.P, is a state situated on the southeastern coast of India. It is India's fourth largest state
by area and fifth largest by population.</h3>
< h3 >
<111>
Districts<i> - 23</i>
Capital City<i> - Hyderabad</i>
Largest City<i> - Hyderabad</i>
Governor<i> - Biswabhusan Harichandan </i>
Chief Minister<i> - Y. S. Jaganmohan Reddy </i></i>
Population<i> - 78,323,330</i></i>
Tourist spots<i> - Tirumala Tirupati, Charminar, Golconda Fort, Chandragiri,
Chowmahalla Place, Falaknuma Palace etc.,</i>
<a href="Home.html">back</a>
</h3>
</body>
</html>
Kerala.html
<html>
<head>
<title>Kerala - India</title>
</head>
<body bgcolor="indianred">
<h1><center>Kerala</center></h1>
< h3 >
<ul>
Districts<i> - 14</i>
Capital City<i> - Thiruvanandapuram</i>
```

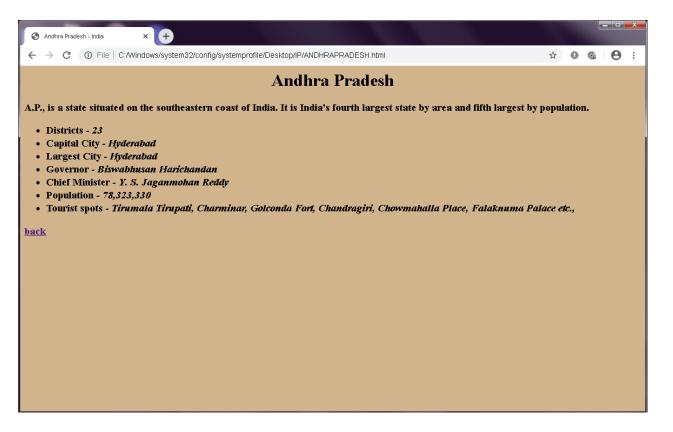
Karnataka.html

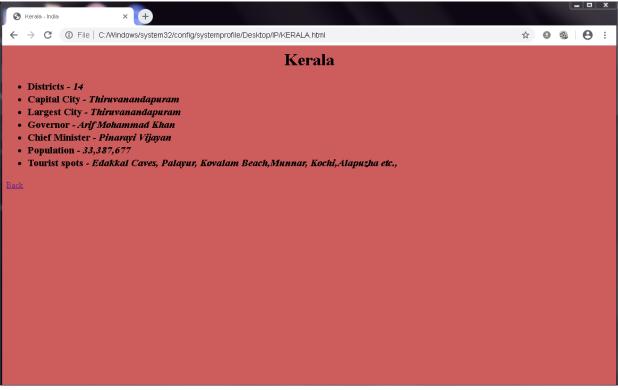
```
<html>
<head>
<title>Karnataka - India</title>
</head>
<body bgcolor="wheat">
<h1><center>Karnataka</center></h1>
< h3 >
ul>
Districts<i> - 30</i>
Capital City<i> - Bangalore</i>
Largest City<i> - Bangalore</i>
Governor<i>- Vajubhai Vala</i>
Chief Minister<i> - B. S. Yediyurappa</i>
Population<i> - 61,130,704</i></i>
Tourist spots<i> - Gol Gumbaz, Mysore Palace, Keshava Temple etc.,</i>
</h3>
<a href="Home.html">back</a>
</body>
</html>
```

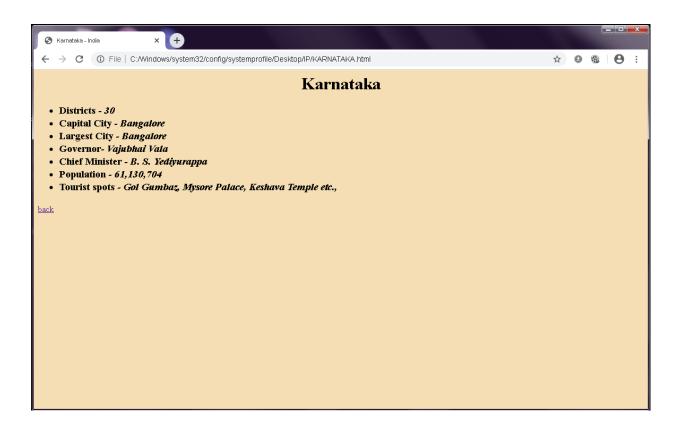
OUTPUT:













Ex. No: 2	CREATION OF WEB PAGE USING CASCADING STYLE SHEET
DATE:	

To create a web page that displays college information using various style sheet

ALGORITHM:

Inline CSS:

- Step 1: Create a HTML program with <style> tag.
- Step 2: Inside each html element specify the format required for that web page using<style> tag.
- Step3: Run the program with a web browser.

Internal CSS:

- Step 1: Create a HTML program with <style> tag.
- Step 2: Inside the <style> tag, specify the format required for that web page.
- Step3: Run the program with a web browser.

External CSS:

- Step 1: Open a notepad, type the needed CSS in it and save it with .css extension.
- Step2: Refer this .css file in the HTML using the tag <link>.
- Step3: Run the program with a web browser.

color:#C39; text-align:left;

font-size:20px;

color:#963;

color:#F03; margin-left:10px;

P{

h2{

img{

text-transform:capitalize; text-decoration:underline;

background-color:#FFF;

font-family: Verdana, Geneva, sans-serif;

```
Inline CSS.html
<a href="http://www.w3.org/1999/xhtml"><head>
 <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
 <title>Inline CSS</title>
 <link rel="stylesheet" href="style.css">
</head>
<body>
 <h1 style="color:blue;text-align:center;">Example for External CSS</h1>
   Vel Tech High Tech Dr.Rangarajan Dr.Sakunthala Engineering
College was established in the year 2002 under R.S.Trust, founded by the Philanthropic couple:
Col. Prof. Vel. Dr. R. Rangarajan, Founder President & Chairman and Dr. Sagunthala
Rangarajan, Foundress Vice-Chairman respectively. Under the governance of AICTE & Anna
University, this College has 11 branches of study with 8 UG Programmes and 3 PG
Programmes
 <h2 style="color:green;text-align:center;">Image Affected with styles</h2>
 <img src="college logo.png"><br><br>
 <a href="college_logo.png" target="_blank">Download Image</a>
</body>
</html>
Internal CSS.html
<a href="http://www.w3.org/1999/xhtml">
<head>
 <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
 <title>Internal CSS</title>
 <style>
   body{
   background-color:#9F6;
   }
   h1{
```

```
border:5px
                    double #903;
   width:400px;
   height:300px;
   margin-left:10px;
   }
   a{
   margin-left:10px;
   a:hover{
   color:#009;
   font-size:18px;
   font-weight:700;
 </style>
</head>
<body>
 <h1>Example for Internal CSS</h1>
  Vel Tech High Tech Dr.Rangarajan Dr.Sakunthala Engineering College was established
in the year 2002 under R.S.Trust, founded by the Philanthropic couple: Col. Prof. Vel. Dr. R.
Rangarajan, Founder President & Chairman and Dr. Sagunthala Rangarajan, Foundress Vice-
Chairman respectively. Under the governance of AICTE & Anna University, this College has
11 branches of study with 8 UG Programmes and 3 PG Programmes
 <h2>Image Affected with styles</h2>
 <img src="college_logo.png"><br><br>
 <a href="college_logo.png" target="_blank">Download Image</a>
</body>
</html>
Style.css
<style>
   body{
   background-color:#9F6;
   h1{
   color:#C39;
   text-align:left;
   text-transform:capitalize;
   text-decoration:underline;
   }
   P{
   font-size:20px;
   font-family: Verdana, Geneva, sans-serif;
   background-color:#FFF;
   color:#963;
```

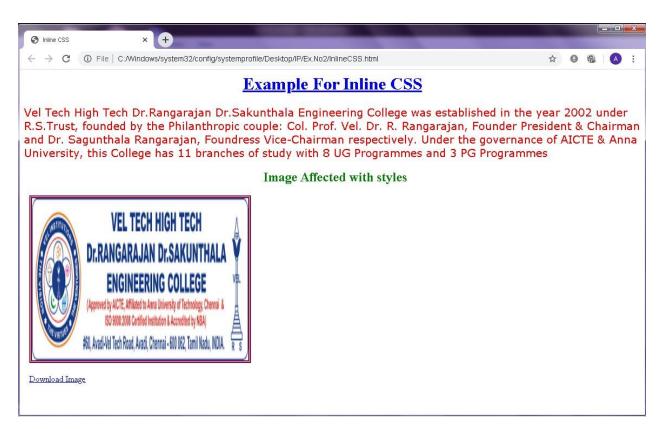
h2{

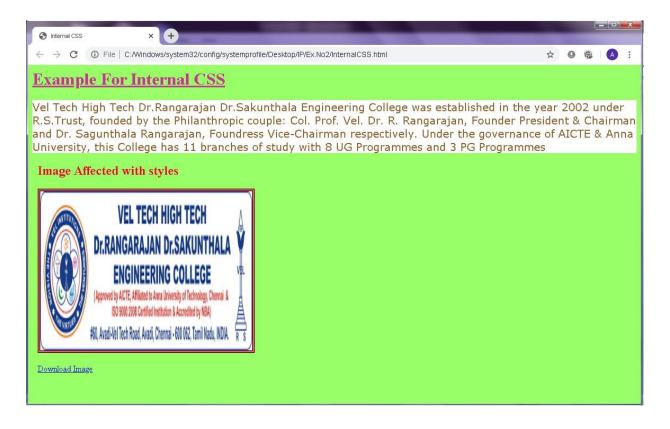
color:#F03; margin-left:10px;

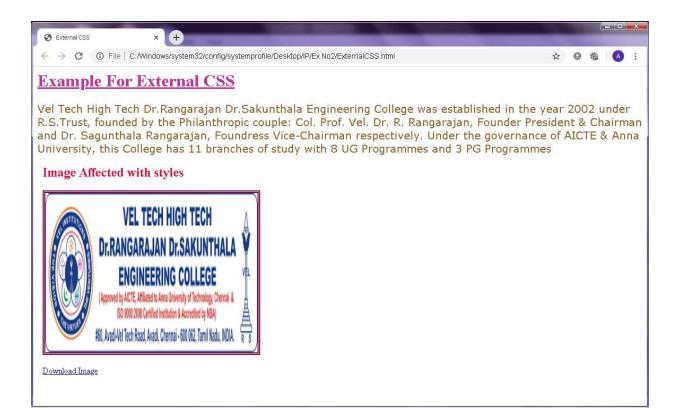
```
img{
   border:5px
                    double #903;
   width:400px;
   height:300px;
   margin-left:10px;
   a{
   margin-left:10px;
   a:hover{
   color:#009;
   font-size:18px;
   font-weight:700;
 </style>
External CSS.html
<a href="http://www.w3.org/1999/xhtml">
<head>
 <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
 <title>External CSS</title>
 <link rel="stylesheet" href="style.css">
</head>
<body>
 <h1>Example for External CSS</h1>
 Vel Tech High Tech Dr.Rangarajan Dr.Sakunthala Engineering College was established
in the year 2002 under R.S. Trust, founded by the Philanthropic couple – Col. Prof. Vel. Dr. R.
Rangarajan, Founder President & Chairman and Dr. Sagunthala Rangarajan, Foundress
Vice-Chairman respectively. Under the governance of AICTE & Anna University, this
College has 11 branches of study with 8 UG Programmes and 3 PG Programmes
 <h2>Image Affected with styles</h2>
 <img src="college_logo.png"><br /><br />
 <a href="college_logo.png" target="_blank">Download Image</a>
```

</body>

OUTPUT:









Ex.No:3	FORM VALIDATION USING JAVASCRIPT
DATE:	

To validate the registration, user login, user profile and payment by credit card pages using JavaScript.

ALGORITHM:

Login page

- Step1: Create Web page using HTML form that contains the fields such as Credit Card Number, amount and a validate button.
- Step2: Set the URL of the server as the value of form.(Set registration html as the link when user clicks registration)Redirect to profile.html if username and password is valid
- Step3: Run the HTML program.
- Step4: Submit the login data to the server.

Profile page

- Step1: Create Web page using HTML form that contains the Text fields such as User Name, Password, Login and Cancel buttons.
- Step2: Set the URL of the server as the value of form.
- Step3: Run the HTML program.
- Step4: Submit the data to the server
- Step5: Server validates the data and on successful validation it prints a message that payment done, otherwise prints data is invalid.

Form validation

- Step1: Create Web page using HTML from that contains the Text fields such as Name, Email, Pin code, a Name of the country Dropdown button and a submit buttons.
- Step3: Run the HTML program.
- Step4: On Submit the data gets Validated.

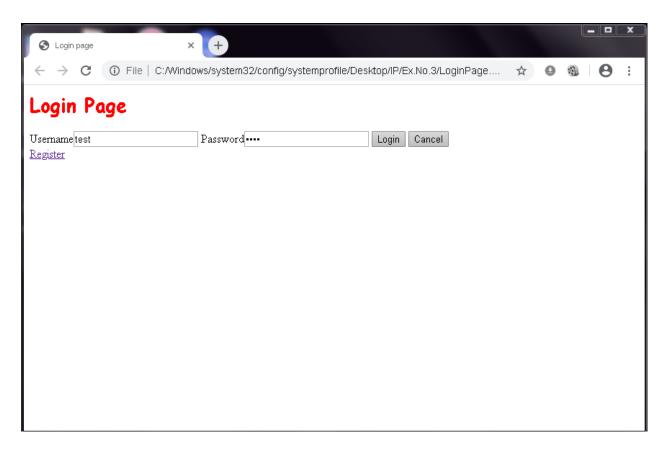
Login page.html

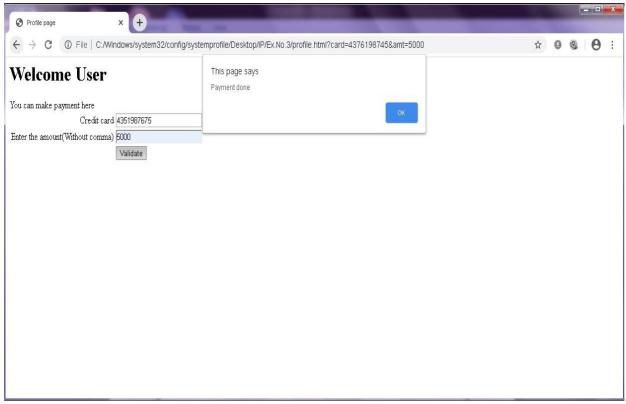
```
<html>
<head>
<title>Login page</title>
</head>
<body>
       style="font-family: Comic Sans Ms; font-size: 20pt; color: red;text-align="center";>
              Login Page</h1>
       <form name="login">
              Username<input type="text" name="userid" />
              Password<input type="password" name="pswrd" />
       <input type="button" onclick="check(this.form)" value="Login" />
       <input type="reset" value="Cancel" /> <br>
              <a href="RegForm.html">Register</a>
       </form>
       <script language="javascript">
              function check(form)/*function to check userid & password*/
              if (form.userid.value == "test" && form.pswrd.value == "pass")
                window.open('profile.html')
             else
              alert("Enter valid Username and Password")
       </script>
</body>
</html>
Profile.html
<html>
<head>
<script>
function validateCard(){
 var numdigits = document.myForm.card.value.length;
 if(numdigits < 9 || isNaN( document.myForm.card.value)){
 alert("Card number should be greater than 9");
 return false:
 if(document.myForm.amt.value!="" && (!isNaN( document.myForm.amt.value))){
 alert("Payment done");
 }else{
```

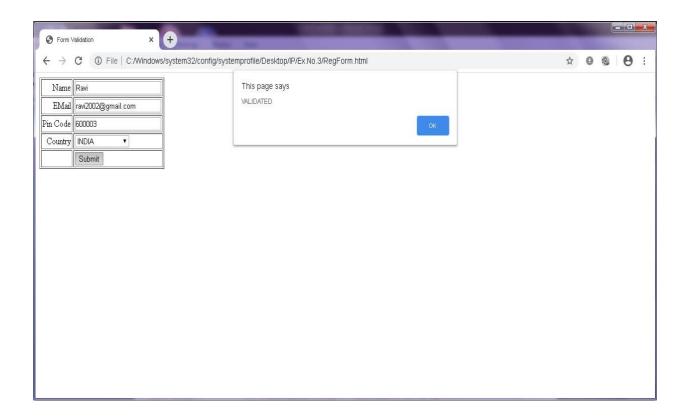
```
alert("Enter the amount");
 return false;
</script>
</head>
<title>Profile page</title>
<h1>Welcome User</h1>
You can make payment here
<form name="myForm" onsubmit="return(validateCard());">
      Credit card
                  <input type="text" name="card" />
            Enter the amount(Without comma)
                  <input type="text" name="amt" />
            <input type="submit" value="Validate" />
            </form>
RegForm.html
<html>
<head>
<title>Form Validation</title>
<script type="text/javascript">
    function validate(){
             if( document.myForm.Name.value == "")
      alert( "Please provide your name!" );
      document.myForm.Name.focus();
      return false;
    if( document.myForm.EMail.value == "" )
      alert( "Please provide your Email!" );
                  document.myForm.EMail.focus() ;return false;}
      else
       var uemail = document.myForm.EMail.value;
var mailformat = /^\w+([\.-]?\w+)*@\w+([\.-]?\w+)*(\.\w{2,3})+$/;
if(!uemail.match(mailformat))
alert("You have entered an invalid email address!");
```

```
document.myForm.EMail.focus();
     return false;
    }
           }
   if( document.myForm.Zip.value == "" || isNaN( document.myForm.Zip.value ) ||
     document.myForm.Zip.value.length > 6)
{
     alert( "Please provide a Pin Code lesser than 7 characters." );
     document.myForm.Zip.focus();
     return false;
   if( document.myForm.Country.value == "-1" ) {
     alert( "Please provide your country!" );
     return false;
    }
           alert("VALIDATED");
  </script>
</head>
<body>
     <form name="myForm" onsubmit="return(validate());">
          Name
                     <input type="text" name="Name" />
               EMail
                     <input type="text" name="EMail" />
               Pin Code
                     <input type="text" name="Zip" />
                Country
                     <select name="Country">
                     <option value="-1" selected>[choose yours]
                               <option value="1">USA</option>
                               <option value="2">UK</option>
                               <option value="3">INDIA</option>
                     </select>
                <input type="submit" value="Submit" />
                </form>
</body>
</html>
```

OUTPUT:









Ex.No:4(a)	INVOKING SERVLETS FROM HTML FORM
DATE:	

To write a java program to invoke servlets from HTML form.

ALGORITHM:

Client.html:

- Step1: Create a web page using HTML form that contains the fields such as label,text and one submit button.
- Step2: Set the URL of the server as the value of form's action attribute.
- Step3: Run the HTML program.
- Step4: Submit the form data to the server.

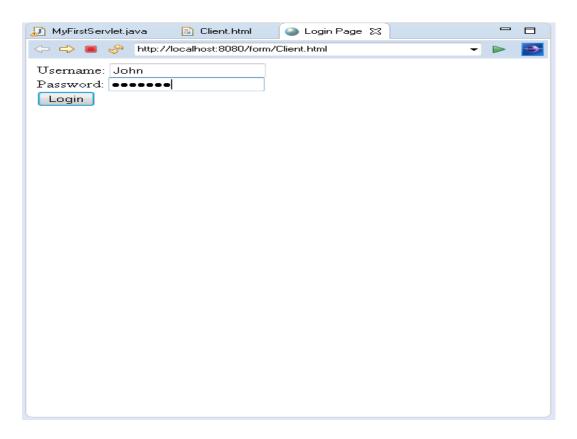
server.java:

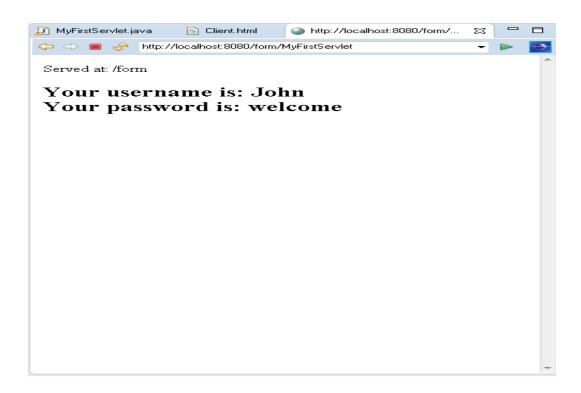
- Step1: Define the class server that extends the property of the class GenericServlet.
- Step2: Handle the request from the client by using the method service() of GenericServlet class.
- Step3: Get the parameter names from the HTML form by using the method getParameterNames().
- Step4: Get the parameter values from the HTML forms by using the method getParameter().
- Step5: Send the response to the client by using the method of PrintWriter class.

Client.html

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Login Page</title>
</head>
<body>
<form name="loginForm" method="post" action="MyFirstServlet">
  Username: <input type="text" name="username"/> <br/>
  Password: <input type="password" name="password"/> <br/>
  <input type="submit" value="Login" />
</form>
</body>
</html>
server.java:
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("/MyFirstServlet")
public class MyFirstServlet extends HttpServlet
       public MyFirstServlet()
  {
        super();
       System.out.println("Iam created");
   protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
    response.getWriter().append("Served at: ").append(request.getContextPath());
    String username = request.getParameter("username");
    String password = request.getParameter("password");
            System.out.println("username: " + username);
            System.out.println("password: " + password);
          PrintWriter writer = response.getWriter();
```

OUTPUT:







Ex.No:4 b.(i)	SESSION TRACKNG USING HIDDEN FORM FIELDS
DATE:	

To perform session tracking using hidden form fields.

ALGORITHM:

Step1: Create a html file which contains user information.

Step2: The first servlet will receive these values.

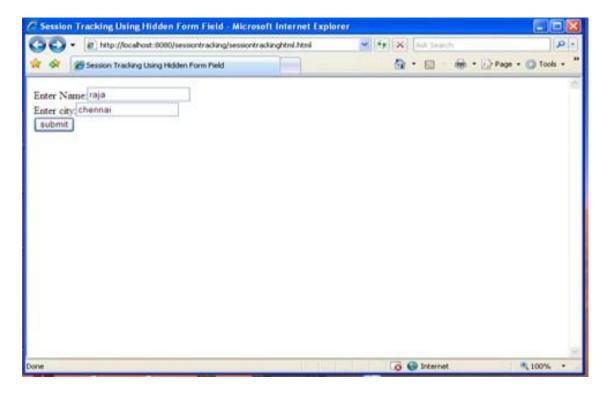
Step3: First servlet stores them in the hidden form fields.

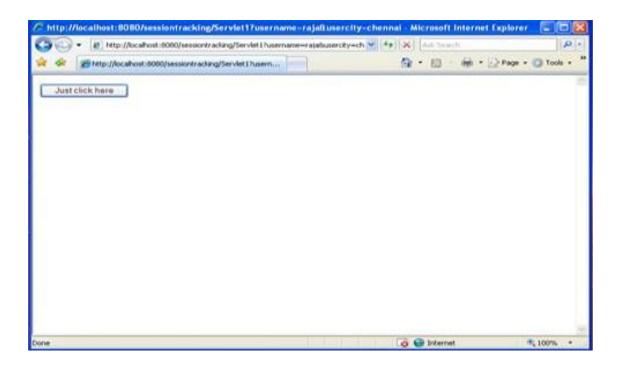
Step4: The second servlet will display the user information with greeting message.

Html Code:

```
<html>
<head>
<title>Session Tracking Using Hidden Form Field</title>
</head>
<body>
<form action="Servlet1">
Enter Name:<input type="text" name="username"/><br/>
Enter city:<input type="text" name="usercity"/><br/>
<input type="submit" value="submit"/>
</form>
</body>
</html>
Servlet1:
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class Servlet1 extends HttpServlet
 public void doGet(HttpServletRequest request,HttpServletResponse response)
  try
    response.setContentType("text/html");
    PrintWriter out = response.getWriter();
    String n=request.getParameter("username");
    String c=request.getParameter("usercity");
    out.print("<form action=\"Servlet2\">");
    out.print("<input type='hidden' name='uname' value="+n+"'>");
    out.print("<input type='submit' value='Just click here'>");
    out.print("</form>");
    out.close();
  catch(Exception e)
    System.out.println(e);
Servlet2:
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
```

```
public class Servlet2 extends HttpServlet
{
  public void doGet(HttpServletRequest request,HttpServletResponse response)
  {
    try
    {
      response.setContentType("text/html");
      PrintWriter out = response.getWriter();
      String n=request.getParameter("uname");
      out.println("Hello"+n);
      String c=request.getParameter("usercity");
      out.print("you are from"+c);
      out.close();
    }
    catch(Exception e)
    {
       System.out.println(e);
    }
}
```







Ex.No:4 b.(ii)	SESSION TRACKING A HIT COUNT
DATE:	

To write a Java Program for Session tracking a hit count. This servlet uses session tracking to count the number of times a client has accessed it.

ALGORITHM:

Step1: Servlet program to keep track of user visiting the page.

Step2: The count is incremented by one when user visits.

Step3: The output displays the greeting message.

Step4: The number of previous access is also displayed.

```
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;
import javax.servlet.http.HttpSession;
@WebServlet("/HCounterServlet")
public class HCounterServlet extends HttpServlet
       public HCounterServlet()
              super();
protected void doGet(HttpServletRequest request, HttpServletResponse response)
                     throws ServletException, IOException
{
       response.getWriter().append("Served at: ").append(request.getContextPath());
       HttpSession session = request.getSession(true);
              response.setContentType("text/html");
              PrintWriter out = response.getWriter();
              Integer count = new Integer(0);
              String head;
              if (session.isNew())
                     head = "Welcome New user. This is your first visit";
              }
              else
                  Integer oldcount = (Integer) session.getValue("count");
                 if (oldcount != null)
                 count = new Integer(oldcount.intValue() + 1);
                head = "This is your vist#:" +(count+1);
session.putValue("count", count);
out.println("<HTML><BODY BGCOLOR=\"#FDF5E6\">\n" + "<H2
ALIGN=\"CENTER">" + head + "</H2>\n</BODY></HTML>");
       protected void doPost(HttpServletRequest request, HttpServletResponse response)
                     throws ServletException, IOException
       doGet(request, response);
```

}







Ex.No:5	THREE-TIER APPLICATIONS USING SERVLETS
DATE:	

To write java servlet programs to conduct online examination and to display student mark list available in a database.

ALGORITHM:

Client:

- In index.html on the client side declare the contents that you like to transfer to the server using html form and input type tags.
- Create a submit button and close all the included tags.

Server:

- Import all necessary packages
- Define a class that extends servlet
- In the doPost() method, do the following:
 - i) Set the content type of the response to "text/html"
 - ii) Create a writer to the response
 - iii) Get a paratmeter from the request
 - iv) If its value is equal to right answer then add 5 to mark variable
 - v) Similarly repeat step for all parameters
 - vi) Create a new jsp to read the values from DB and send the result in an html format.

Student Mark List Database:

- Import necessary to java packages and javax packages and classes
- Create a class that extends HttpServlet and implements ServletException
- and IOException
- In the doGet() method, do the following:
 - i) Create a PrintWriter object
 - ii) Open a connection with the data source name
 - iii) Write a sql query and execute to get the resultset
 - iv) Display the resultset information in html form

index.html:

```
<html>
<head>
<title>Online Examination</title>
<script language="javascript">
     function validation(Form obj) {
           if (Form_obj.Seat_no.value.length == 0) {
                 alert("Please,fill up the Seat Number");
                 Form_obj.Seat_no.focus();
                 return false;
           if (Form_obj.Name.value.length == 0) {
                 alert("Please,fill up the Name");
                 Form_obj.Name.focus();
                 return false;
           }
           return true;
</script>
</head>
<body bgcolor=lightgreen>
     <center>Online Examination</center>
     <form action="OEValidator" method="post" name="entry"</pre>
           onSubmit="return validation(this)">
           <input type="hidden" value="list" name="action">
           <hr />
           Seat Number :
                       <input type="text" name="Seat_no">
                 Name :
                       <input type="text" name="Name" size="50">
                 <5=25 </b>
                       <hr/>
```

```
<bs/><b>1 . Earth is round</b><br/><br/><input type="radio" name="group1"
                      value="True">True <input type="radio" name="group1"
                      value="False">False<br/>obr> <br/> <b>2. Satelites revolve in
space.</b><br/><input type="radio" name="group2"
                     value="True">True <input type="radio" name="group2"
                      value="False">False<br/>br> <br/>br/> <b>3. You can go to moon via space
shuttle</b><br/><br/><input type="radio" name="group3"
                     value="True">True <input type="radio" name="group3"
                      value="False">False<br/>
<br/>
<br/>
<br/>
dThere is zero gravity in
space.</b><br/><input type="radio" name="group4" value="True">True
              <input type="radio" name="group4" value="False">False<br>
              <br/><br/>b>5. Kapana Chawla is first indian woman to go to space</b><br/>
              <input type="radio" name="group5" value="True">True <input</pre>
                      type="radio" name="group5" value="False">False<br>
              <hr/>
              <center>
                      <input type="submit" value="Submit"> <input type="reset"</pre>
                             value="Clear"><br>
                      <br>
              </center>
       </form>
SERVLET Code:
import java.io.IOException;
import java.sql.*;
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("/OEValidator")
public class OEValidator extends HttpServlet {
    private static final long serialVersionUID = 1L;
       public OEValidator() {
              super();
              // TODO Auto-generated constructor stub
       protected void doGet(HttpServletRequest request, HttpServletResponse response)
                     throws ServletException, IOException {
              // TODO Auto-generated method stub
              try {
                     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("net.ucanaccess.jdbc.UcanaccessDriver");
```

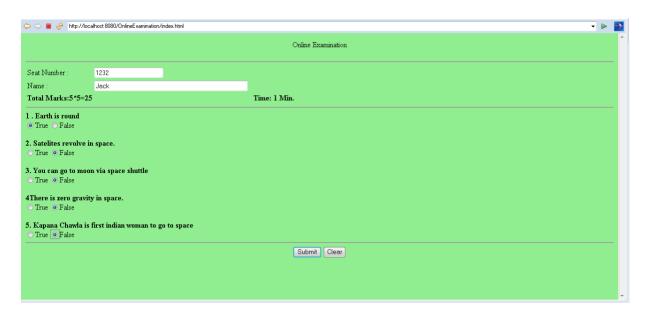
```
String filename = "E:/OELabExercise/OEDB.accdb";
                      String database = "jdbc:ucanaccess://" + filename;
                      connect = DriverManager.getConnection(database, "", "");
                     if (request.getParameter("action") != null) {
                             SeatNum = request.getParameter("Seat no");
                             Name = request.getParameter("Name");
                             ans1 = request.getParameter("group1");
                             if (ans1.equals("True"))
                                     a1 = 5;
                             else
                                     a1 = 0;
                             ans2 = request.getParameter("group2");
                             if (ans2.equals("True"))
                                     a2 = 0;
                             else
                                     a2 = 5;
                             ans3 = request.getParameter("group3");
                             if (ans3.equals("True"))
                                    a3 = 0;
                             else
                                    a3 = 5;
                             ans4 = request.getParameter("group4");
                             if (ans4.equals("True"))
                                     a4 = 5;
                             else
                                     a4 = 0;
                             ans5 = request.getParameter("group5");
                             if (ans5.equals("True"))
                                     a5 = 0;
                             else
                                     a5 = 5;
                             int Total = a1 + a2 + a3 + a4 + a5;
                             stmt = connect.createStatement();
String query = "INSERT INTO StudentTable (" + "Seat_no,Name,Marks" + ") VALUES ("" +
SeatNum + "', "' + Name + "', "' + Total + "')";
                             System.out.println("QUERY " + query);
                             int result = stmt.executeUpdate(query);
                             stmt.close();
               } catch (Exception e) {
                     e.printStackTrace();
               }
       protected void doPost(HttpServletRequest request, HttpServletResponse response)
                      throws ServletException, IOException {
              // TODO Auto-generated method stub
              doGet(request, response);
       }
}
```

JSP Code:

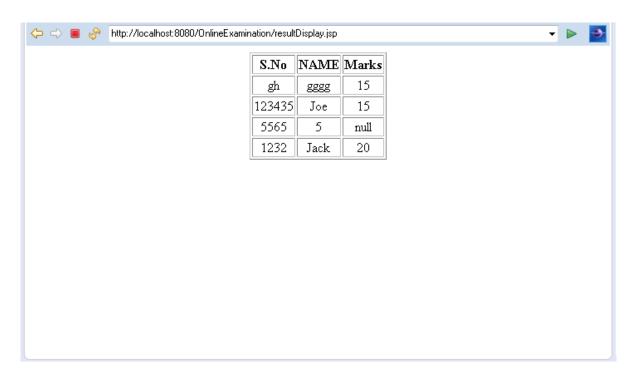
```
<%@page import="java.sql.DriverManager"%>
<%@page import="java.sql.Connection"%>
<%@page import="java.sql.ResultSet"%>
<%@page import="java.sql.Statement"%>
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"</p>
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<%
try {
Statement statement;
ResultSet resultSet = null;
Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
String filename = "E:/OELabExercise/OEDB.accdb";
String database = "jdbc:ucanaccess://" + filename;
Connection con = DriverManager.getConnection(database, "", "");
statement = con.createStatement();
resultSet = statement.executeQuery("SELECT * FROM STUDENTTABLE");
%>
<thead>
>
<th>>S.No</th>
NAME
Marks
</thead>
<%
while (resultSet.next()) {
%>
<%=resultSet.getString(1)%>
<%=resultSet.getString(2)%>
<%=resultSet.getString(3)%>
<%
```

```
%>

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



JSP





Ex.No:6	INSTALLING TOMCAT AND CONVERTING STATIC WEB PAGES
DATE:	TO DYNAMIC WEB PAGES

To install tomcat and convert the static web pages into dynamic web pages using servlets (or JSP) and cookies.

ALGORITHM:

- **Step1:** We will create a html form for entering the user name, password and card ID.
- **Step2:** From the above HTML form, the servlet program is invoked in which the validity of the user name, password and card id is checked.if it is a valid user then the welcome message will be displayed otherwise the "invalid user" message will be displayed. In this servlet we set the cookies in which the current user name is stored.
- **Step3:** Compile the above servlet Login servlet.java We must store the user information such as user name,password and card id in the init-param using initParams argument of the @webServlet annotation.
- **Step4:** On successful login, the information from the cookie is checked and shopping cart page for corresponding user can be displayed.
- Step5: Compile the above servlet LoginSuccess.java
- **Step6:** Start tomcat web server. Open the web browser and display the login form created in step1.

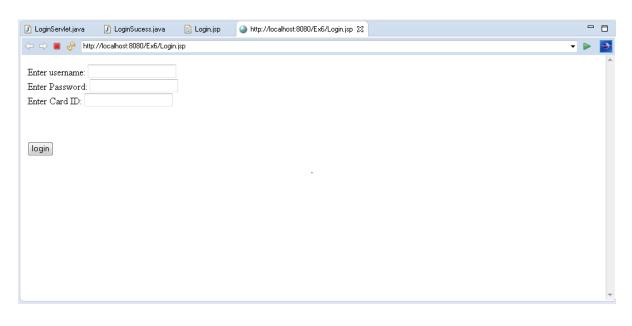
public LoginServlet() {

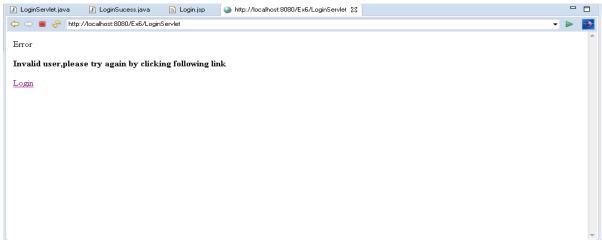
```
Login.jsp:
<html>
<head>
<body>
<form action="LoginServlet" method="post">
       Enter Username:
<input type="text" name="user">
<br>
       Enter Password:
<input type="password" name="password">
<br>
       Enter Card ID:
<input type="text" name="cardID">
<br>>
<br><br><br>>
<input type="submit" value="login">
</form>
</body>
LoginServlet.java:
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebInitParam;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet(
              urlPatterns = { "/LoginServlet" },
              initParams = {
              @WebInitParam(name = "usernames", value = "user1,user2,user3"),
              @WebInitParam(name = "passwords", value = "pwd1,pwd2,pwd3"),
              @WebInitParam(name = "cardIDs", value = "111,222,333")
              })
public class LoginServlet extends HttpServlet {
       private static final long serialVersionUID = 1L;
```

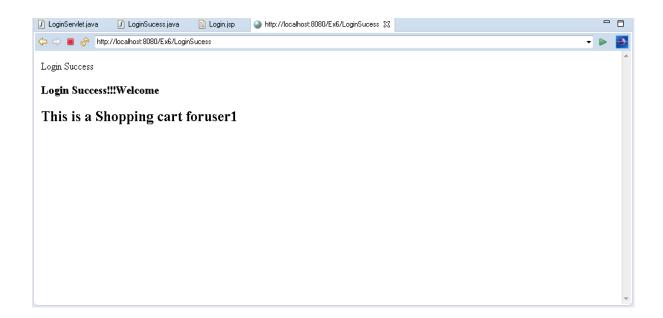
```
super();
    // TODO Auto-generated constructor stub
protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    PrintWriter out = response.getWriter();
    try {
String usr=request.getParameter("user");
       String pwd=request.getParameter("password");
       String card=request.getParameter("cardID");
       boolean flag=true;
       String[] userID=getInitParameter("usernames").split(",");
       String[] password=getInitParameter("passwords").split(",");
       String[] cardids=getInitParameter("cardIDs").split(",");
       int i;
       for(i=0;i<userID.length;i++)</pre>
         if (userID[i]. equals (usr) \& password[i]. equals (pwd) \& \& cardids[i]. equals (card))
            flag=false;
            Cookie MyCookie=new Cookie("CurrentUser", usr);
            MyCookie.setMaxAge(60*60);
            response.addCookie(MyCookie);
            response.sendRedirect("LoginSucess");
       }
              if(flag==true)
         out.print("Error");
         out.println("<h4>Invalid user,please try again by clicking following link</h4>");
         out.print("<a href='Login.jsp'>Login</a>");
       }
     }
finally {
       out.close();
     }
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
              // TODO Auto-generated method stub
              doGet(request, response);
       }
}
```

LoginSucess.java:

```
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet("/LoginSucess")
public class LoginSucess extends HttpServlet {
       private static final long serialVersionUID = 1L;
  public LoginSucess() {
    super();
    // TODO Auto-generated constructor stub
protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
               Cookie[] my_cookies=request.getCookies();
               response.setContentType("text/html");
               PrintWriter out=response.getWriter();
               out.print("Login Success");
               out.println("<b>");
               String userName=null;
               if(my_cookies!=null)
                 for(Cookie cookie:my cookies)
                  {
                    if(cookie.getName().equals("currentUser"))
                      userName=cookie.getValue();
                  }
               out.print("<h3>Login Success!!!Welcome</h3>");
               out.print("<h2>This is a Shopping cart for"+userName+"</h2>");
               out.close();
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
              // TODO Auto-generated method stub
              doGet(request, response);
       }
}
```







RESULT: Thus the tomcat installation and conversion of the static web pages intodynamic web pages using servlets cookies has been executed successfully.

Ex.No:7	CONVERTING STATIC WEB PAGES TO DYNAMIC WEB
DATE:	PAGES(USER INFORMATION AND BOOKS
DATE.	INFORMATION)

To convert the static web pages (user information and books information) into dynamic web pages using JSP.

ALGORITHM:

- **Step 1:** Create your own directory under tomcat/webapps (e.g. tr1)
- Step 2: Copy the html files in tr1
- **Step 3:** Copy the jsp files also into tr1
- Step 4: Start tomcat give the following commandCatalina.bat runAt install-dir/bin
- **Step 5:** At I.E give url as http://localhost:8081/tr1/main.html

Main.html:

```
<html>
<body bgcolor="pink">
<h2 align="center"><PRE>
<br/>b> Welcome to online book storage.
   Press LOGIN if you are having id
     Otherwise press REGISTRATION
</b></PRE></h2>
<br><br>
<div align="center"><a href="/tr/login.html">LOGIN</a>
href="/tr/login.html">REGISTRATION</a></div>
</body>
</html>
Login.html:
```

```
<html>
<body bgcolor="pink"><br><br><br>
<form name="myform" method="post" action=/tr1/login.jsp">
<div align="center">
   LOGIN ID : <input type="passwors" name="pwd"><br>
   PASSWORD: <input type="password" name="pwd"><br>
</div>
<br>><br>>
<div align="center">
```

```
<inputtype="submit"value="ok"
onClick="validate()">    <a href="reset" reset"
value="clear">
</form>
</body>
</html>
Reg.html:
<html>
<body bgcolor="pink"><br><br>
<form name="myform" method="post" action="/tr1/reg.jsp">
<div align="center">
    NAME
               :<input type="text" name="name"><br>
ADDRESS :<input type="text" name="addr"><br>
    CONTACT NUMBER :<input type="text" name="phno"><br>
               : <input type="text" name="id"><br>
    LOGIN ID
    PASSWORD: <input type="password" name="pwd"><br>
</div>
<br>><br>>
<div align="center">
<inputtype="submit"value="ok"</pre>
onClick="validate()">()">     <ahbevolute{input type="reset"}
value="clear">
</form>
</body>
</html>
Profile.html:
<html>
<body bgcolor="pink"><br><br>
<form name="myform" method="post" action="/tr1/profile.jsp">
<div align="center">
               : <input type="text" name="id"><br>
    LOGIN ID
<br><br>>
</div>
<br>><br>>
<div align="center">
<inputtype="submit"value="ok"</pre>
onClick="validate()">()">     <ahbevolute{input type="reset"}
value="clear">
</form>
</body>
</html>
Catalog.html:
<html>
<body bgcolor="pink"><br><br><br>
<form method="post" action="/tr1/catalog.jsp">
```

```
<div align="center">
     BOOK TITLE : <input type="text" name="title"><br>
<br><br>
</div>
<br>><br>>
<div align="center">
<inputtype="submit"value="ok"</pre>
name="button1">     </a>;<a href="inputtype="reset"value="clear"
name="button2">
</form>
</body>
</html>
Order.html:
<html>
<body bgcolor="pink"><br><br><br>
<form method="post" action="/tr1/order.jsp">
<div align="center">
    LOGIN ID
                   :<input type="text" name="id"><br>
    PASSWORD : <input type="password" name="pwd"><br>
                   :<input type="text" name="title"><br>
    NO. OF BOOKS :<input type="text" name="no"><br>
                  : <input type="text" name="date"><br>
    CREDIT CARD NUMBER: <input type="password"
name="cno"><br><br>>
</div>
<br>><br>>
<div align="center">
<input type="submit" value="ok"
name="button1">    <a href="reset" reset"
value="clear" name="button2">
</form>
</body>
</html>
Login.jsp:
   %@page import="java.sql.*"%
   %@page import="java.io.*"%
<%
out.println("<html><body bgcolor=\"pink\">");
     String id=request.getParameter("id");
     String pwd=request.getParameter("pwd");
     Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.registerDriver(d);
     Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger");
     Statement stmt=con.createStatement();
```

```
String sqlstmt="select id,password from login where id="+id+" and
password="+pwd+"";
ResultSetrs=stmt.executeQuery(sqlstmt);
int flag=0;
while(rs.next())
flag=1;
if(flag==0)
out.println("SORRY INVALID ID TRY AGAIN ID<br/>br>");
out.println(" <a href=\"/tr1/login.html\">press LOGIN to RETRY</a>");
else
{
out.println("VALID LOGIN ID<br>");
out.println("<h3>");
out.println("<ahref=\"profile.html\"><fontcolor=\"black\">USER
PROFILE</font></a><br>'');
out.println("<ahref=\"catalog.html\"><fontcolor=\"black\">BOOKS
CATALOG</font></a><br>'');
out.println("<ahref=\"order.html\"><fontcolor=\"black\">ORDER
CONFIRMATION</font></a><br>");
out.println("");
out.println("<body></html>");
    %>
Reg.jsp:
  %@page import="java.sql.*"%
  %@page import="java.io.*"%
out.println("<html><body bgcolor=\"pink\">");
  String name=request.getParameter("name");
  String addr=request.getParameter("addr");
  String phno=request.getParameter("phno");
  String id=request.getParameter("id");
  String pwd=request.getParameter("pwd");
int no=Integer.parseInt(phno);
  Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.registerDriver(d);
      Connection con=
DriverManager.getConnection ("jdbc:oracle:thin:@localhost:1521:orcl", "scott", "tiger");
    Statement stmt=con.createStatement();
    String sqlstmt="select id from login";
ResultSetrs=stmt.executeQuery(sqlstmt);
int flag=0;
while(rs.next())
if(id.equals(rs.getString(1)))
```

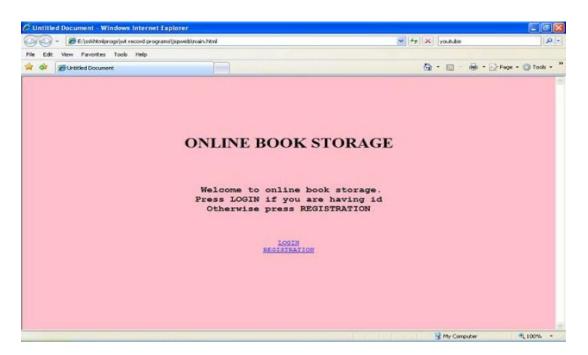
```
flag=1;
if(flag==1)
out.println("SORRY LOGIN ID ALREADY EXISTS TRY AGAIN WITH NEW ID
<br>");
out.println("<a href=\"/tr1/reg.html\">press REGISTER to RETRY</a>");
}
else{
  Statement stmt1=con.createStatement ();
  stmt1.executeUpdate ("insert into login values
("+name+","+addr+","+no+","+id+","+pwd+")");
out.println ("YOU DETAILS ARE ENTERED <br/>br>");
out.println ("<a href =\"/tr1/login.html\">press LOGIN to login</a>");
out.println ("</body></html>");
%>
Profile.jsp:
<%@page import="java.sql.*"%>
<%@page import="java.io.*"%>
out.println ("<html><body bgcolor=\"pink\">");
       String id=request.getParameter("id");
       Driver d=new oracle.idbc.driver.OracleDriver();
DriverManager.regiserDriver(d);
Connection con=
DriverManager.getConnection ("jdbc:oracle:thin:@localhost:1521:orcl", "scott", "tiger");
    Statement stmt=con.createStatement ();
    String sqlstmt="select * from login where id="+id+"";
ResultSetrs=stmt.executeQuery (sqlstmt);
int flag=0;
while(rs.next())
out.println ("<div align=\"center\">");
out.println ("NAME
                       :"+rs.getString(1)+"<br>");
out.println ("ADDRESS:"+rs.getString(2)+"<br/>");
out.println ("PHONE NO:"+rs.getString(3)+"<br/>');
out.println ("</div>");
flag=1;
if(flag==0)
out.println("SORRY INVALID ID TRY AGAIN ID <br/> ');
out.println("<a href=\"/tr1/profile.html\">press HERE to RETRY </a>");
out.println ("</body></html>");
```

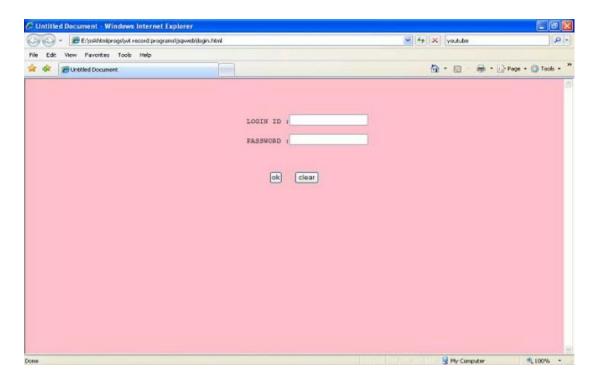
Catalog.jsp:

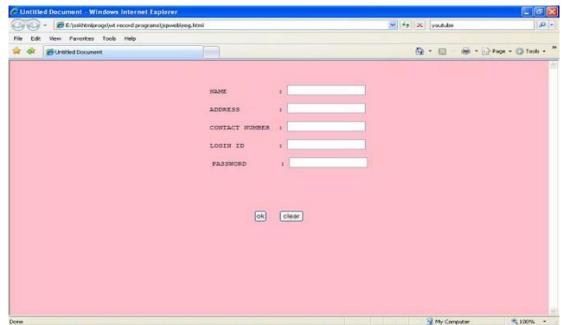
```
<%@page import="java.sql.*"%>
<%@page import="java.io.*"%>
<%
out.println ("<html><body bgcolor=\"pink\">");
       String title=request.getParameter ("title");
       Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.regiserDriver (d);
Connection con=DriverManager.getConnection
("jdbc:oracle:thin:@localhost:1521:orcl", "scott", "tiger");
    Statement stmt=con.createStatement ():
    String sqlstmt="select * from book where title="+title+"";
ResultSetrs=stmt.executeQuery (sqlstmt);
int flag=0;
while(rs.next())
out.println ("<div align=\"center\">");
out.println ("TITLE
                       :"+rs.getString(1)+"<br>");
out.println ("AUTHOR:"+rs.getString(2)+"<br/>');
out.println ("VERSION:"+rs.getString(3)+"<br/>');
out.println ("PUBLISHER:" +rs.getString(4)+" <br/>');
out.println ("COST:" +rs.getString(5)+"<br/>');
out.println ("</div>");
flag=1;
if(flag==0)
out.println("SORRY INVALID ID TRY AGAIN ID <br/> ');
out.println("<a href=\"/tr1/catalog.html\">press HERE to RETRY </a>");
out.println ("</body></html>");
%>
Order.jsp:
<%@page import="java.sql.*"%>
<%@page import="java.io.*"%>
<%
out.println ("<html><body bgcolor=\"pink\">");
       String id=request.getParameter ("id");
       String pwd=request.getParameter ("pwd");
       String title=request.getParameter ("title");
       String count1=request.getParameter ("no");
       String date=request.getParameter ("date");
       String cno=request.getParameter ("cno");
int count=Integer.parseInt(count1);
       Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.regiserDriver (d);
```

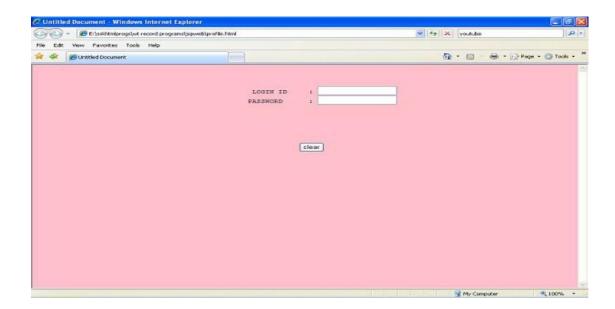
```
Connection con=
DriverManager.getConnection ("jdbc:oracle:thin:@localhost:1521:orcl", "scott", "tiger");
    Statement stmt=con.createStatement ();
    String sqlstmt="select id, password from login";
ResultSetrs=stmt.executeQuery (sqlstmt);
int flag=0,amount,x;
while(rs.next())
if(id.equals(rs.getString(1))&&pwd.equals(rs.getString(2)))
     flag=1;
if(flag==0)
out.println("SORRY INVALID ID TRY AGAIN ID <br/> ');
out.println("<a href=\"/tr1/order.html\">press HERE to RETRY </a>");
}
else
     Statement stmt2=con.createStatement();
     String s="select cost from book where title="+title+";
ResultSet rs1=stmt2.executeQuery(s);
int flag1=0;
while(rs1.next())
  {
     flag1=1;
     x=Integer.parseInt(rs1.getString(1));
amount=count*x;
out.println("AMOUNT:"+amount+"<br><br><br>");
Statement stmt1=con.createStatement ();
stmtl.executeUpdate ("insert into details"+id+","+title+","+amount+","+date+","+cno+")");
out.println ("YOU ORDER HAS TAKEN<br>");
if(flag1==0)
out.println("SORRY INVALID BOOK TRY AGAIN <br/> ');
out.println("<a href=\"/tr1/order.html\">press HERE to RETRY </a>");
```

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

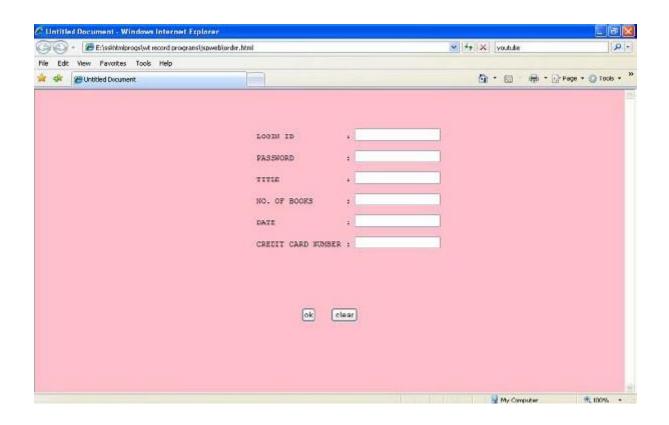












RESULT: Thus the conversion of the static web pages(user information and book information) into dynamic web pages using JSP has been executed successfully.

Ex.No:8	RETRIEVING USER INFORMATION FROM XML DOCUMENT
DATE:	

- i) To create and save an XML document at the server, which contain ten users information.
- ii) To write a program which takes user id as an input and returns the user details by taking the user information from the XML document.

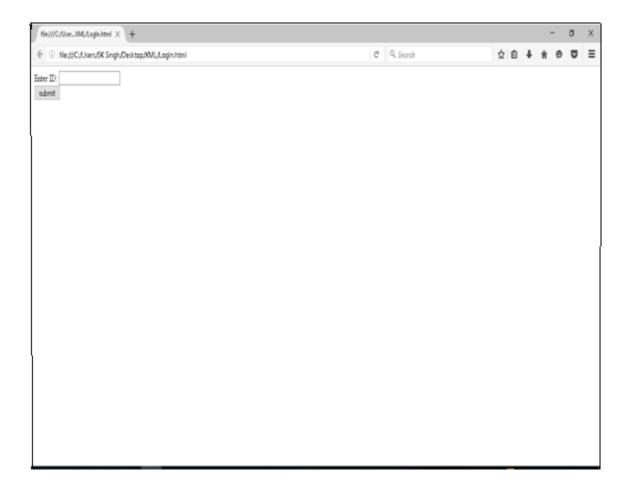
ALGORITM:

- **Step 1:** Save Students information in the XML file on the specific location.
- **Step 2:** Create and establish the connection between html file and XML file.
- **Step 3:** Get the user ID as input
- **Step 4:** Display the student's information.

StudentDetails.xml:

```
<?xml version="1.0" encoding="UTF-8"?>
<Student>
<PersonDetails>
 <id>101</id>
 <name>Anand</name>
 <city>Madurai</city>
 <Branch>CSE</Branch>
 <Year>I</Year>
</PersonDetails>
<PersonDetails>
 <id>102</id>
 <name>Anu</name>
 <city>Konam</city>
 <Branch>CSE</Branch>
 <Year>II</Year>
</PersonDetails>
<PersonDetails>
 <id>103</id>
 <name>Archana</name>
 <city>Madurai</city>
 <Branch>CSE</Branch>
 <Year>I</Year>
</PersonDetails>
<PersonDetails>
 <id>104</id>
 <name>Monica</name>
 <city>Nellai</city>
 <Branch>CSE</Branch>
 <Year>III</Year>
</PersonDetails>
</Student>
LogIn.html:
<!DOCTYPE html>
<html>
<head>
</head>
<body>
<script type="text/javascript">
function Display()
if(window.XMLHttpRequest)
  xmlhttp=new XMLHttpRequest();
```

```
xmlhttp.open("GET","UserInfo.xml",false);
xmlhttp.send();
xmlDoc=xmlhttp.responseXML;
var x=xmlDoc.getElementsByTagName("PersonDetails");
var key_id=document.getElementById("key").value;
for(i=0;i<x.length;i++)
 if(key_id.match(x[i].getElementsByTagName("id")[0].childNodes[0].nodeValue))
  j=i;
document.write("<h3>User Details are...</h3> <hr> Registeration ID=");
document.write(x[i].getElementsByTagName("id")[0].childNodes[0].nodeValue);
document.write("</br> Name=");
document.write(x[j].getElementsByTagName("name")[0].childNodes[0].nodeValue);
document.write("</br> City=");
document.write(x[j].getElementsByTagName("city")[0].childNodes[0].nodeValue);
document.write("</br> Branch=");
document.write(x[j].getElementsByTagName("Branch")[0].childNodes[0].nodeValue);
document.write("</br> Year=");
document.write(x[i].getElementsByTagName("Year")[0].childNodes[0].nodeValue);
document.write("</br> ");
}
</script>
<form name='myform'>
Enter ID:
<input type='text' id='key'/><br/>
<input type='button' value='submit' onclick='Display()'/>
</form>
</body>
</html>
```





RESULT:

Thus the Program takes user id as an input and returns the user details by taking the user information from the XML document has been executed successfully.

Ex.No:9	VALIDATING AND STORING A FORM DATA INTO
DATE:	DATABASE USINGPHP

To Validate and store a form data into database using PHP regular expression.

ALGORITHM:

- **Step 1:** Install XAMPP web server.
- **Step 2:** Write a program in a notepad and save it as filename.php.
- **Step 3:** After completion of the installation, we can use the XAMPP Control Panel to start/stop all servers.
- Step 4: Start Mysql and Apache servers.
- **Step 5:** Copy filename.php to htdocs (C:/Program Files/XAMPP/htdocs)
- **Step 6:** Now to run our code, open localhost/filename.php then it gets executed.

Validate.php

```
<!DOCTYPE HTML>
<html>
<head>
<style>
.error {color: #FF0000;}
</style>
</head>
<body>
<?php
// define variables and set to empty values
$nameErr = $emailErr = $genderErr = $websiteErr = "";
$name = $email = $gender = $comment = $website = "";
if ($_SERVER["REQUEST_METHOD"] == "POST")
 if (empty($_POST["name"]))
  $nameErr = "Name is required";
else
  $name = test input($ POST["name"]);
  // check if name only contains letters and whitespace
  if (!preg_match("/^[a-zA-Z]*$/",$name))
   $nameErr = "Only letters and white space allowed";
  }
 }
 if (empty($_POST["email"]))
  $emailErr = "Email is required";
else
  $email = test_input($_POST["email"]);
  // check if e-mail address is well-formed
  if (!filter_var($email, FILTER_VALIDATE_EMAIL))
{
   $emailErr = "Invalid email format";
  }
```

```
if (empty($_POST["website"]))
  $website = "";
else
  $website = test_input($_POST["website"]);
  // check if URL address syntax is valid
if (!preg_match("\b(?:(?:https?|ftp):\b/\www\.)[-a-z0-9+&@#\/%?=~_|!:,.;]*[-a-z0-9+&@#\/
%=~_|]/i",$website)) {
   $websiteErr = "Invalid URL";
  }
 }
 if (empty($_POST["comment"]))
  $comment = "";
 } else {
  $comment = test_input($_POST["comment"]);
 if (empty($_POST["gender"]))
  $genderErr = "Gender is required";
else
  $gender = test_input($_POST["gender"]);
function test_input($data)
 $data = trim($data);
 $data = stripslashes($data);
 $data = htmlspecialchars($data);
 return $data;
?>
<h2>PHP Form Validation </h2>
<span class="error">* required field</span>
<form method="post" action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]);?>"
 Name: <input type="text" name="name">
 <span class="error">* <?php echo $nameErr;?></span>
 <br>><br>>
 E-mail: <input type="text" name="email">
 <span class="error">* <?php echo $emailErr;?></span>
```

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

PHP Form Validation
* required field
Name:
E-mail: *
Website:
Comment:
Gender: C Female C Male C Other*
Submit

Your Input: sangamithra sangamithra@gmail.com www.google.com good female

Insert.php

```
<!DOCTYPE html>
<html>
<head>
<title>PHP insertion</title>
<link href="css/insert.css" rel="stylesheet">
</head>
<body>
<div class="maindiv">
<!--HTML Form -->
<div class="form div">
<div class="title">
<h2>Insert Data In Database Using PHP.</h2>
</div>
<form action="insert.php" method="post">
<!-- Method can be set as POST for hiding values in URL-->
<h2>Form</h2>
<label>Name:</label>
<input class="input" name="name" type="text" value="">
<label>Email:</label>
<input class="input" name="email" type="text" value="">
<label>Contact:</label>
<input class="input" name="contact" type="text" value="">
<label>Address:</label>
<textarea cols="25" name="address" rows="5"></textarea><br>
<input class="submit" name="submit" type="submit" value="Insert">
</form>
</div>
</div>
</body>
</html>
Conn.php
<?php
$connection = mysql connect("localhost", "root", "");
$db = mysql_select_db("colleges", $connection);
if(isset($_POST['submit']))
$name = $ POST['name'];
$email = $_POST['email'];
$contact = $_POST['contact'];
$address = $_POST['address'];
if($name !="||$email !=")
//Insert Query of SQL
$query = mysql_query("insert into students(student_name, student_email, student_contact,
student_address) values ('$name', '$email', '$contact', '$address')");
```

```
echo "<br/>><br/><span>Data Inserted successfully...!!</span>";
}
else
{
echo "Insertion Failed <br/> Some Fields are Blank. ..!!";
}
mysql_close($connection); // Closing Connection with Server
?>
```



Name:		
Email:		
Contact:		
Address:		
-		
	Insert	

RESULT:
Thus the form has been validated using PHP regular expression and also data has been stored into the database successfully.

Ex.No:10	A SURVEY USING WEB SERVICE FOR GETTING
DATE:	AFEEDBACK
	ON ANY CONSUMER PRODUCT

To create a survey using web service for getting a feedback on any consumer product.

ALGORITHM:

Step 1: Open the home page.

Step 2: Enter the login ID and type the comments then submit.

Step 3: Retrieve comments with post id

Step 4: Display the comments.

Index.php

```
<!doctype html>
<html lang="en">
<head>
      <meta charset="UTF-8"/>
      <title>jQuery Ajax Comment System - Demo</title>
      <link rel="stylesheet" href="css/style.css">
      <script
src="http://ajax.googleapis.com/ajax/libs/jquery/1.10.2/jquery.min.js"></script>
      <script src="js/script.js"></script>
</head>
<body>
       <div class="wrap">
             <h1> Maggy Noodles Comment System</h1>
      <?php
             // retrive post
             include('config.php');
             include ('function.php');
             dbConnect();
             $query = mysql_query(
                    'SELECT *
                    FROM post
                    WHERE post_id = 1');
             $row = mysql_fetch_array($query);
      ?>
             <div class="post">
                    <h2><?php echo $row['post_title']?></h2>
                    <?php echo $row['post_body']?>
             </div>
      <?php
             // retrive comments with post id
             $comment_query = mysql_query(
                    "SELECT *
                    FROM comment
                    WHERE post_id = {\$row['post_id']}
                    ORDER BY comment id DESC
                    LIMIT 15");
      ?>
             <h2>Comments.... </h2>
             <div class="comment-block">
             <?php while($comment = mysql_fetch_array($comment_query)): ?>
                    <div class="comment-item">
                           <div class="comment-avatar">
```

```
<img src="<?php echo avatar($comment['mail']) ?>"
alt="avatar">
                           </div>
                           <div class="comment-post">
                                  <h3><?php echo $comment['name'] ?>
<span>said...</span></h3>
                                  <?php echo $comment['comment']?>
                           </div>
                    </div>
             <?php endwhile?>
             </div>
             <h2>Submit new comment</h2>
             <!--comment form -->
             <form id="form" method="post">
                    <!-- need to supply post id with hidden fild -->
                    <input type="hidden" name="postid" value="<?php echo
$row['post_id']?>">
                    <label>
                           <span>Name *</span>
                           <input type="text" name="name" id="comment-name"</pre>
placeholder="Your name here. . " required>
                    </label>
                    <label>
                           <span>Email *</span>
                           <input type="email" name="mail" id="comment-mail"</pre>
placeholder="Your mail here..." required>
                    </label>
                    <label>
                           <span>Your comment *</span>
                           <textarea name="comment" id="comment" cols="30"
rows="10" placeholder="Type your comment here... " required></textarea>
                    </label>
                    <input type="submit" id="submit" value="Submit Comment">
             </form>
      </div>
</body>
</html>
Ajax_Comment.php
<?php
if (isset( $_SERVER['HTTP_X_REQUESTED_WITH'] )):
      include('config.php');
      include('function.php');
      dbConnect();
      if (!empty($_POST['name']) AND !empty($_POST['mail']) AND
!empty($_POST['comment']) AND !empty($_POST['postid'])) {
             $name = mysql_real_escape_string($_POST['name']);
             $mail = mysql_real_escape_string($_POST['mail']);
```

```
$comment = mysql_real_escape_string($_POST['comment']);
              $postId = mysql_real_escape_string($_POST['postid']);
              mysql_query("
                    INSERT INTO comment
                     (name, mail, comment, post_id)
                     VALUES('{\$name\}', '{\$mail\}', '{\$comment\}', '{\$postId\}')");
       }
?>
<div class="comment-item">
       <div class="comment-avatar">
              <img src="<?php echo avatar($mail) ?>" alt="avatar">
       </div>
       <div class="comment-post">
              <h3><?php echo $name ?> <span>said. ..</span></h3>
              <?php echo $comment?>
       </div>
</div>
<?php
      dbConnect(0);
endif?>
Config.php
<?php
# db configuration
define('DB_HOST', 'localhost');
define('DB_USER', 'root');
define('DB_PASS', 'root');
define('DB_NAME', 'dbname');
?>
Function.php
<?php
* Connect to mysql server
* @param bool
* @use true to connect false to close
function dbConnect($close=true)
{
      if (!$close)
      {
              mysql_close($link);
              return true;
       }
```

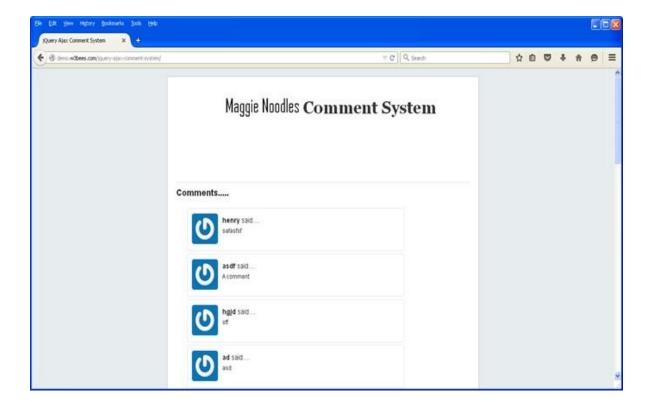
```
$link = mysql connect(DB HOST, DB USER, DB PASS) or die('Could not connect
to MySQL DB ') . mysql_error();
       if (!mysql_select_db(DB_NAME, $link))
return false;
}
/**
* gravatar Image
* @ see http://en.gravatar.com/site/implement/images/
function avatar(\$mail, \$size = 60){
       $url = "http://www.gravatar.com/avatar/";
       $url .= md5( strtolower( trim( $mail ) ) );
       // $url .= "?d=" . urlencode( $default );
       $url .= "&s=" . $size;
       return $url;
?>
label
{
       display: block;
       margin: 5px 0;
       font-weight: 900;
       cursor: pointer;
}
Style.CSS
/* general styling */
       margin: 0;
       padding: 0;
       box-sizing: border-box;
       -webkit-box-sizing: border-box;
       -moz-box-sizing: border-box;
       -webkit-font-smoothing: antialiased;
       -moz-font-smoothing: antialiased;
       -o-font-smoothing: antialiased;
       font-smoothing: antialiased;
       text-rendering: optimizeLegibility;
body{
       font: 12px Arial, Tahoma, Helvetica, FreeSans, sans-serif;
       text-transform: inherit;
       color: #333;
       background: #e7edee;
       width: 100%;
       text-shadow: 0 1px 1px rgba(0, 0, 0, 0.2)
}
.wrap{
```

```
width: 720px;
       margin: 15px auto;
       padding: 15px 20px;
       background: white;
       border: 2px solid #DBDBDB;
       -webkit-border-radius: 5px;
       -moz-border-radius: 5px;
       border-radius: 5px;
       overflow: hidden;
}
a{ text-decoration: none; color: #333}
h1{
       font-family: Georgia, "Times New Roman", Times, serif;
       font-size: 2.8em;
       text-align: center;
       margin: 25px 0;
h2{font-size: 1.5em; margin: 8px 0}
h3{
       font-size: 1.2em;
       margin: 5px 0;
h3 span{
       font-weight: normal;
       font-size: 1em;
.item{
       clear: both;
       margin:0;
       padding: 10px;
       overflow: hidden;
       border-top: 1px solid #DBDBDB;
}
.item:last-child{border-bottom:1px solid #DBDBDB}
.item:hover{background: #f9f9f9}
.post{
       padding: 10px 0;
       border-bottom: 1px solid #E6E6E6;
.comment-block{
       margin: 20px 0 20px 20px;
}
.comment-item{
       overflow: hidden;
       width: 500px;
       clear: both;
       padding: 10px;
       border: 1px solid #E6E6E6;
       border-radius: 5px;
       margin: 5px;
```

```
}
.comment-avatar{
       width: 60px;
       float: left;
.comment-avatar img{
       width: 60px;
       height: 60px;
       border-radius: 5px;
}
.comment-post{
       width: 400px;
       float: left;
       padding: 0 5px 0 10px;
#form{
       clear: both;
       margin: 10px;
       width: 500px;
}
/* form styling */
input[type="text"],
input[type="email"],
input[type="tel"],
input[type="url"],
textarea {
       width:100%;
       background: #fff;
       border: 1px solid #ddd;
       font-size: 13px;
       line-height: 20px;
       margin: 0;
       padding: 7px 10px;
       box-shadow: inset 0 1px 2px #eee;
       border:1px solid #CCC;
       margin:005px;
       border-radius:5px;
}
textarea {
       height:100px;
       max-width:100%;
input[type="submit"] {
       cursor:pointer;
       width:100%;
       border:none;
       background:#991D57;
       background-image:linear-gradient(bottom, #8C1C50 0%, #991D57 52%);
       background-image:-moz-linear-gradient(bottom, #8C1C50 0%, #991D57 52%);
```

```
background-image:-webkit-linear-gradient(bottom, #8C1C50 0%, #991D57 52%);
       color:#FFF;
       margin:005px;
       padding:10px;
       border-radius:5px;
input[type="submit"]:hover {
       background-image:linear-gradient(bottom, #9C215A 0%, #A82767 52%);
       background-image:-moz-linear-gradient(bottom, #9C215A 0%, #A82767 52%);
       background-image:-webkit-linear-gradient(bottom, #9C215A 0%, #A82767 52%);
       -webkit-transition:background 0.3s ease-in-out;
       -moz-transition:background 0.3s ease-in-out;
       transition:background-color 0.3s ease-in-out;
input[type="submit"]:active {
       box-shadow:inset 0 1px 3px rgba(0,0,0,0.5);
input:focus,
textarea:focus {
       outline:0:
       border:1px solid #999;
}
.alert{
       display: none;
       padding: 8px 35px 8px 14px;
       margin: 20px 0;
       text-shadow: 0 1px 0 rgba(255, 255, 255, 0.5);
       color: #468847;
       background-color: #dff0d8;
       border-color: #d6e9c6;
       -webkit-border-radius: 4px;
       -moz-border-radius: 4px;
       border-radius: 4px;
}
Script.js
$(document).ready(function(){
       var form = \$('form');
       var submit = $('#submit');
       form.on('submit', function(e) {
              // prevent default action
              e.preventDefault();
              // send ajax request
              $.ajax({
                     url: 'ajax_comment.php',
                     type: 'POST',
                     cache: false,
                     data: form.serialize(), //form serizlize data
```

```
beforeSend: function(){
                              // change submit button value text and disabled it
                              submit.val('Submitting...').attr('disabled', 'disabled');
                       },
                      success: function(data){
                              // Append with fadeIn see http://stackoverflow.com/a/978731
                              var item = $(data).hide().fadeIn(800);
                              $('.comment-block').append(item);
                              // reset form and button
                              form.trigger('reset');
                              submit.val('Submit Comment').removeAttr('disabled');
                       },
                      error: function(e){
                              alert(e);
                       }
               });
       });
});
```





Ex.No:11	CREATING A HTML5 VIDEO PLAYER AND GETTING
DATE:	FEEDBACK

To create a video list using HTML5 and get user Feedback.

ALGORITHM:

- Step 1 : Create html5 page and save it
- Step 2: Open html body tag and start video tag
- Step 3: Inside video tag add the videos source and mime tag
- Step 4: If video not supported display appropriate massage inside tag and close video tag
- Step 5 : Open textarea tag with needed rows and columns
- Step 6 : Create a submit button to get user feedback
- Step 7 : OnClick of submit call a JavaScript function to display an alert that feedback has been received and close the textarea tag
- Step 8 : Save the file and open in HTML5 enabled browser

video.html

```
<!DOCTYPE html>
<html>
<body>
<video id="playlist" controls="controls">
 <source src="C:\video1.mp4" type="video/mp4">
 <source src="c:\video2.mp4" type="video/ogg">
 Your browser does not support HTML5 video.
</video>
\langle BR \rangle
Your Feedback:
<textarea name="comments" rows="10" cols="80">
</textarea>
<input type="submit" value="Submit" onclick="subFed();">
<script type='text/javascript'>
  documentgetElementById('playlist').addEventListener('ended',myHandler,false);
  function myHandler(e)
    if(!e)
    e = window.event;
    alert("Video Finished");
       function subFed()
       alert("Feedback Submitted");
</script>
</body>
</html>
```





Ex.No:12	TO ENCODE AND DECODE A STRING USING JAVA
DATE:	

To Encode and Decode a string using java

ALGORITHM:

- Step 1: Create a java file and in the main method use a hard coded string to node
- Step 2 : Create an object for Base64 encoder
- Step 3: Get bytes of a string and pass it to Base64 object encoding method and string will be encoded
- Step 4 : To decode the string pas the encoded string to decode method of Base64 object and string will be decoded
- Step 5 : Close the main method

}

}

```
StringEncode.java
import java.nio.charset.StandardCharsets;
import java.util.Base64;
import java.util.Base64.Decoder;
import java.util.Base64.Encoder;
public class StringEncode
       public static void main(String[] args)
{
              String string = "VELTECH HIGHTECH";
              // Encoding
              Encoder encoder = Base64.getEncoder();
              byte[] data = string.getBytes(StandardCharsets.UTF_8);
              String encodedString = encoder.encodeToString(data);
              System.out.println("Given String to encode is " + string);
              System.out.println("Encoded: " + encodedString);
              // Decoding
              Decoder decoder = Base64.getDecoder();
              byte[] bytes = decoder.decode(encodedString);
              String decodedString = new String(bytes, StandardCharsets.UTF_8);
              System.out.println("Decoded: " + decodedString);
```



RESULT: Thus the string is encoded and decoded using java security was executed successfully.