Malla Reddy College Engineering (Autonomous)

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Department of Information Technology III B.

II B.TECH II SEM (A.Y.2018-19)

80603 Web Technologies Lab

2018-19 Onwards (MR-18)	MALLA REDDY ENGINEERING COLLEGE (Autonomous)	B.Tech. IV Semester		
Code: 80603	**WEB TECHNOLOGIES LAB** (Common for CSE and IT)	**L**	**T**	**P**
Credits: 2		**-**	**1**	**2**

Prerequisite: NIL

Course Objectives:
To enable the student to program web applications using the following technologies, AJAX, PHP, Tomcat Server, Servlets, JSP

Software Requirements: JDK, BDK and Tomcat Server

Note:

1. Use LAMP Stack (Linux, Apache, MySQL and PHP) for the Lab Experiments. Though not mandatory, encourage the use of Eclipse platform wherever applicable.
2. The list suggests the minimum program set. Hence, the concerned staff is requested to add more problems to the list as needed.

List of Programs:

1. Install the following on the local machine
Apache Web Server (if not installed)
Tomcat Application Server locally
Install MySQL (if not installed)
Install PHP and configure it to work with Apache web server and MySQL (if not already configured)

2. Write an HTML page including javascript that takes a given set of integer numbers and shows them after sorting in descending order.

3. Write an HTML page including any required Javascript that takes a number from one text field in the range of 0 to 999 and shows it in another text field in words. If the number is out of range, it should show “out of range” and if it is not a number, it should show “not a number” message in the result box.

4. Write an HTML page that has one input, which can take multi-line text and a submit button. Once the user clicks the submit button, it should show the number of characters, words and lines in the text entered using an alert message. Words are separated with white space and lines are separated with new line character.

5. Write an HTML page that contains a selection box with a list of 5 countries. When the user selects a country, its capital should be printed next to the list. Add CSS to customize the properties of the font of the capital (color, bold and font size).

6. Create an XML document that contains 10 users information. Write a Java program, which takes User Id as input and returns the user details by taking the user information from the XML document using (a) DOM Parser and (b) SAX parser.

Implement the following web applications using (a) PHP, (b) Servlets and (c) JSP:

7. A user validation web application, where the user submits the login name and password to the server. The name and password are checked against the data already available in Database and if the data matches, a successful login page is returned. Otherwise a failure message is shown to the user.

8. Modify the above program to use an xml file instead of database.

9. Modify the above program to use AJAX to show the result on the same page below the submit button.

10. A simple calculator web application that takes two numbers and an operator (+, -, /, * and%) from an HTML page and returns the result page with the operation performed on the operands.

11. Modify the above program such that it stores each query in a database and checks the database first for the result. If the query is already available in the DB, it returns the value that was previously computed (from DB) or it computes the result and returns it after storing the new query and result in DB.

12. A web application takes a name as input and on submit it shows a hello <name> pagewhere <name> is taken from the request. It shows the start time at the right top corner ofthe page and provides a logout button. On clicking this button, it should show a logoutpage with Thank You <name> message with the duration of usage (hint: Use session tostore name and time).

13. A web application that takes name and age from an HTML page. If the age is less than18, it should send a page with “Hello <name>, you are not authorized to visit this site”message, where <name> should be replaced with the entered name. Otherwise it shouldsend “Welcome <name> to this site” message.

14. A web application for implementation:

The user is first served a login page which takes user's name and password. Aftersubmitting the details the server checks these values against the data from a database andtakes the following decisions.

If name and password matches, serves a welcome page with user's full name.

If name matches and password doesn't match, then serves "password mismatch" page

If name is not found in the database, serves a registration page, where user's full name isasked and on submitting the full name, it stores, the login name, password and full namein the database (hint: use session for storing the submitted login name and password)

15. A web application that lists all cookies stored in the browser on clicking "List Cookies"button. Add cookies if necessary.

TEXT BOOKS

1. The Complete Reference PHP – Steven Holzner, Tata McGraw-Hill
2. Web Programming, building internet applications, Chris Bates 2nd edition, Wiley Dreamtech

REFERENCES

1. Java Server Pages –Hans Bergsten, SPD O'Reilly
2. Java Script, D.Flanagan, O'Reilly, SPD.
3. Internet and World Wide Web – How to program, Dietel and Nieto, Pearson.

Course Outcomes:

At the end of the course, students will be able to

1. **Demonstrate** use of LAMP Stack for web applications and Tomcat Server for Servlets and JSPs
2. **Design** simple applications with Technologies like HTML, Javascript, AJAX, PHP,
3. **Utilize** the concepts of Servlets and JSPsand implement dynamic websites and Connect to Database and get results
4. **Use**Parse XML files using Java (DOM and SAX parsers)

CO- PO Mapping (3/2/1 indicates strength of correlation) 3-Strong, 2-Medium, 1-Weak															
COs	**Programme Outcomes(POs)**												**PSOs**		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1			3		3	2		2		2		3	2	3	3
CO2			3		3	2		2		2		3	2	3	3
CO3			3		3	2		2		2		3	2	3	3
CO4			3		3	2		2		2		3	2	3	3

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR

B. Tech III - I sem (Common to CSE)	**L**	**T**	**C**
	3	**1**	**3**

(15A05502) COMPUTER NETWORKS

Program 1:

write a html program to display welcome message

first.html:

```
<html>
   <head>
      <title>my first html program</title>
   </head>
   <body>
      <center>
         <p>welcome to html programming </p>
      </center>
   </body>
</html>
```

Output:

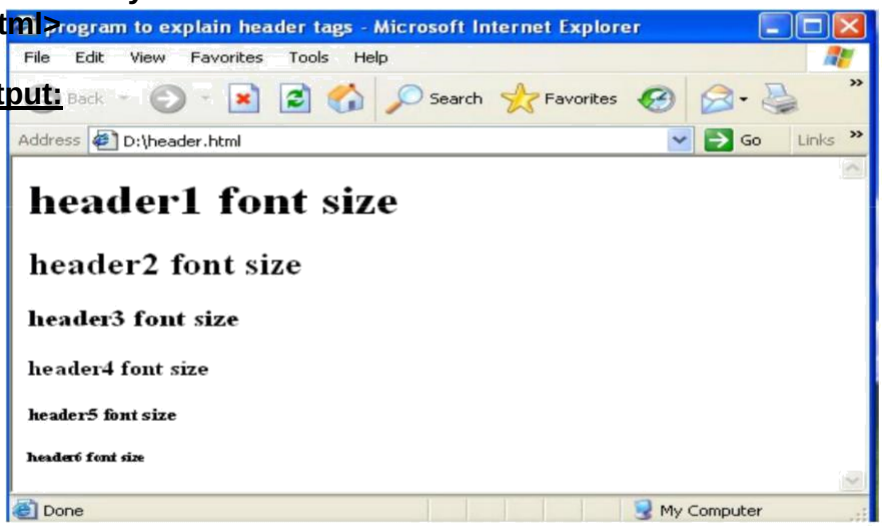
Program 2:

write a html program using header tags

header.html:

```
<html>
    <head>
        <title>program to explain header
    tags</title> </head>
    <body>
        <h1>header1 font size </h1>
        <h2>header2 font size </h2>
        <h3>header3 font size </h3>
        <h4>header4 font size </h4>
        <h5>header5 font size </h5>
        <h6>header6 font size </h6>
    </body>
</html>
```

Output:



Program 3:

write a html program to embed an image into web document

image.html:

```
<html>
    <head>
        <title>program TO embed image</title>
    </head>
```

```
        <body>
            <h3>Inserting sunset picture</h3>
            <img src="Sunset.jpg" width="200" height="200"
            alt="sunset picture"/>
        </body>
</html>
```

Output:

Program 4:

write a html program to create hyperlinks to other documents

first.html:

```
<html>
   <head>
      <title>my first html program</title>
   </head>
   <body>
      <center>
          <p>welcome to html programming </p>
      </center>
   </body>
</html>
```

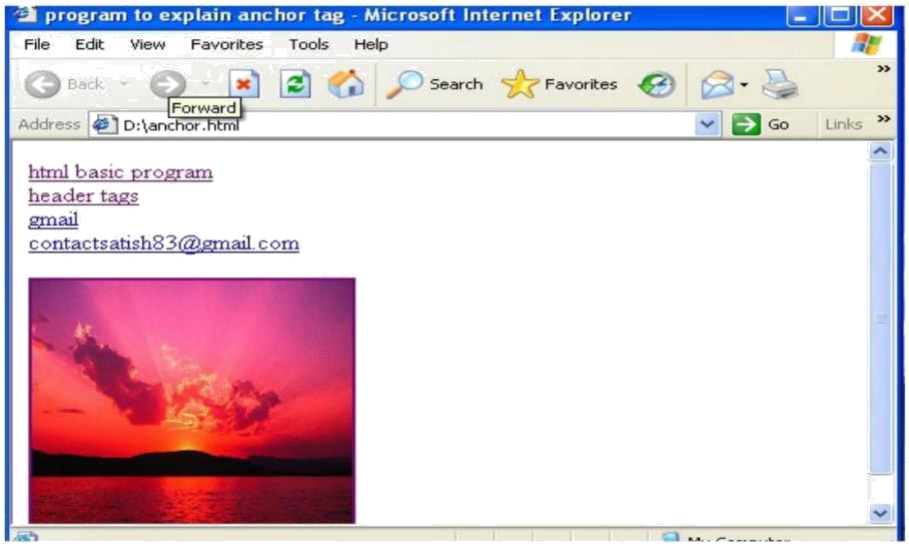
Header.html:

```
<html>
    <head>
        <title>program to explain header
    tags</title> </head>
    <body>
        <h1>header1 font size </h1>
        <h2>header2 font size </h2>
        <h3>header3 font size </h3>
        <h4>header4 font size </h4>
        <h5>header5 font size </h5>
        <h6>header6 font size </h6>
    </body>
</html>
```

anchor.html:

```
<html>
    <head>
        <title>program to explain anchor tag</title> </head>


    <body>
        <a href="first.html"> html basic program </a> <br/>
        <a href="header.html"> header tags </a> <br/>
        <a href="http://www.gmail.com"> gmail </a> <br/>
        <a href="mailto:contactsatish83@gmail.com">
            contactsatish83@gmail.com
        </a>
        <br/><br/>
        <a href="first.html">
            <img src="sunset.jpg" width="200" height="200"
            alt="sunset picture"/>
        </a>
    </body>
</html>
```

Output:



Program 5:

write a html program to create ordered lists,unordered lists,nested lists

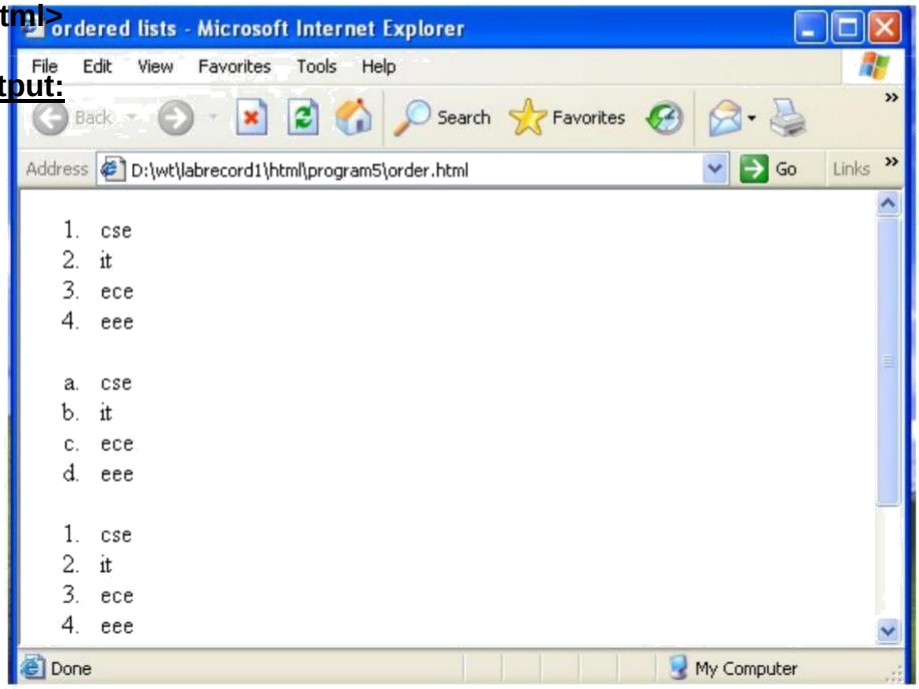
ordered lists:

order.html:

```
<html>
        <head>
                <title>ordered lists</title> </head>


        <body>
                <ol>
                        <li>cse</li>
                        <li>it</li>
                        <li>ece</li>
                        <li>eee</li>
                </ol>
                <ol type="a">
```

```
                <li>cse</li>
                <li>it</li>
                <li>ece</li>
                <li>eee</li>
        </ol>
        <ol type="1">
                <li>cse</li>
                <li>it</li>
                <li>ece</li>
                <li>eee</li>
        </ol>
        <ol type="i">
                <li>cse</li>
                <li>it</li>
                <li>ece</li>
                <li>eee</li>
        </ol>
    </body>
</html>
```

Output:

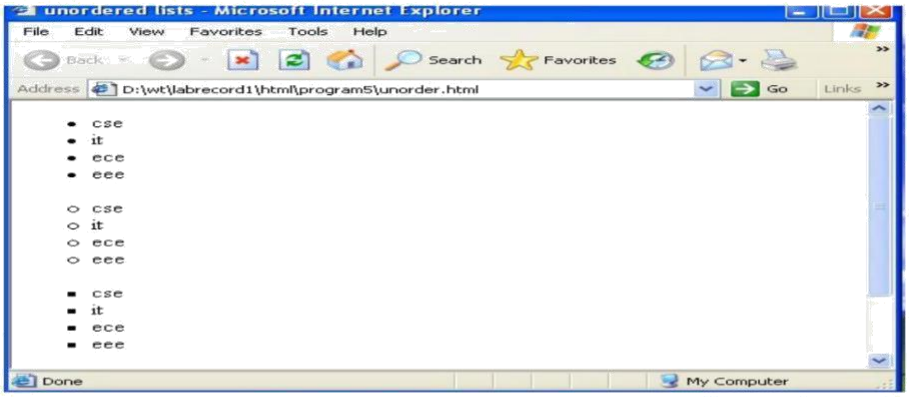


Unordered lists:

Unorder.html:

```
<html>
	<head>
		<title>unordered lists</title>
	</head>
	<body>
		<ul>
			<li>cse</li>
			<li>it</li>
			<li>ece</li>
			<li>eee</li>
		</ul>
		<ul type="circle">
			<li>cse</li>
			<li>it</li>
			<li>ece</li>
			<li>eee</li>
		</ul>
		<ul type="square">
			<li>cse</li>
			<li>it</li>
			<li>ece</li>
			<li>eee</li>
		</ul>
		<ul type="disc">
			<li>cse</li>
			<li>it</li>
			<li>ece</li>
			<li>eee</li>
		</ul>
	</body>
</html>
```

Output:



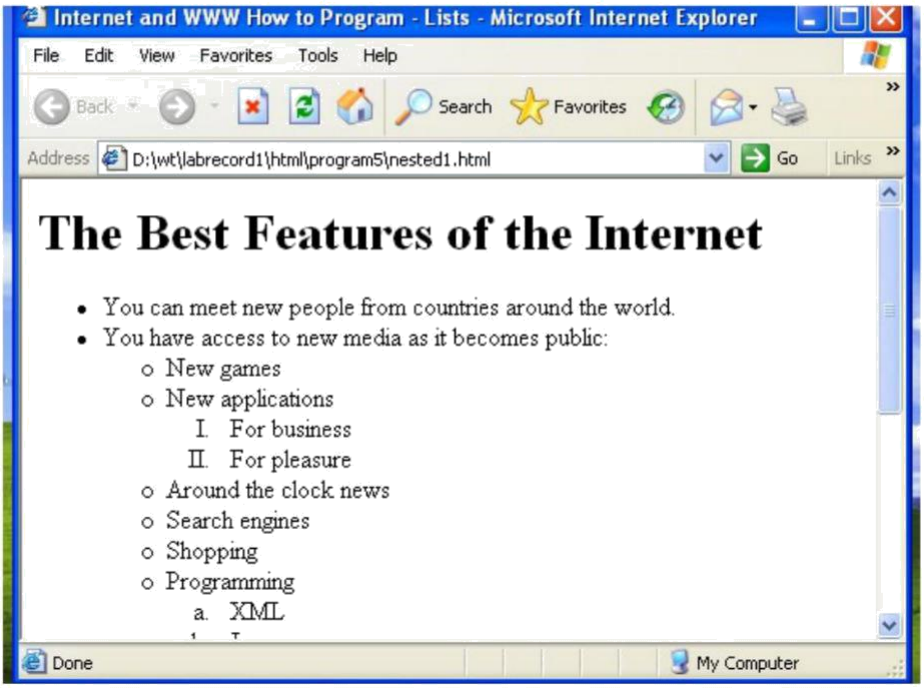
Nested lists:

Nested1.html:

```
<html>
    <head>
        <title>Internet and WWW How to Program - Lists </title>

    </head>
    <body>
        <h1>The Best Features of the Internet</h1> <ul>

            <li>You can meet new people from countries around the
            world.</li>
            <li> You have access to new media as it becomes public:

                <ul>
                    <li>New games</li>
                    <li>
                        New applications
                        <ol type = "I">
                            <li>For business</li>
                            <li>For pleasure</li>
                         </ol>
                    </li>
                    <li>Around the clock news</li>
                    <li>Search engines</li>
                    <li>Shopping</li>
                    <li>
                        Programming
                        <ol type = "a">
                            <li>XML</li>
```

```
                                        <li>Java</li>
                                        <li>XHTML</li>
                                        <li>Scripts</li>
                                        <li>New languages</li>
                                    </ol>
                                </li>
                            </ul>
                        </li>

                        <li>Links</li>
                        <li>Keeping in touch with old friends</li> <li>It is
                        the technology of the future!</li>
                </ul>
                <h1>My 3 Favorite
                <em>CEOs</em></h1> <ol>
                        <li>Harvey Deitel</li>
                        <li>Bill Gates</li>
                        <li>Michael Dell</li>
                </ol>
        </body>
</html>
```

Output:



Program 6:

write a html program to create Time Table using tables

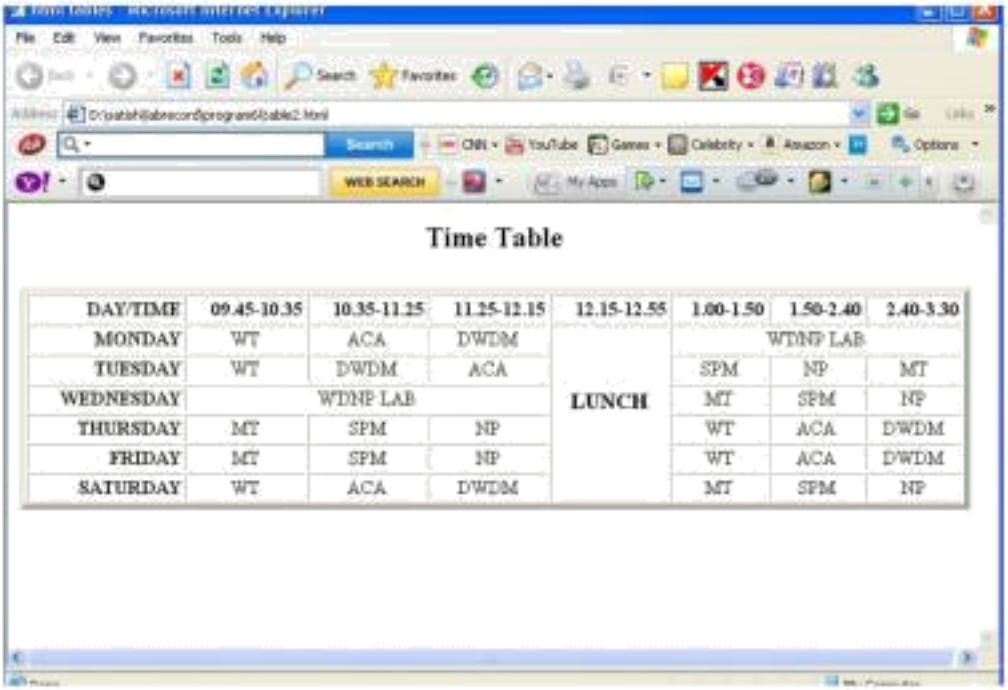
table2.html:

```
<html>
	<head>
		<title>html tables</title>
	</head>
	<body>
		<table border="5" width="800">
			<caption>
				<strong>
					<h2>Time Table</h2>
				</strong>
			</caption>
			<colgroup>
				<col align="right" span="8"/>
			</colgroup>
			<thead>
```

```
        <tr>
            <th>DAY/TIME</th>
            <th>09.45-10.35</th>
            <th>10.35-11.25</th>
            <th>11.25-12.15</th>
            <th>12.15-12.55</th>
            <th>1.00-1.50</th>
            <th>1.50-2.40</th>
            <th>2.40-3.30</th>
        </tr>
    </thead>
    <tbody>
        <tr>

            <th>MONDAY</th>
            <td align="center">WT</td>
            <td align="center">ACA</td>
            <td align="center">DWDM</td>
            <td rowspan="7"
            align="center"><h3>LUNCH</h3></td>
            <td colspan="3" align="center">WT/NP
            LAB</td>
        </tr>
        <tr>
            <th>TUESDAY</th>
            <td align="center">WT</td>
            <td align="center">DWDM</td>
            <td align="center">ACA</td>
            <td align="center">SPM</td>
            <td align="center">NP</td>
            <td align="center">MT</td>
        </tr>
        <tr>
            <th>WEDNESDAY</th>
            <td colspan="3" align="center">WT/NP
            LAB</td>
            <td align="center">MT</td>
            <td align="center">SPM</td>
            <td align="center">NP</td>
        </tr>
        <tr>
            <th>THURSDAY</th>
            <td align="center">MT</td>
            <td align="center">SPM</td>
            <td align="center">NP</td>
            <td align="center">WT</td>
            <td align="center">ACA</td>
```

```
                    <td align="center">DWDM</td>
                </tr>
                <tr>
                    <th>FRIDAY</th>
                    <td align="center">MT</td>
                    <td align="center">SPM</td>
                    <td align="center">NP</td>
                    <td align="center">WT</td>
                    <td align="center">ACA</td>
                    <td align="center">DWDM</td>
                </tr>
                <tr>
                    <th>SATURDAY</th>
                    <td align="center">WT</td>
                    <td align="center">ACA</td>
                    <td align="center">DWDM</td>
                    <td align="center">MT</td>
                    <td align="center">SPM</td>
                    <td align="center">NP</td>
                </tr>
            </tbody>
        </table>
    </body>
</html>
```

Output:



Time Table

DAY/TIME	09.45-10.35	10.35-11.25	11.25-12.15	12.15-12.55	1.00-1.50	1.50-2.40	2.40-3.30
MONDAY	WT	ACA	DWDM		WTNP LAB		
TUESDAY	WT	DWDM	ACA		SPM	NP	MT
WEDNESDAY	WTNP LAB			LUNCH	MT	SPM	NP
THURSDAY	MT	SPM	NP		WT	ACA	DWDM
FRIDAY	MT	SPM	NP		WT	ACA	DWDM
SATURDAY	WT	ACA	DWDM		MT	SPM	NP

Program 7:

write a html program to create a feedback form for a website

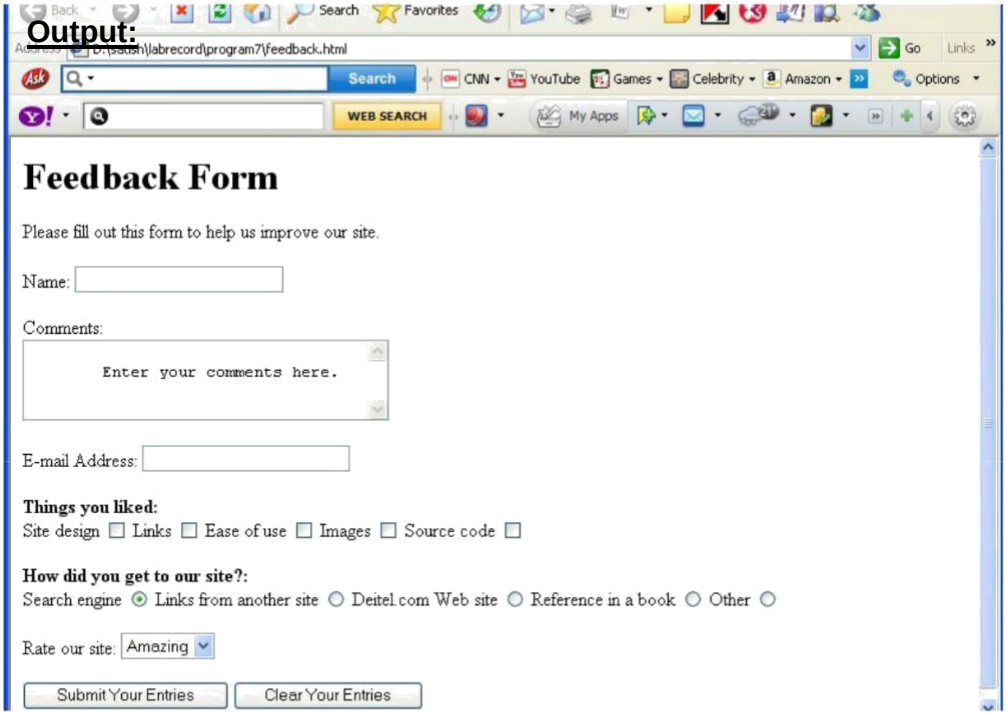
feedback.html:

```
<html>
    <head>
        <title>Internet and WWW How to Program - Forms</title>
    </head>
    <body>
        <h1>Feedback Form</h1>
        <p>Please fill out this form to help us improve our site.</p>

        <form method = "post" action = "/cgi-bin/formmail"> <p>

            <label>Name:
                <input name = "name" type = "text"
                    size = "25" />
            </label>
        </p>
```

```
<p>
        <label>Comments:
                <br />
                <textarea name = "comments" rows = "4"
                cols="36">
                        Enter your comments here.
                </textarea>
        </label>
</p>
<p>
        <label>E-mail Address:
                <input name = "email" type = "password"
                size = "25" />
        </label>
</p>
<p>
        <strong>Things you liked:</strong><br />
        <label>Site design
                <input name = "thingsliked" type =
                "checkbox" value = "Design/>
        </label>
        <label>Links
                <input name = "thingsliked" type =
                "checkbox" value = "Links" />
        </label>
        <label>Ease of use
                <input name = "thingsliked" type =
                "checkbox" value = "Ease" />
        </label>
        <label>Images
                <input name = "thingsliked" type =
                "checkbox" value = "Images" />
        </label>
        <label>Source code
                <input name = "thingsliked" type =
                "checkbox" value = "Code" />
        </label>
</p>
<p>
        <strong>How did you get to oursite?:
        </strong><br />
        <label>Search engine
                <input name = "howtosite" type = "radio" value
                = "search engine" checked
                = "checked" />
        </label>
        <label>Links from another site
```

```
                        <input name = "howtosite" type =
                        "radio" value = "link" />
                    </label>
                    <label>Deitel.com Web site
                        <input name = "howtosite" type =
                        "radio" value = "deitel.com" />
                    </label>
                    <label>Reference in a book
                        <input name = "howtosite" type =
                        "radio" 90 value = "book" />
                    </label>
                    <label>Other
                        <input name = "howtosite" type =
                        "radio" value = "other" />
                    </label>
                </p>
            <p>
            <label>Rate our site:
                <select name = "rating">
                    <option selected = "selected">
                        Amazing
                    </option>
                    <option>10</option>
                    <option>9</option>
                    <option>8</option>
                    <option>7</option>
                    <option>6</option>
                    <option>5</option>
                    <option>4</option>
                    <option>3</option>
                    <option>2</option>
                    <option>1</option>
                    <option>Awful</option>
                </select>
            </label>
            </p>
            <p>
                <input type = "submit" value ="Submit Your Entries"
                />
                <input type = "reset" value = "Clear Your Entries" />

            </p>
        </form>
    </html>
```

Output:


Back
Search
Favorites
Address
D:\satish\labrecord\program7\feedback.html
Go
Links
Search
CNN
YouTube
Games
Celebrity
Amazon
Options
WEB SEARCH
My Apps
Feedback Form
Please fill out this form to help us improve our site.
Name:
Comments:
Enter your comments here.
E-mail Address:
Things you liked:
Site design
Links
Ease of use
Images
Source code
How did you get to our site?:
Search engine
Links from another site
Deitel.com Web site
Reference in a book
Other
Rate our site:
Amazing
Submit Your Entries
Clear Your Entries

Program 8:

write a html program to create frames with in a web document

frame1.html:

```
<html>
    <head>
        <title>Internet and WWW How to Program -frames</title> </head>

    <frameset cols = "160,*">
        <frame name = "leftframe" src = "nav.html" /> <frame
        name = "main" src = "first.html" /> <noframes>

            <p>
                This page uses frames, but your browser
                does not support them.
            </p>
            <p>
                Please, <a href = "nav.html">follow this link to
            browse our site without frames</a>. </p>

        </noframes>
    </frameset>
</html>
```

nav.html:

```
<html>
    <head>
        <title>nav.html</title>
    </head>
    <body>
        <a href="first.html" target="main"> first
            program</a><br/>
        <a href="header.html" target="main">
            header program</a><br/>
    </body>
</html>
```

first.html:

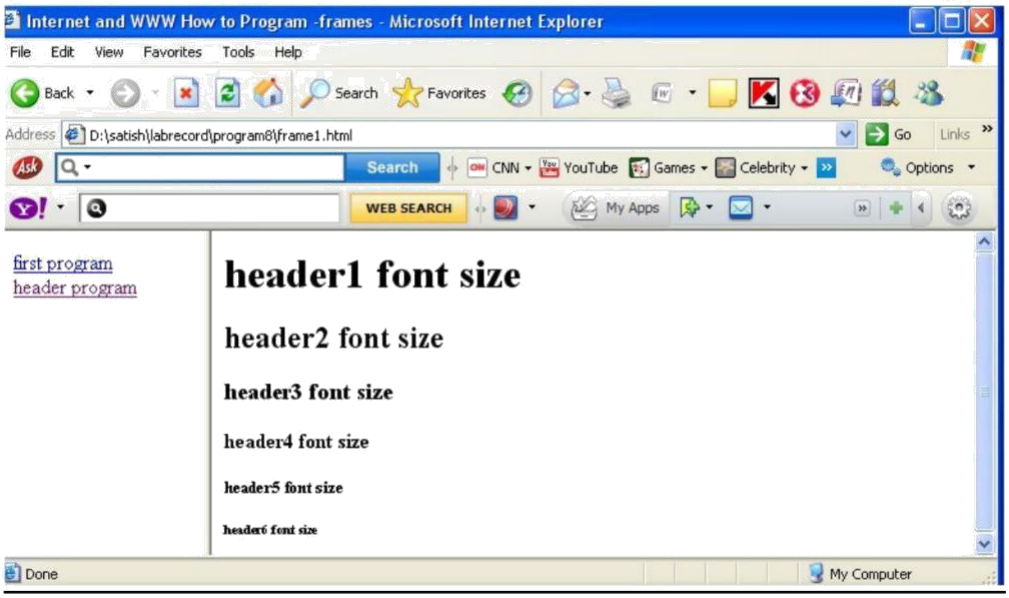
```
<html>
  <head>
    <title>my first html program</title>
```

```
    </head>
    <body>
       <center>
            <p>welcome to html programming </p>
       </center>
    </body>
</html>
```

header.html:

```
<html>
        <head>
                <title>program to explain header
        tags</title> </head>
        <body>
                <h1>header1 font size </h1>
                <h2>header2 font size </h2>
                <h3>header3 font size </h3>
                <h4>header4 font size </h4>
                <h5>header5 font size </h5>
                <h6>header6 font size </h6>
        </body>
</html>
```

Output:



Program 9:

write a html program to create links with in the same web document(inter linking)

interlink.html:

```
<html>
   <head>
      <title>Internal linking</title>
   </head>
   <body>
      <p></p>
      <h1 id="features">The Best Features of the Internet</h1> <p><a href =
      "#ceos">Go to <em>Favorite CEOs</em></a></p> <ul>

            <li>You can meet people from countries around the world.</li>

            <li>You have access to new media as it becomes public:
               <ul>
                  <li>New games</li>
                  <li>New applications
                  <ul>
                     <li>For Business</li>
                     <li>For Pleasure</li>
                  </ul>
                  </li>
                  <li>Around the clock news</li>
                  <li>Search Engines</li>
                  <li>Shopping</li>
                  <li>Programming
                     <ul>
                        <li>XHTML</li>
                        <li>Java</li>
                        <li>Dynamic HTML</li>
                        <li>Scripts</li>
                        <li>New languages</li>
                     </ul>
                  </li>
               </ul>
            </li>
            <li>Links</li>
            <li>Keeping in touch with old friends</li> <li>It is
            the technology of the future!</li>
      </ul><br/>
      <h1 id="ceos">My 3 Favorite <em>CEOs</em></h1> <p>

            <a href = "#features">Go to <em>Favorite Features</em>
      </a></p>
      <ol>
            <li>Bill Gates</li>
            <li>Steve Jobs</li>
            <li>Michael Dell</li>
```

```
        </ol>
    </body>
</html>
```

Output:

Program 10:

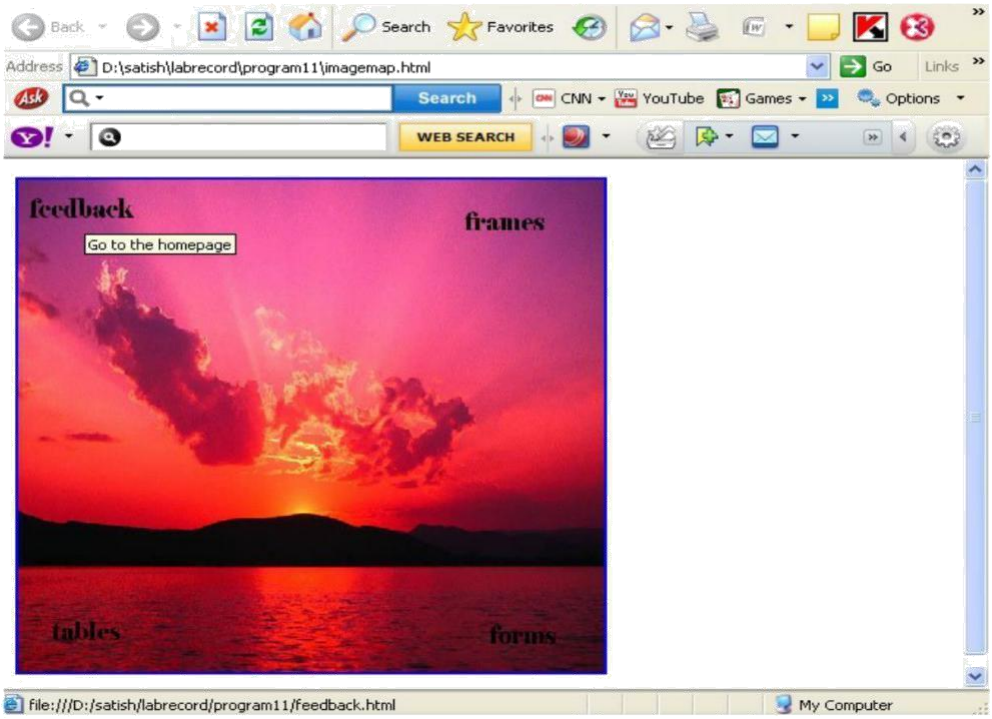
write a html program to create image maps

imagemap.html:

```
<html>
        <head>
                <title>
                        Internet and WWW How to Program - Image
                Map </title>
        </head>
        <body>
           <p>
                <map id = "picture">
                                <area href = "feedback.html" shape = "rect"
```

```
                    coords = "3,7,72,25" alt = "Go to the
                    homepage" />
                <area href = "frame1.html" shape = "rect"
                    coords = "300,18,356,40"
                        alt = "Go to the links page" />
                <area href = "table2.html" shape = "rect"
                    coords = "3,360,72,370"
                    alt = "Go to the feedback form" /> <area href
                = "form1.html" shape = "rect"
                    coords = "330,365,365,380"
                    alt = "Go to the contact page" />
            </map>
            <img src = "sunset1.jpg" width = "400" height = "400" alt =
                "Deitel logo" usemap = "#picture" />
        </p>
    </body>
</html>
```

output:



Program 11:

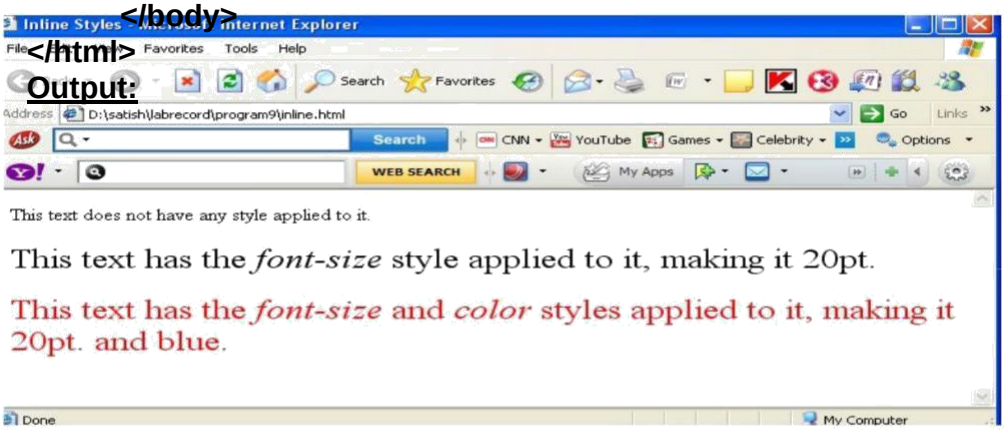
write a html program to create inline stylesheets,embedded stylesheets and external stylesheets

inline stylesheets:
inline.html:

<html>

```
<head>
        <title>Inline Styles</title>
</head>
<body>
  <p>This text does not have any style applied to it.</p> <p style = "font-
  size: 20pt">This text has the
    <em>font-size</em> style applied to it, making it 20pt. </p>

     <p style = "font-size: 20pt; color: #ff0000"> This text has
                                    the <em>font-size</em> and
      <em>color</em> styles applied to it, making it 20pt. and
      blue.</p>
</body>
</html>
```

Output:



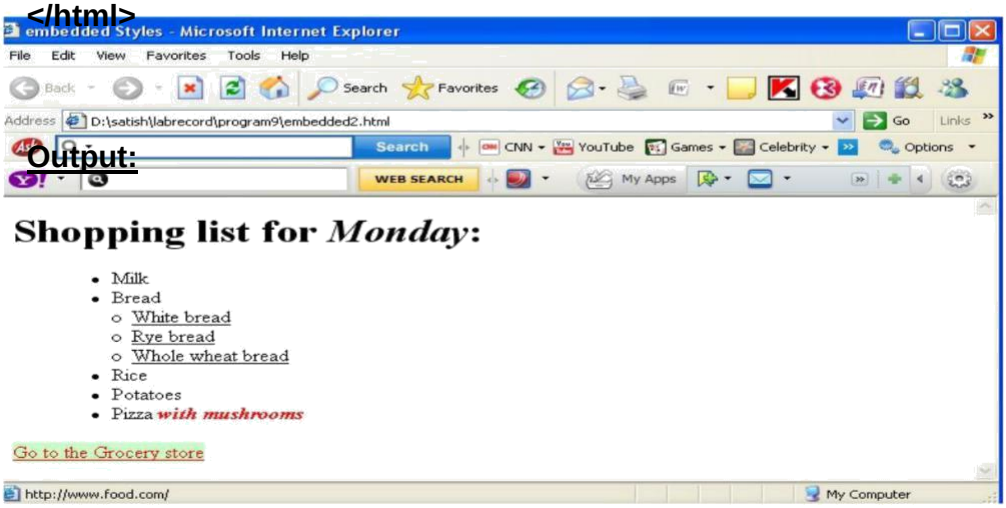
Embedded stylesheets:

embedded2.html:

```
<html>
        <head>
                <title>embedded Styles</title>
                <style type = "text/css">
                        a.nodec { text-decoration: none }
                        a:hover { text-decoration: underline;
                                  color: red;
                                  background-color: #ccffcc }
                        li em { color: red;
                                font-weight: bold }
                        ul { margin-left: 75px }
                        ul ul { text-decoration: underline;
```

```
                    margin-left: 15px }
        </style>
    </head>
    <body>
        <h1>Shopping list for <em>Monday</em>:</h1> <ul>

            <li>Milk</li>
            <li>Bread
                <ul>
                    <li>White bread</li>
                    <li>Rye bread</li>
                    <li>Whole wheat bread</li>
                </ul>
            </li>
            <li>Rice</li>
            <li>Potatoes</li>
            <li>Pizza <em>with mushrooms</em></li> </ul>

        <p><a class = "nodec" href = "http://www.food.com"> Go to the
            Grocery store</a></p>
    </body>
</html>
```

Output:



External stylesheets:

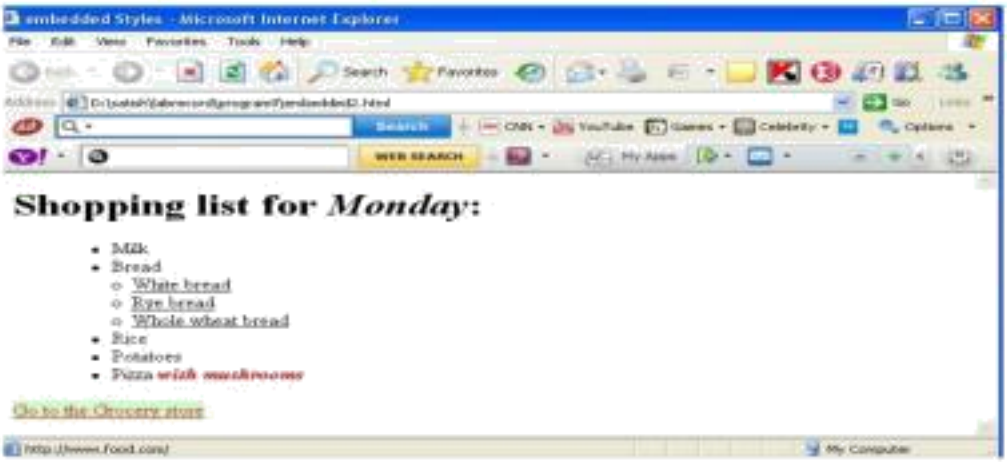
styles.css:

```
a { text-decoration: none }
a:hover { text-decoration: underline;
          color: red;
          background-color: #ccffcc }
li em { color: red;
        font-weight: bold;
        background-color: #ffffff }
ul { margin-left: 2cm }
ul ul { text-decoration: underline;
        margin-left: 15px }
```

external.html:

```
<html>
        <head>
                <title>More Styles</title>

                <link rel = "stylesheet" type = "text/css"
                  href = "styles.css" />
        </head>
        <body>
                <h1>Shopping list for <em>Monday</em>:</h1> <ul>

                        <li>Milk</li>
                        <li>Bread
                                <ul>
                                        <li>White bread</li>
                                        <li>Rye bread</li>
                                        <li>Whole wheat bread</li>
                                </ul>
                        </li>
                        <li>Rice</li>
                        <li>Potatoes</li>
                        <li>Pizza <em>with mushrooms</em></li> </ul>

                <p><a class = "nodec" href = "http://www.food.com"> Go to the
                        Grocery store</a></p>
        </body>
</html>
```

Output:



Program 12:

Develop static pages (using Only HTML) of an online Book store.The pages should resemble:www.amazon.com.The website should consists the following pages.

Home page
Registration
User Login
Books catalog

main.html:

```
<html>
    <head>
        <title>home page</title>
    </head>
    <body>
        <center>
            <b><h1>welcome to amazon.com</h1></b><br><br>
            <form method="post"action="login.html">
                <input type="submit" value="click"/>
                registration user login here
        </center>
```

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

login.html:

```
<html>
        <head>
                <title>login page</title>
        </head>
        <body>
                <center>
                <form method="post" action="login.html">
                        <p><strong>name:</strong>
                                <input type="text" name="username" size="25">
                        </p>
                        <p><strong>password</strong>
                                 <input name="pass" type="password" size="6">
                        </p>
                        <p><strong>male</strong>
                          <input type=”radio” checked="checked"
                            value=”male”/>
                          
                        </p>
                        <p><strong>female</strong>
                                <input type="radio" value="female"/> 
                        </p>
                        <input type="submit" value="submit">   <input
                        type="reset" value="reset">
                        <a    href="registration.html">new              users      register
                here </a>
                </form>
        </center>
</body>
</html>
```

Registration.html:

```
<html>
    <head>
        <title>registration</title>
    </head>
    <body>
        <center>
            <form method="post" action="login.html">
                <p><strong>name:</strong>
                  <input type="text" size="25" name="user" >
                </p>
                <p><strong>password</strong>
                    <input name="pass" size="6"
                        type="password" ></p>
                <p><strong>male</strong>
                    <input type="radio" name=”gender”
                        value="male” />  
                </p>
                <p><strong>female</strong>
                  <input type="radio" name=”gender”
                    value="female"/> </p>
                <p><strong>address:</strong>
                 <textarea name="address" row="6" cols="20">
                 </textarea>
                </p>
                <p><strong>mobile no:</strong>
                  <input type="text" name="phno" size="10">
                </p>
                <br><br>
                <input type="submit" value="submit"> <input
                type="reset" value="reset">
            </form>
```

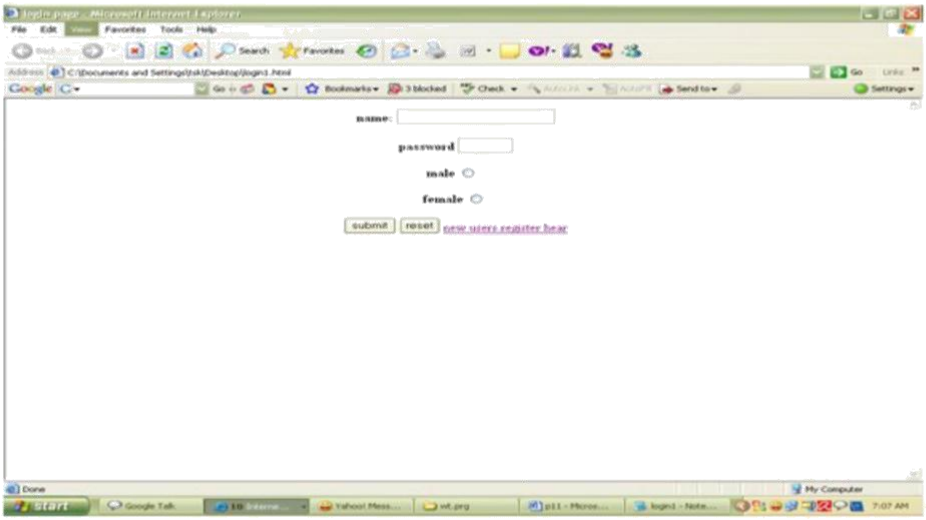
```
            </center>
        </body>
</html>
```

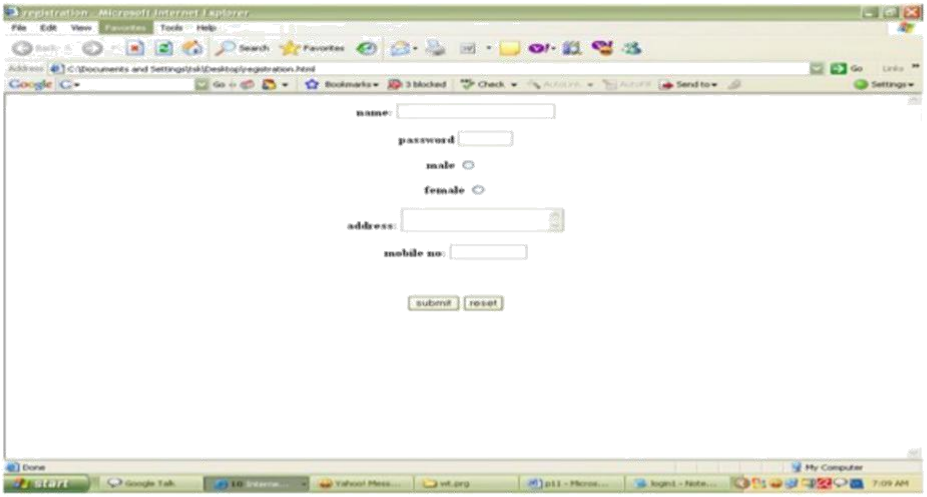
bookcatalog.html:

```
<html>
        <head>
            <title>books catalog</title>
        </head>
        <body>
            <center>
                <h1><p>welcome to books catalog</p></h1> <table
                border="1"width="25%"height="50%">
                    <tr>
                        <th>computers</th>
                        <th>electronics</th>
                        <th>biotech</th>
                        <th>mechanical</th>
                    </tr>
            </center>
        </body>
</html>
```

Output:


welcome to amazon.com
click registered user login hear


name:
password
male
female
submit
reset
new users register hear



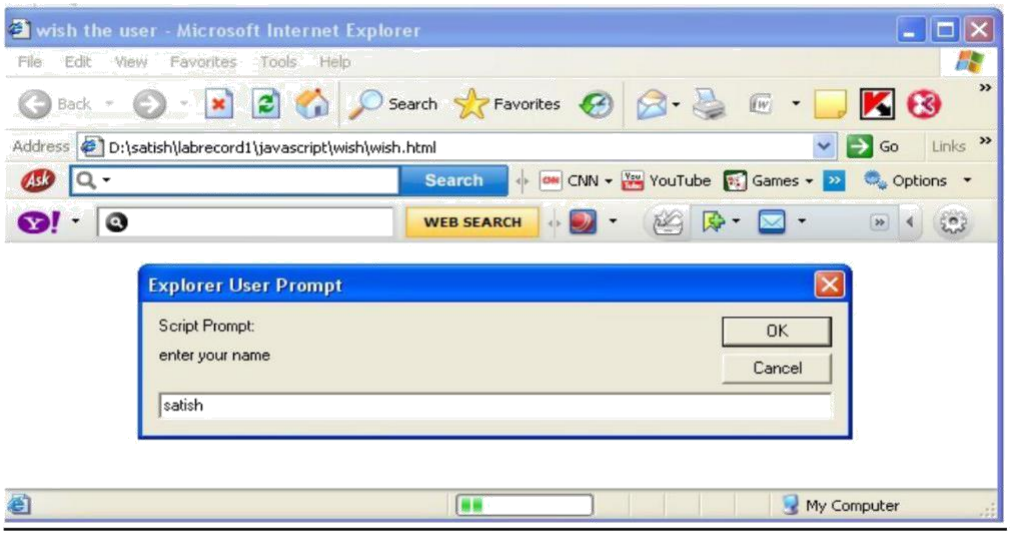
Program 13:

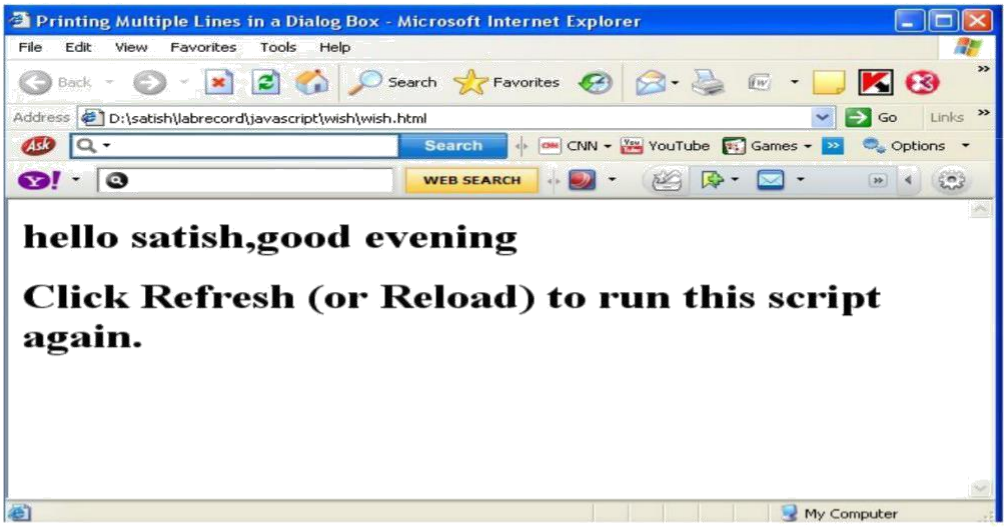
write a javascript program to wish the user according to time

wish.html:

```
<html>
   <head>
      <title>wish the user</title> <script type =
      "text/javascript"> <!--

            var d1,hours,name;
            d1 = new Date();
            hours = d1.getHours();
            name = window.prompt("enter your name","sat"); if( hours
            <12)
                  document.writeln("<h1>hello "+ name + ",good
                  morning");
            if( hours >= 12)
            {
                  hours = hours-12;
                  if(hours < 6 )
                        document.writeln("<h1>hello "+ name + ",good
                        afternoon");
                  if( hours >= 6 )
                        document.writeln("<h1>hello "+ name + ",good
                        evening");
            }
      //    -->
      </script>
   </head>

   <body>
      <p>Click Refresh (or Reload) to run this script again.</p> </body>

</html>
```

Output:





Program 14:

write a javascript program to display list of items according to users choice

1 **unorder**
list 2order list

3 **ordered listnusing alphabets**

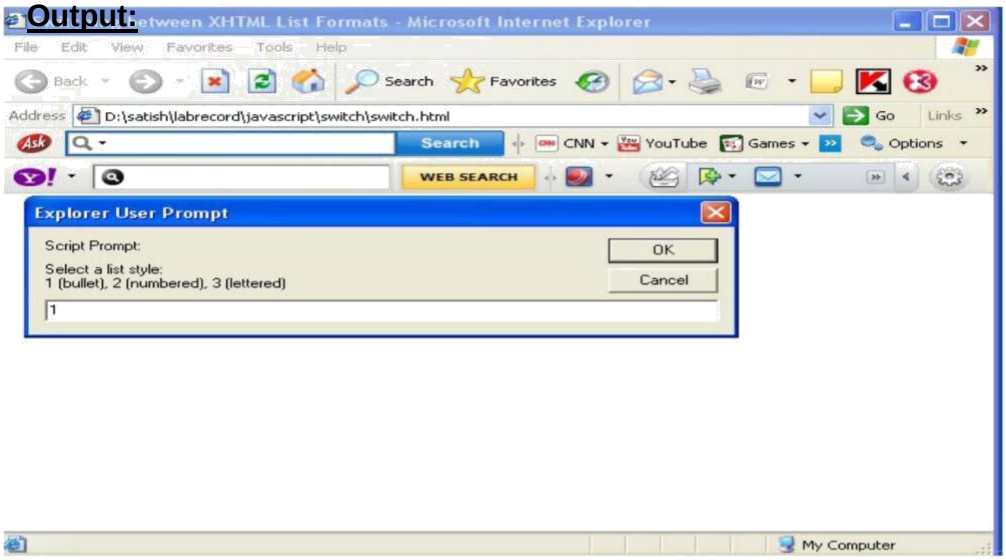
switch.html:

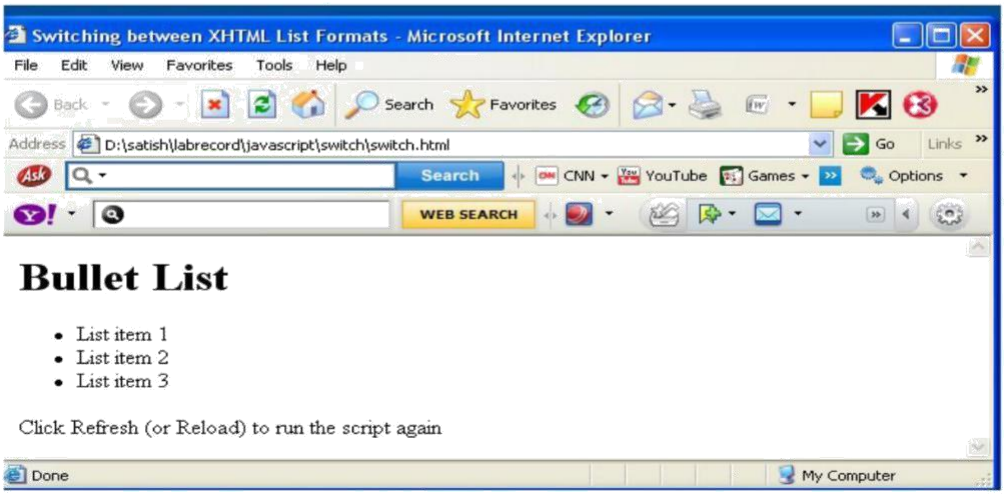
```
<html>
   <head>
      <title>Switching between XHTML List Formats</title> <script
      type = "text/javascript"> <!--

         var choice,startTag,endTag,validInput = true,listType; choice =
         window.prompt( "Select a list style:\n" +
                  "1 (bullet), 2 (numbered), 3 (lettered)", "1" );
         switch ( choice )
         {
            case "1":
                  startTag = "<ul>";
                  endTag = "</ul>";
                  listType = "<h1>Bullet List</h1>"; break;

            case "2":
                  startTag = "<ol>";
                  endTag = "</ol>";
                  listType = "<h1>Ordered List: Numbered</h1>"; break;

            case "3":
                  startTag = "<ol type = \"A\">";
                  endTag = "</ol>";
                  listType = "<h1>Ordered List: Lettered</h1>"; break;

            default:
                  validInput = false;

         }
         if ( validInput == true )
         {
            document.writeln( listType + startTag );
            for ( var i = 1; i <= 3; ++i )
            document.writeln( "<li>List item " + i + "</li>" );
            document.writeln( endTag );
         }
         else
            document.writeln( "Invalid choice: " + choice );
         //    -->
         </script>
   </head>
   <body>
```

** Click Refresh (or Reload) to run the script again </body>**

</html>

Output:





Program 15:

write a javascript program to develop craps game,the rules of the game are

1) **In the first throw of the 2 dice if the sum of two numbers on the top of the 2 dice is equals to either 7 or 11 the user wins the game**

2) **In the first throw of the 2 dice if the sum of two numbers on the top of the 2 dice is equals to either 2 or 3 or 12 the user losses the game**

3) **In the first throw of the 2 dice if the sum of two numbers on the top of the 2 dice is equals to either 4 or 5 or 6 or 8 or 9 or 10 then the user gets that sum as his/her point and he has to continue rolling dice until he/she gets next sum equals to point which means he/she wins the game ,mean while if he/she gets sum as 7 indicates loss of game**

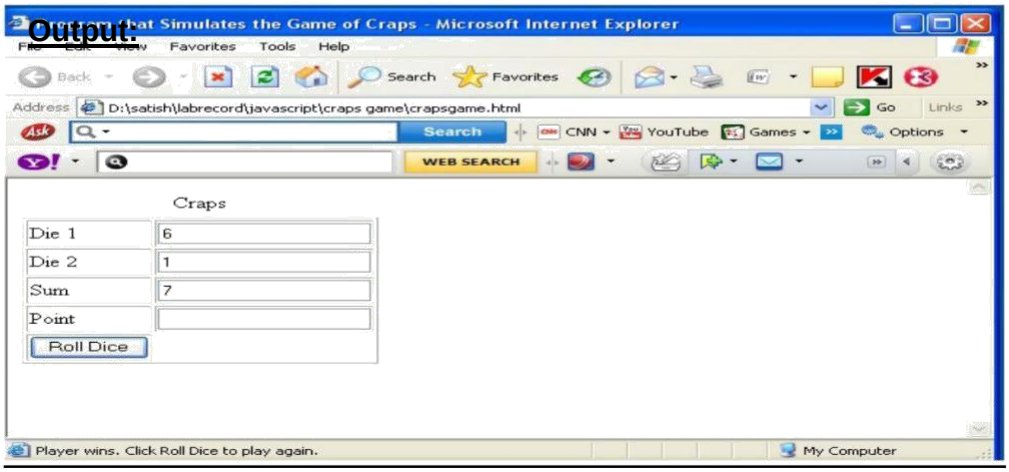
Crapsgame.html:

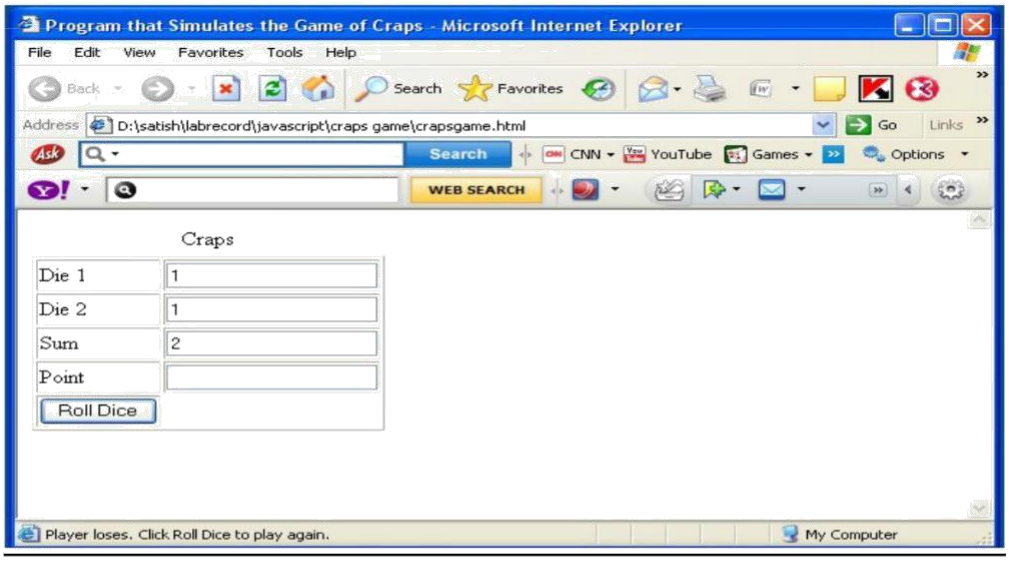
```
<html>
   <head>
        <title>Program that Simulates the Game of Craps</title> <script type
        = "text/javascript">
        <!--
```

```
var WON = 0, LOST = 1, CONTINUE_ROLLING = 2;
var firstRoll=true,sumOfDice=0,myPoint=0;
var gameStatus= CONTINUE_ROLLING;
function play()
{
  if ( firstRoll )
  {
     sumOfDice = rollDice();
     switch ( sumOfDice )
     {
        case 7: case 11:
                        gameStatus = WON;
                        document.craps.point.value = "";
                        break;
        case 2: case 3: case 12:
                        gameStatus = LOST;
                        document.craps.point.value = "";
                        break;
        default:
                gameStatus = CONTINUE_ROLLING; myPoint =
                sumOfDice; document.craps.point.value =
                myPoint; firstRoll = false;

     }
  }
  else
  {
     sumOfDice = rollDice();
     if ( sumOfDice == myPoint )
             gameStatus = WON;
     else
             if ( sumOfDice == 7 )
             gameStatus = LOST;
  }
  if ( gameStatus == CONTINUE_ROLLING )
     window.status = "Roll again";
  else
  {
     if    ( gameStatus == WON ) window.status =
          "Player wins. " +
                    "Click Roll Dice to play again.";
     else
          window.status = "Player loses. " + "Click Roll
                    Dice to play again.";
     firstRoll = true;
  }
}
```

```
            function rollDice()
            {
                var die1, die2, workSum;
                die1 = Math.floor( 1 + Math.random() * 6 ); die2 =
                Math.floor( 1 + Math.random() * 6 ); workSum = die1
                + die2; document.craps.firstDie.value = die1;
                document.craps.secondDie.value = die2;
                document.craps.sum.value = workSum; return
                workSum;

            }
        //    -->
        </script>
    </head>

    <body>

        <form name = "craps" action = ""> <table
                border = "1">
                   <caption>Craps</caption>
                   <tr><td>Die 1</td>
                   <td><input name = "firstDie" type = "text" />
                   </td></tr>
                   <tr><td>Die 2</td>
                   <td><input name = "secondDie" type = "text" />
                   </td></tr>
                   <tr><td>Sum</td>
                   <td><input name = "sum" type = "text" />
                   </td></tr>
                   <tr><td>Point</td>
                   <td><input name = "point" type = "text" /> </td></tr>

                   <tr><td><input type = "button" value = "Roll Dice"
                              onclick = "play()" /></td></tr>
                </table>
        </form>

    </body>

</html>
```

Output:


Program that Simulates the Game of Craps - Microsoft Internet Explorer
Favorites Tools Help
Back Search Favorites
Address D:\satish\labrecord\javascript\craps game\crapsgame.html
Go Links
Search CNN YouTube Games Options
WEB SEARCH
Craps
Die 1 6
Die 2 1
Sum 7
Point
Roll Dice
Player wins. Click Roll Dice to play again.
My Computer


Program that Simulates the Game of Craps - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address D:\satish\labrecord\javascript\craps game\crapsgame.html
Go Links
Search CNN YouTube Games Options
WEB SEARCH
Craps
Die 1 1
Die 2 1
Sum 2
Point
Roll Dice
Player loses. Click Roll Dice to play again.
My Computer

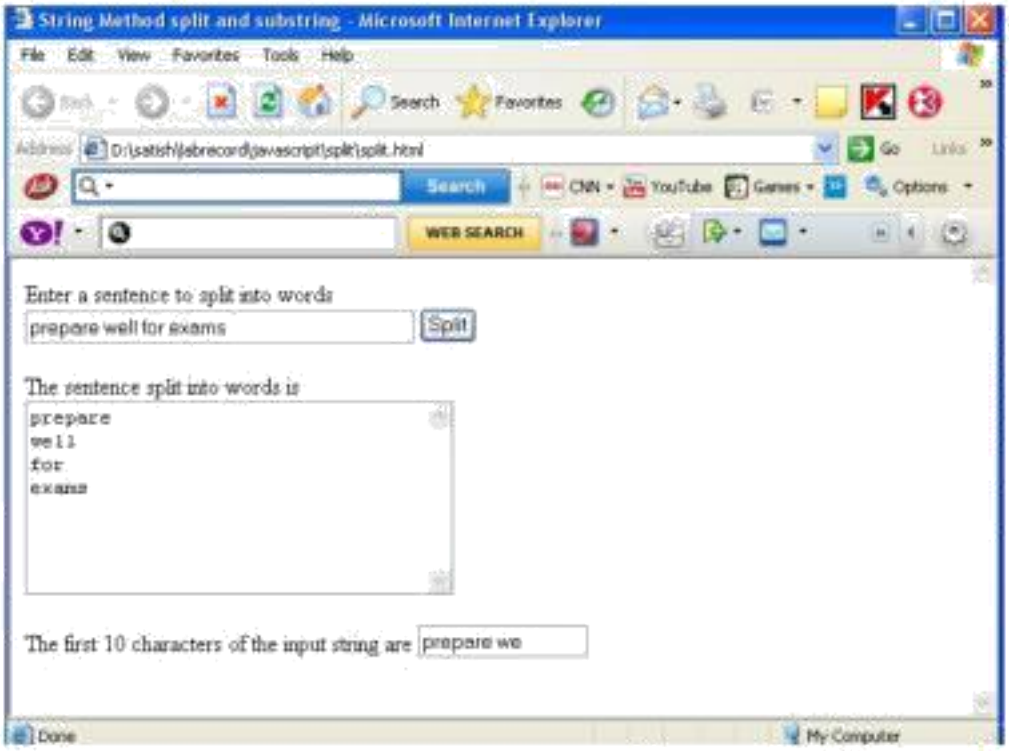
Program 16:

write a javascript program to split a given sentence into set of tokens or words by using space character as delimeter

split.html:

```
<html>
	<head>
		<title>String Method split and substring</title> <script type
		= "text/javascript"> <!--

		function splitButtonPressed()
		{
			var strings=myForm.inputVal.value.split(" " );
			myForm.output.value = strings.join( "\n" );
			myForm.outputSubstring.value =
				myForm.inputVal.value.substring( 0, 10 );
		}
		//    -->
		</script>
	</head>
	<body>
	  <form name = "myForm" action = "">
		<p>Enter a sentence to split into words<br /> <input
		name="inputVal" type="text" size="40" /> <input
		name="splitButton" type ="button" value = "Split" onclick
		= "splitButtonPressed()" /> </p>

		<p>The sentence split into words is<br />
		<textarea name = "output" rows = "8" cols = "34">
		</textarea>
		</p>
		<p>The first 10 characters of the input string are <input name
		= "outputSubstring" type = "text"
			size = "15" /></p>
	    </form>
	</body>
</html>
```

Output:



Program 17:

write a javascript program to explain about onload event

onload.html:

```
<html>
   <head>
      <title>DHTML Event Model - onload</title>
```

```
<script type = "text/javascript"> <!--

  var seconds = 0;
  function startTimer()
  {
    window.setInterval( "updateTime()", 1000 );
  }
  function updateTime()
  {
     seconds++;
     soFar.innerText = seconds;
  }
//    -->
</script>
</head>
<body onload = "startTimer()">
<p>Seconds you have spent viewing this page so far:
<a id = "soFar"><strong>0</strong></a></p>
</body>
</html>
```

Output:

Program 18:

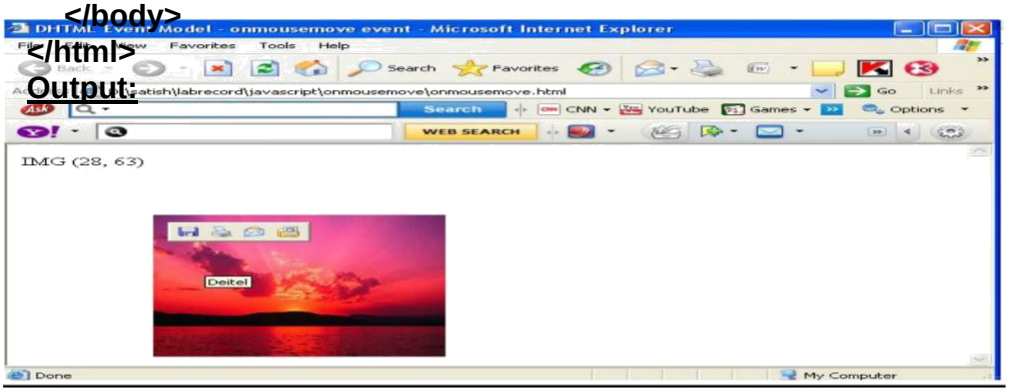
write a javascript program to explain about onmousemove event

onmousemove.html:

```
<html>
   <head>
      <title>DHTML Event Model - onmousemove event</title> <script
      type = "text/javascript"> <!--

      function updateMouseCoordinates()
      {
        coordinates.innerText = event.srcElement.tagName +
        " (" + event.offsetX + ", " + event.offsetY + ")";
```

```
        }
        //    -->
        </script>
    </head>
    <body style = "back-groundcolor: wheat" onmousemove
        = "updateMouseCoordinates()"> <span id =
        "coordinates">(0, 0)</span><br />
        <img src = "sunset.jpg" style = "position: absolute; top:100;left:100" alt
        = "Deitel" width="200" height="200"/>
    </body>
</html>
```

Output:



Program 19:

Write a javascript program to explain about onfocus,onblur ,onsubmit ,onreset events

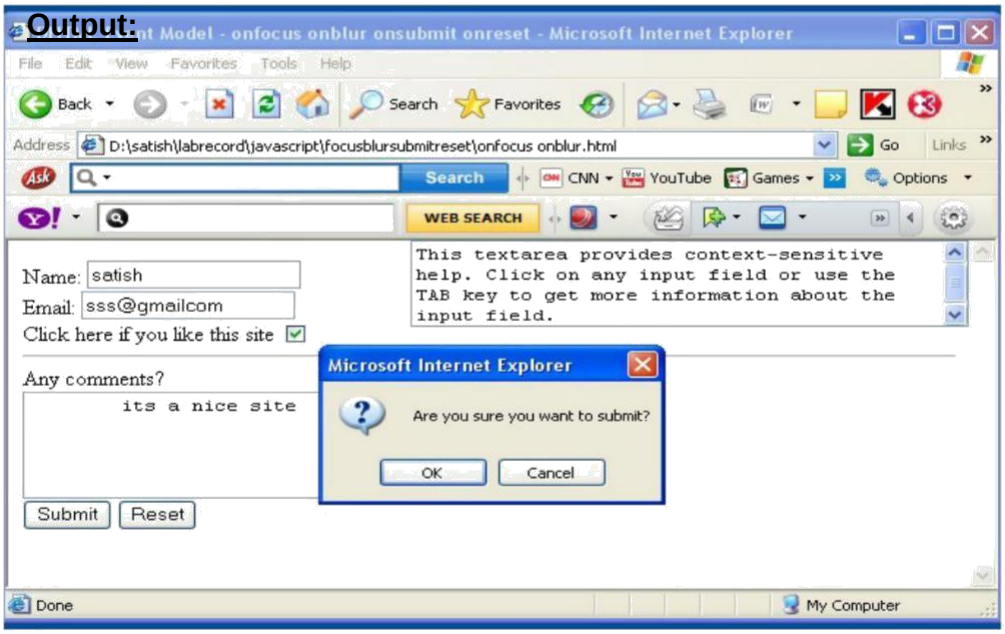
Onfocusonblur.html:

```
<html>
    <head>
      <title>
        DHTML Event Model - onfocus onblur onsubmit onreset </title>

      <script type = "text/javascript"> <!--

        var helpArray =
                    [ "Enter your name in this input box.",
                    "Enter your email address in this input box, " + "in the format
                    user@domain.",
                    "Check this box if you liked our site.", 44
```

```
                    "In this box, enter any comments you would " + "like us
                    to read.",
                    "This button submits the form to the " + "server-
                    side script",
                    "This button clears the form",
                    "This textarea provides context-sensitive " + "help. Click on
                    any input field or use the TAB" + "key to get more
                    information about the " + "input field." ];

    function helpText( messageNum )
    {
      myForm.helpBox.value = helpArray[ messageNum ];
    }
    function formSubmit()
    {
            window.event.returnValue = false;
            if ( confirm ( "Are you sure you want to submit?" ) )
                    window.event.returnValue = true;
    }
    function formReset()
    {
            window.event.returnValue = false;
            if ( confirm( "Are you sure you want to reset?" ) )
                    window.event.returnValue = true;
    }
    //    -->
    </script>
</head>
<body>
  <form id="myForm" method="post" action=""
    onsubmit="formSubmit()" onreset="formReset()">

    Name: <input type = "text" name = "name"
            onfocus =    "helpText(0)" onblur = "helpText(6)"/><br />

    Email: <input              type = "text" name = "email"
            onfocus =    "helpText(1)" onblur = "helpText(6)"/><br />

    Click here if                you like this site
    <input type =       "checkbox" name = "like" onfocus =
                  "helpText(2)" onblur = "helpText(6)" /><br /><hr />
    Any comments?<br />
    <textarea name        = "comments" rows = "5" cols = "45"
             onfocus   = "helpText(3)" onblur = "helpText(6)">
    </textarea><br       />

    <input type = "submit" value = "Submit" onfocus =
```

```
"helpText(4)" onblur = "helpText(6)" /> <input type = "reset" value =
        "Reset" onfocus = "helpText(5)" onblur = "helpText(6)" />
      <textarea name = "helpBox" style = "position: absolute;
            right: 0; top: 0" rows = "4" cols = "45">
            This textarea provides context-sensitive help. Click on any input
            field or use the Tab key to get more information about the input field.

      </textarea>
        </form>
  </body>
</html>
```

Output:



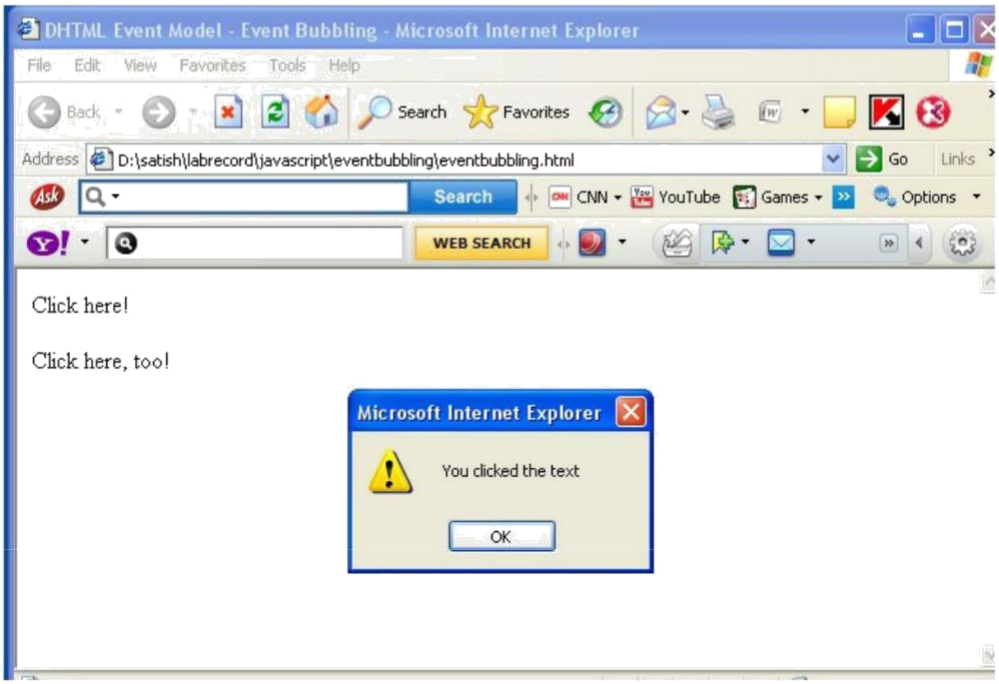
Program 20:

Write a javascript program to explain about event bubbling

Eventbubbling.html:

```
<html>
   <head>
        <title>DHTML Event Model - Event Bubbling</title> <script
        type = "text/javascript"> <!--

          function documentClick()
          {
            alert( "You clicked in the document" );
          }
        function bodyClick()
          {
            alert( "You clicked in the body" );
          }
          function paragraphClick( value )
          {
            alert( "You clicked the text" );
            if ( value )
            event.cancelBubble = true;
          }
          document.onclick = documentClick;
          //    -->
        </script>
   </head>
   <body onclick="bodyClick()">
        <p onclick = "paragraphClick( false )">Click here!</p>
        <p onclick = "paragraphClick( true )">Click here, too! </p> </body>

</html>
```

Output:



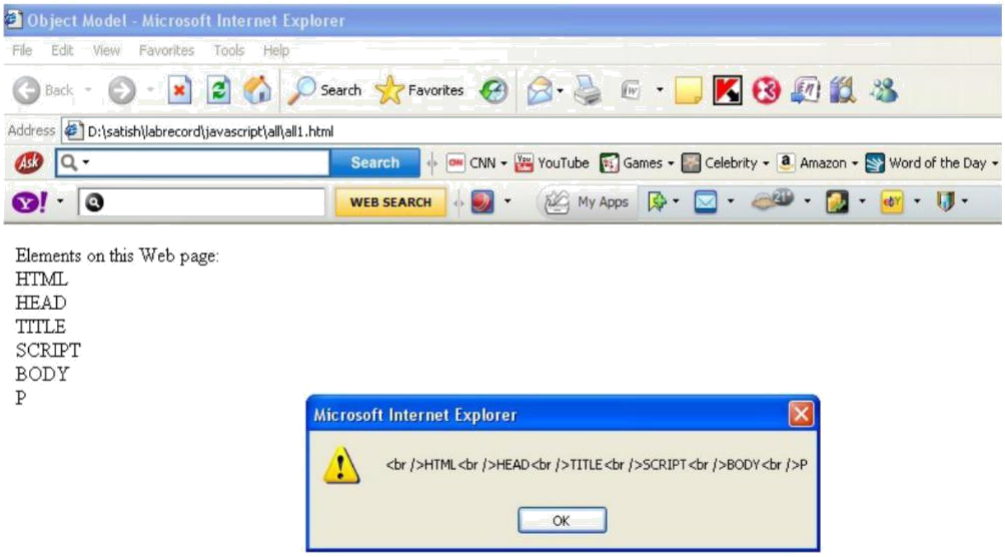
Program 21:

Write a javascript program which displays the different element/tag names of a web document using “all” collection object

all1.html:

```
<html>
  <head>
    <title>Object Model</title> <script type =
      "text/javascript"> <!--

        var elements = "";
        function start()
        {
          for ( var loop = 0; loop < document.all.length; ++loop ) elements += "<br />"
                    + document.all[ loop ].tagName;
          pText.innerHTML +=
          elements; alert( elements );
        }
      //    -->
      </script>
  </head>
  <body onload = "start()">
      <p id = "pText">
         Elements on this Web page:
      </p>
  </body>
</html>
```

Output:



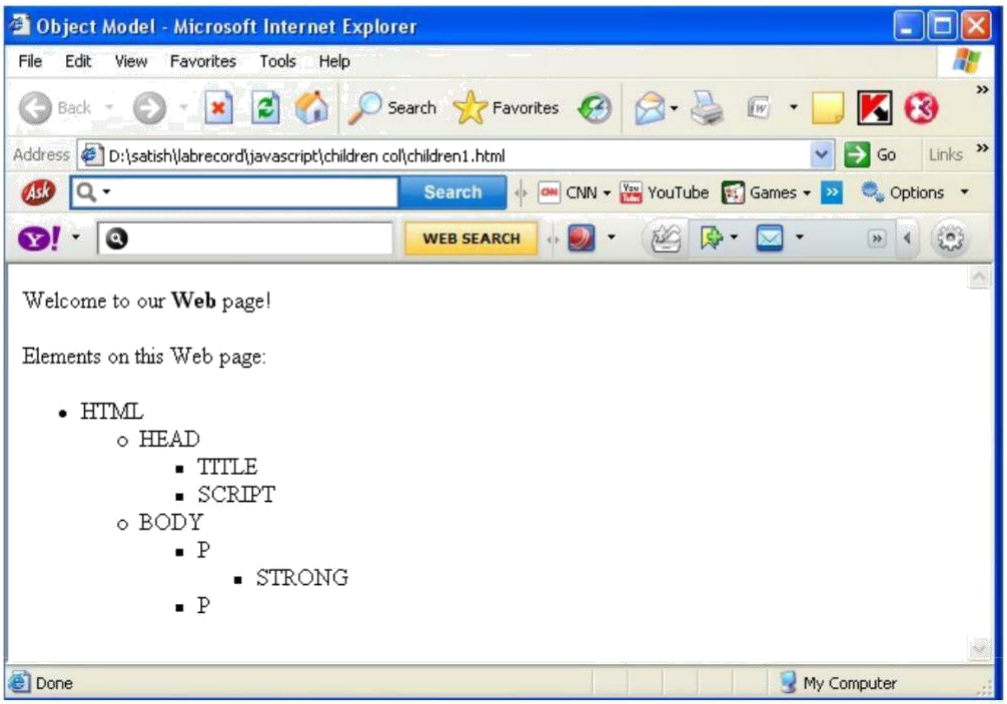
Program 22:

Write a javascript program which displays the different element/tag names of a web document using "children" collection object

Children1.html:

```
<html>
  <head>
    <title>Object Model</title> <script type =
    "text/javascript"> <!--

        var elements = "<ul>";
        function child( object )
        {
            var loop = 0;
            elements += "<li>" + object.tagName + "<ul>";
            for ( loop = 0; loop < object.children.length; loop++ )
            {
                if ( object.children[ loop ].children.length )
                        child( object.children[ loop ] );
                else
                  elements += "<li>" + object.children[ loop ].tagName +"</li>";

            }
            elements += " </ul> ";
        }
      //    -->
      </script>
    </head>
    <body onload = "child( document.all[ 0 ] );
                            myDisplay.outerHTML += elements;">
          <p>Welcome to our <strong>Web</strong> page!</p> <p id =
          "myDisplay">
                    Elements on this Web page:
          </p>
    </body>
</html>
```

Output:



program 23:

Write a javascript program to explain about navigator object navigator.html:

<html>

```
<head>
   <title>The navigator Object</title> <script
   type = "text/javascript">
     <!--
       function start()
       {
          if (navigator.appName=="Microsoft Internet Explorer") {

            if ( navigator.appVersion.substring( 1, 0 ) >= "4" )
                 document.location = "newIEversion.html";
            else
                 document.location = "oldIEversion.html";
          }
          else
                 document.location = "NSversion.html";
     }
    //    -->
  </script>
 </head>
 <body onload = "start()">
       <p>Redirecting your browser to the appropriate page,
             please wait...</p>
 </body>
</html>
```

newIEversion.html:

```
<html>
       <body>
                                  <h3>this content is for internet
explorer whose version is 4 or greater than 4</h3> </body>

</html>
```

oldIEversion.html:

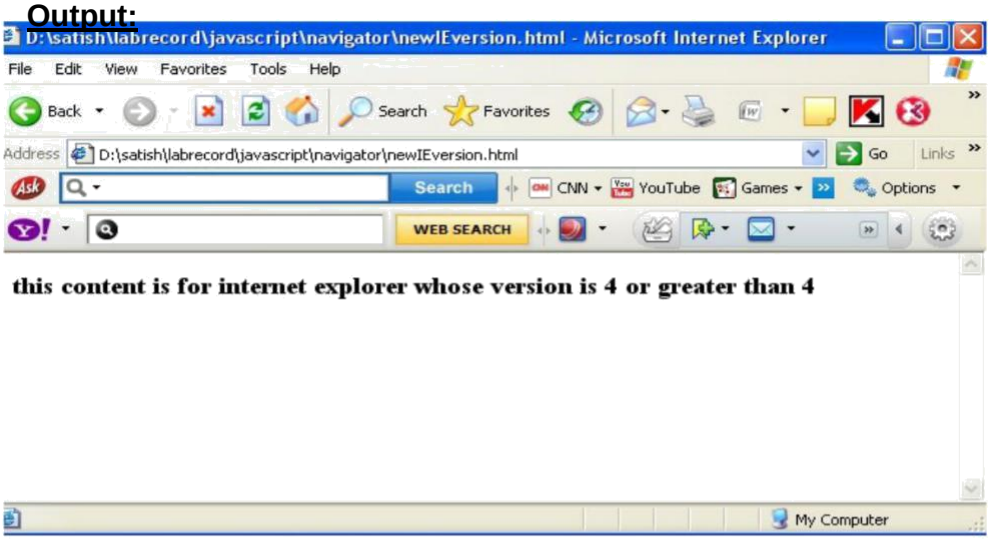
```
<html>
       <body>
             <h3>this content is for internet explorer whose version
             is less than 4</h3>
       </body>
</html>
```

NSversion.html:

```
<html>
       <body>
          <h3>this content is for netscape navigator</h3>
```

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

Output:



Program 24:

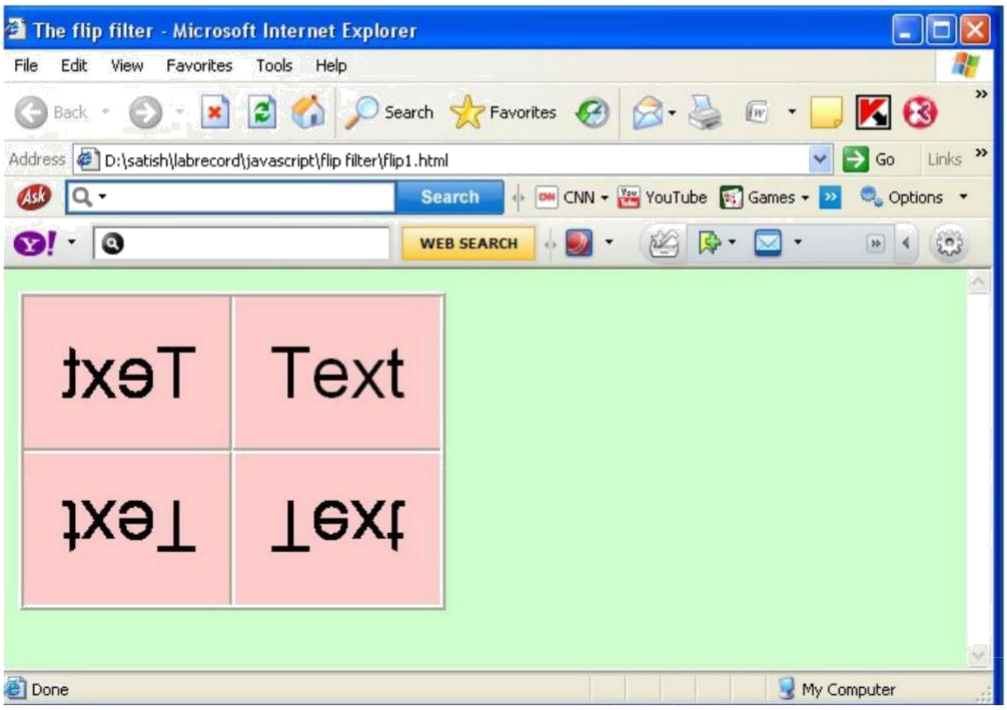
Write a javascript program to explain about flip filter

Flip1.html:

```
<html>
  <head>
     <title>The flip filter</title>
     <style type = "text/css">
       body    { background-color: #CCFFCC }
       table { font-size: 3em;
                  font-family: Arial, sans-serif;
                  background-color: #FFCCCC;
                  border-style: ridge ;
                }
            td     { border-style: groove;
                  padding: 1ex
                }
```

```
    </style>
  </head>

  <body>
    <table>
      <tr>
          <td style = "filter: fliph">Text</td>
          <td>Text</td>
      </tr>
      <tr>
                              <td style = "filter: flipv fliph">Text</td>
          <td style = "filter: flipv">Text</td> </tr>

    </table>
  </body>
</html>
```

Output:



Program 25:

Develop static pages (using only HTML) of an online Book store. The pages should resemble :www.amazon.com. The website should consist the following pages.

Home page

Registration and user Login User

profile page

Books catalog

Shopping cart

Payment by credit card

Order Conformation

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

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=”reg.html” target=”right”><font
    color=”black”> REGISTRATION</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”> BOOK$
    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>
```

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>

reg.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>
             CONTACTNUMBER:<iputtype="text"name="phno">
                 <br>
             LOGINID:<input type="text" name="id"><br>
             PASSWORD:<inputtype="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>
```

catalog.html:

```
<html>
<body bgcolor="pink"><br><br><br> <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"
name="button1">     
<input type="reset" value="clear" name="button2">
</body>
</html>
```

order.html:

```
<html>
<body bgcolor="pink"><br><br><br>
<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 tpe="text" name="date"><br></pre><br><br>
</div>
<br><br>
<div align="center">
<input type="submit" value="ok" name="button1">     

<input type="reset" value="clear" name="button2">
</body>
</html>
```

payment.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==""||
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>
```

profile.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
```

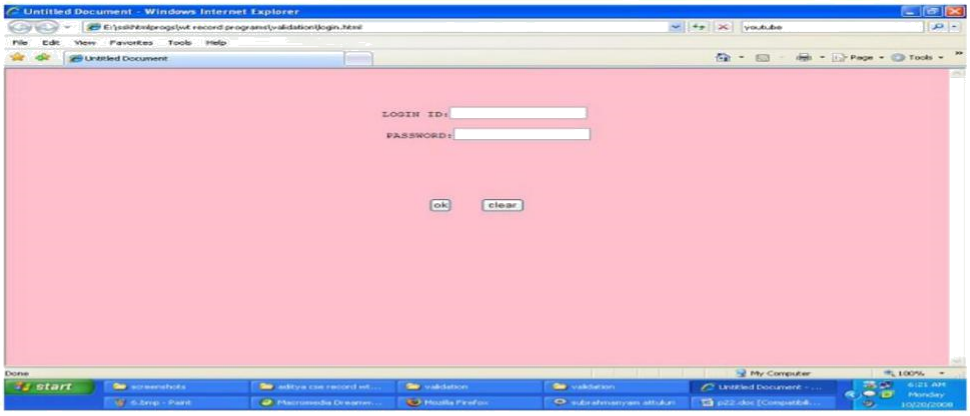
```
{
alert("INVALID INPUT");
document.myform.focus();
}
}
</script>
<form name="myform">
<div align="center"><pre>
LOGIN ID          :<input type="text" name="id"><br>
PASSWORD:<input type="password" name="pwd"></pre><br><br>
</div>
<br><br>
<div align="center">
<input type="submit" value="ok"
onClick="validate()">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

Output:

ONLINE BOOK STORAGE

- LOGIN
- REGISTRATION
- USER PROFILE
- BOOKS CATALOG
- SHOPPINGCART
- PAYMENT
- ORDER CONFIRMATION

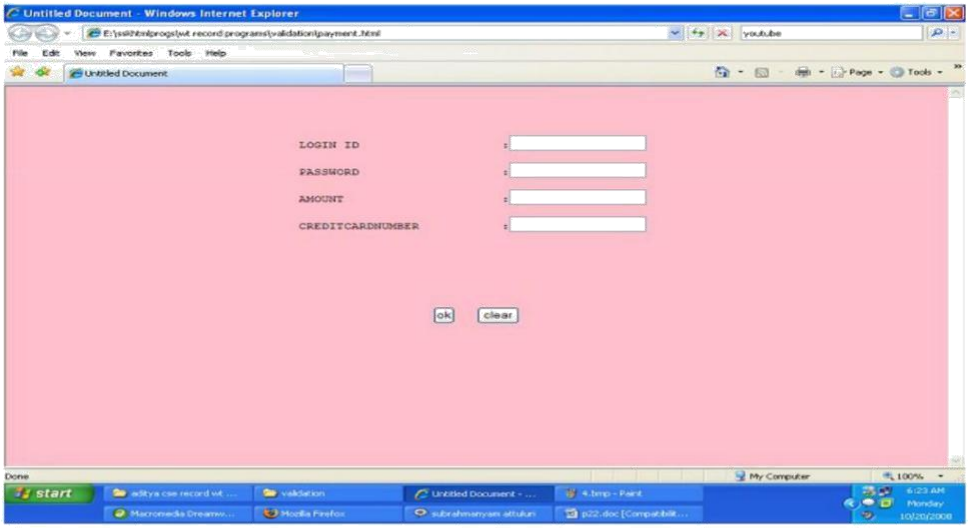
welcome to online book storage. Press login if you are having id otherwise press registration.

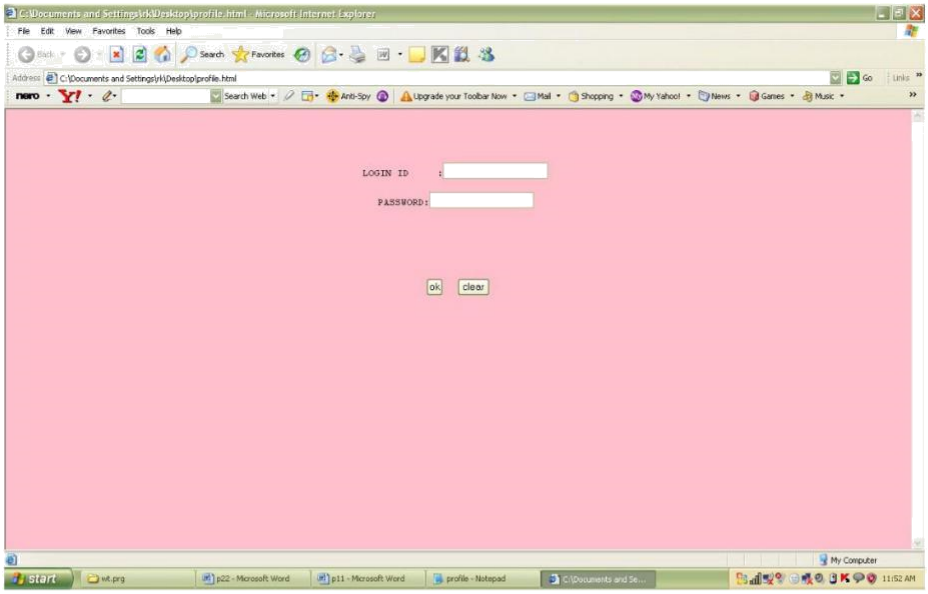



Untitled Document - Windows Internet Explorer
NAME :
ADDRESS :
CONTACT NUMBER :
LOGINID :
PASSWORD :
ok
clear


Untitled Document - Windows Internet Explorer
BOOK TITLE :
ok
clear


Untitled Document - Windows Internet Explorer
LOGIN ID :
TITLE :
NO.OF BOOKS :
COST OF BOOK :
DATE :
ok
clear


Untitled Document - Windows Internet Explorer
LOGIN ID :
PASSWORD :
AMOUNT :
CREDITCARDNUMBER :
ok
clear



Program 26:

Write a Document type definition (DTD) document for representing the structure of employee information

Emps1.dtd:

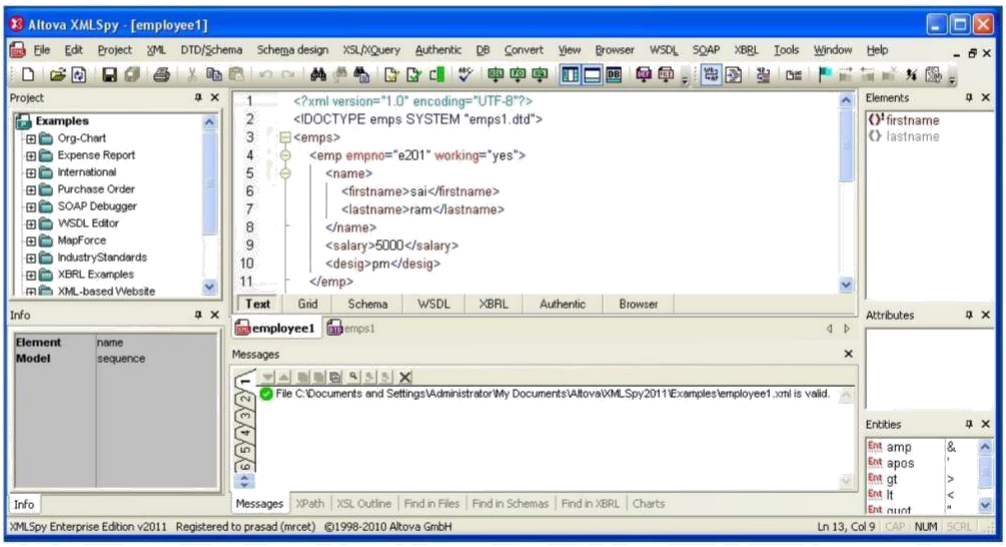
```
<?xml version="1.0" encoding="UTF-8"?>
<!ELEMENT emps (emp+,dept)>
```

```
<!ELEMENT emp (name,salary,desig)>
<!ELEMENT name (firstname,lastname)>
<!ELEMENT firstname (#PCDATA)> <!ELEMENT
lastname (#PCDATA)> <!ELEMENT salary
(#PCDATA)> <!ELEMENT desig (#PCDATA)>
<!ELEMENT dept (deptname,desc)> <!ELEMENT
deptname (#PCDATA)> <!ELEMENT desc
(#PCDATA)> <!ATTLIST emp empno ID
#REQUIRED> <!ATTLIST emp mgrid IDREF
#IMPLIED> <!ATTLIST emp working (yes | no)
'yes'> <!ATTLIST dept deptno ID #REQUIRED>
```

Employee1.xml:

```
<?xml version="1.0" encoding="UTF-
8"?> <!DOCTYPE emps SYSTEM
"emps1.dtd"> <emps>
        <emp empno="e201" working="yes">
                <name>
                        <firstname>sai</firstname>
                        <lastname>ram</lastname>
                </name>
                <salary>5000</salary>
                <desig>pm</desig>
        </emp>
        <emp empno="e202" mgrid="e201"
                working="yes"> <name>
                        <firstname>satish</firstname>
                        <lastname>kumar</lastname>

                </name>
                <salary>2000</salary>
                <desig>programmer</desig>
        </emp>
        <dept deptno="d111">
                <deptname>developing team</deptname>
                <desc>develops programs</desc>
        </dept>
</emps>
```

Output:



Program 27:

Write a xml schema document (xsd) document for representing the structure of employee information

emps2.xsd:

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs=http://www.w3.org/2001/XMLSchema
elementFormDefault="qualified"
attributeFormDefault="unqualified">
<xs:element name="emps"
        type="empstype"> <xs:annotation>
                <xs:documentation>
                        this element stores about various
                employees </xs:documentation>
        </xs:annotation>
</xs:element>
```

```
<xs:simpleType name="salarytype">
        <xs:restriction base="xs:double">
                <xs:minInclusive value="5000"></xs:minInclusive>
                <xs:maxInclusive value="35000"></xs:maxInclusive>
        </xs:restriction>
</xs:simpleType>
<xs:simpleType name="desigtype">
        <xs:restriction base="xs:string">
          <xs:enumeration value="projectmanager"></xs:enumeration>
          <xs:enumeration value="teamleader"></xs:enumeration>
          <xs:enumeration value="developer"></xs:enumeration>
        </xs:restriction>
</xs:simpleType>
<xs:simpleType name="deptnametype">
        <xs:restriction base="xs:string">
          <xs:enumeration value="testing"></xs:enumeration>
          <xs:enumeration value="design"></xs:enumeration>
          <xs:enumeration value="programming"></xs:enumeration>
        </xs:restriction>
</xs:simpleType>
<xs:simpleType name="workingtype">

        <xs:restriction base="xs:string"> <xs:enumeration
          value="yes"></xs:enumeration> <xs:enumeration
          value="no"></xs:enumeration>
        </xs:restriction>
</xs:simpleType>
<xs:attributeGroup name="empattributes">
  <xs:attribute name="empno" type="xs:ID" use="required">
  </xs:attribute>
  <xs:attribute name="mgrid" type="xs:IDREF" use="optional">
  </xs:attribute>
  <xs:attribute name="working" default="yes" use="optional"
type="workingtype">
  </xs:attribute>
</xs:attributeGroup>
<xs:complexType name="empnametype">
        <xs:sequence>
                <xs:element name="firstaname"
                type="xs:string"> </xs:element>
                <xs:element name="lastname"
                type="xs:string"> </xs:element>
        </xs:sequence>
</xs:complexType>
<xs:complexType name="emptype">
        <xs:sequence>
                <xs:element name="name" type="empnametype">
```

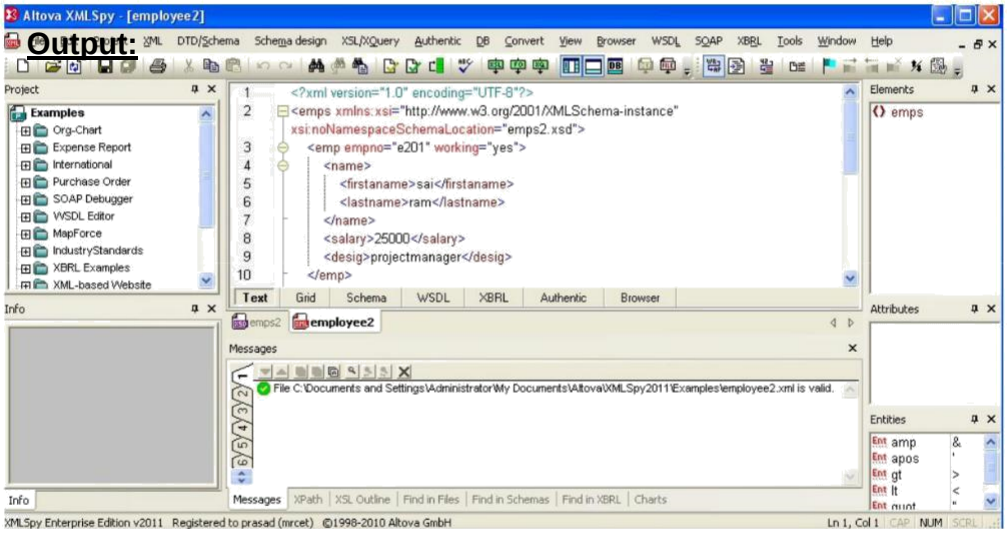
```
            </xs:element>
            <xs:element name="salary" type="salarytype">
            </xs:element>
            <xs:element name="desig"
            type="desigtype"> </xs:element>
        </xs:sequence>
        <xs:attributeGroup ref="empattributes"></xs:attributeGroup>
</xs:complexType>
<xs:complexType name="depttype">
        <xs:sequence>
            <xs:element name="name" type="deptnametype">
            </xs:element>
            <xs:element name="desc"
        type="xs:string"></xs:element> </xs:sequence>
        <xs:attribute name="deptno" use="required"></xs:attribute>

</xs:complexType>
<xs:complexType name="empstype">

            <xs:sequence>
                <xs:element name="emp" type="emptype"
                minOccurs="1" maxOccurs="20"></xs:element>
                <xs:element name="dept" type="depttype"
                minOccurs="1"></xs:element>
            </xs:sequence>
        </xs:complexType>
</xs:schema>
```

Employee2.xml:

```
<?xml version="1.0"?>
<emps xmlns="http://www.w3schools.com"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="emps2.xsd" >
        <emp empno="e201" working="yes">
            <name>
                <firstname> raj </firstname>
                <lastname> kumar </lastname>
            </name>
            <salary>10000</salary>
            <desig>projectmanager</desig>
        </emp>
        <emp empno="e102" mgrid="e201"
            working="yes"> <name>
                <firstname> durga </firstname>
                <lastname> rao </lastname>
            </name>
```

```
            <salary>16500</salary>
            <desig> teamlead </desig>
        </emp>
        <dept deptno="d101">
            <name>testing</name>
            <desc> tests the projects </desc> </dept>

</emps>
```

Output:



Program 28:

Write an xml stylesheet language document (xsl) for converting Employee markup language document to html document

Empxsl.xsl:

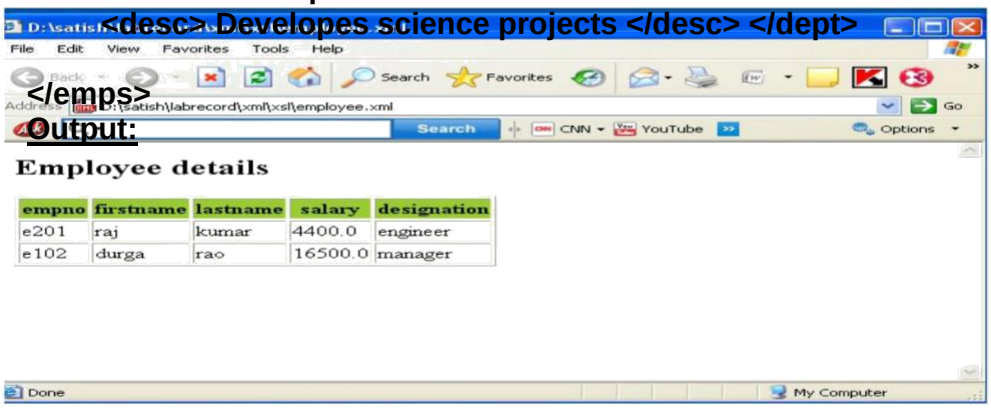
```
<?xml version="1.0" encoding="ISO-8859-1"?> <xsl:stylesheet
version="1.0"
xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
<xsl:template match="/">
   <html>
   <body>
   <h2>Employee details</h2>
      <table border="1">
         <tr bgcolor="#9acd32">
        <th>empno</th>
            <th>firstname</th>
        <th>lastname</th>
            <th>salary</th>
        <th>designation</th>
          </tr>
          <xsl:for-each select="emps/emp">
          <tr>
        <td><xsl:value-of select="@empno"/></td>
        <td><xsl:value-of select="./name/first-name"/></td>
            <td><xsl:value-of select="./name/last-
            name"/></td> <td><xsl:value-of select="sal"/></td>
        <td><xsl:value-of select="desig"/></td> </tr>

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

Employee.xml:

```
<?xml version="1.0"?>
<?xml-stylesheet href="empxsl.xsl" type="text/xsl" ?>
```

```
<emps>
   <emp empno="e201" working="yes">
      <name>
         <first-name> raj </first-name>
         <last-name> kumar </last-name>
      </name>
      <sal>4400.0</sal>
      <desig> engineer </desig>
   </emp>
   <emp empno="e102" managerid="e201" working="yes">
      <name>
         <first-name> durga </first-name>
         <last-name> rao </last-name>
      </name>
      <sal>16500.0</sal>
      <desig> manager </desig>
   </emp>
   <dept deptno="d101"> <dept-name>
      SCIENCE </dept-name>
      <desc> Developes science projects </desc> </dept>
</emps>
```

Output:



Program 29:

Write an web application to explain the servlet lifecycle

/servletlifecycle/hello.html:

```
<html>
```

```
        <body>
                <center><u><h3>Program to demonstrate lifecycle
                of servlet</h3></u></center>
                <form method="get" action="sayhello">
                        <input type="submit" value="HELLO"/>
                </form>
        </body>
</html>
```

/servletlifecycle/WEB-INF/web.xml:

```
<web-app>
      <servlet>
            <servlet-name>HS</servlet-name> <servlet-
               class>com.nit.hello.HelloServlet </servlet-class>

      </servlet>
      <servlet-mapping>
            <servlet-name>HS</servlet-name> <url-
            pattern>/sayhello</url-pattern>
      </servlet-mapping>
</web-app>
```

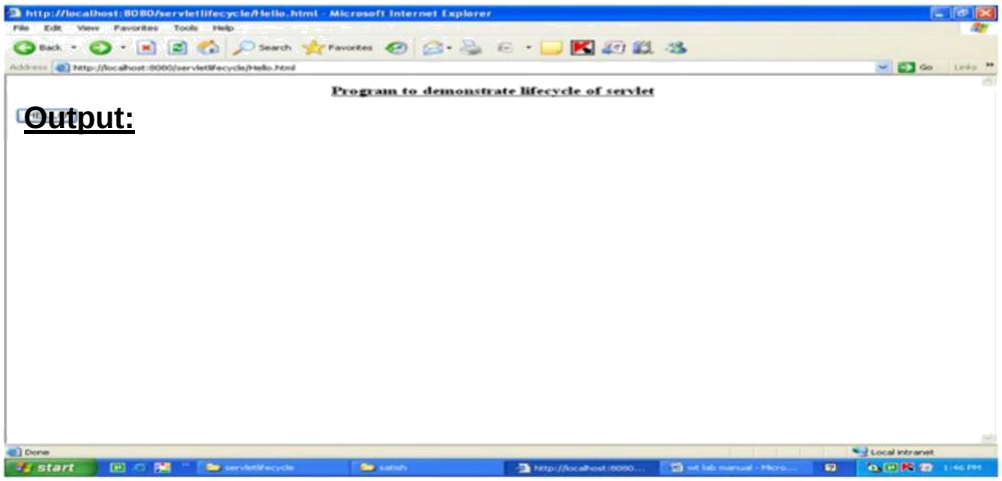
/servletlifecycle/WEB-INF/classes/HelloServlet.java:

```
package com.nit.hello;
import javax.servlet.*;
import java.io.*;
public class HelloServlet implements Servlet {

        ServletConfig sc;
        public void init(ServletConfig sc)throws ServletException

        {
                System.out.println("in init method "); this.sc=sc;

        }
    public void service(ServletRequest req,ServletResponse res) throws
                                    ServletException,IOException
        {
                System.out.println("in service method");
                PrintWriter out=res.getWriter();
                out.println("<center><h3><u>”);
                out.println("Program to demonstrate lifecycle of
                servlet </u></h3></center>");
                out.println("<b> Hello from first servlet </b> ");
        }
```

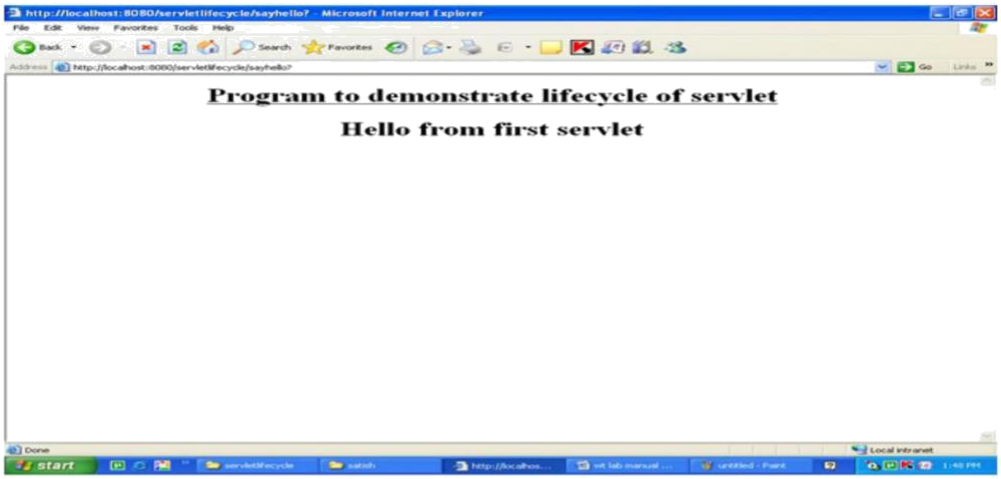
```
        public void destroy()
        {
                        System.out.println("in destroy method");
        }
        public ServletConfig getServletConfig()
        {
                return sc;
        }
        public String getServletInfo()
        {
                return "helloservlet";
        }
}
```

Compilation:

Javac -d . HelloServlet.java



Output:



Program 30:

Write an web application to explain about servlet initial parameters and context or application level parameters

/initialparameters/first.html:

```
<html>
    <body>
        <center>
            <h3>Program explaining initial parameters and
            context level parameters </h3><br/><br/>
            <a href="./wish">click here to view initial and context
            level parameters </a>
        </center>
    </body>
</html>
```

/initialparameters/WEB-INF/web.xml:

```
<web-app >
    <context-param>
        <param-name>emailid</param-name> <param-
        value>mrec@gmail.com</param-value>
    </context-param>
```

```
        <context-param>
           <param-name>drivername</param-name>
           <param-value>sun.jdbc.odbc.JdbcOdbcDriver</param-value>
        </context-param>
        <servlet>
                <servlet-name>firstexample</servlet-name>
                <servlet-class>MyServlet</servlet-class> <init-
                param>
                        <param-name>user1</param-name>
                        <param-value>cseA</param-value>
                </init-param>
                <init-param>
                        <param-name>user2</param-name>
                        <param-value>cseB</param-value>

                </init-param>
        </servlet>
        <servlet-mapping>
                <servlet-name>firstexample</servlet-name>
                <url-pattern>/wish</url-pattern>
        </servlet-mapping>
</web-app>
```

/initialparameters/WEB-INF/MyServlet.java:

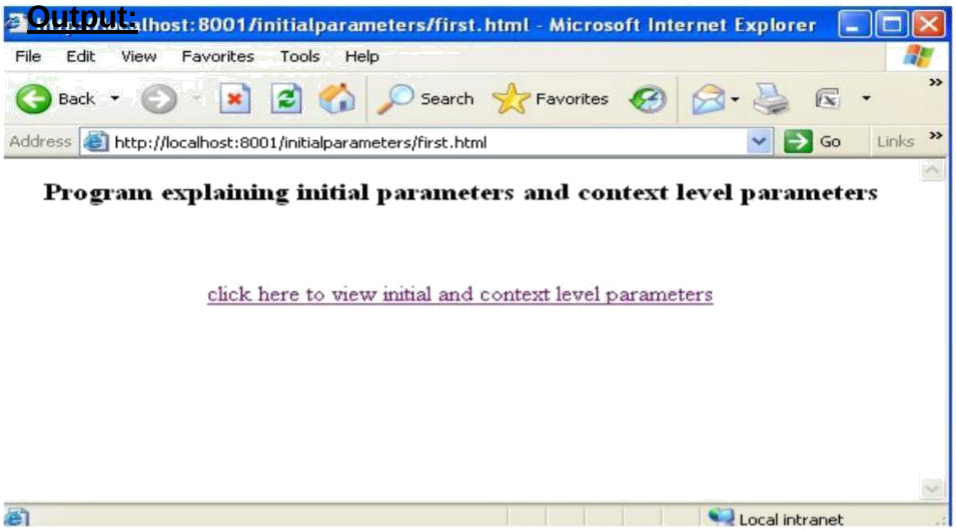
```
import javax.servlet.*;
import java.io.*;
import java.util.*;
public class MyServlet extends GenericServlet {

   public void init()throws ServletException {

        System.out.println("in init() method");
   }
   public void service(ServletRequest req,ServletResponse res)
                                    throws ServletException,IOException
   {
        System.out.println("in
        Service(servletrequest,servletresponse) method");
        res.setContentType("text/html"); PrintWriter
        out=res.getWriter(); ServletConfig
        scg=getServletConfig(); ServletContext
        sct=scg.getServletContext();
        out.println("<html><body>");
        out.println("<h3>The Context level parameters configured for
        application are:</h3><br/>");
```

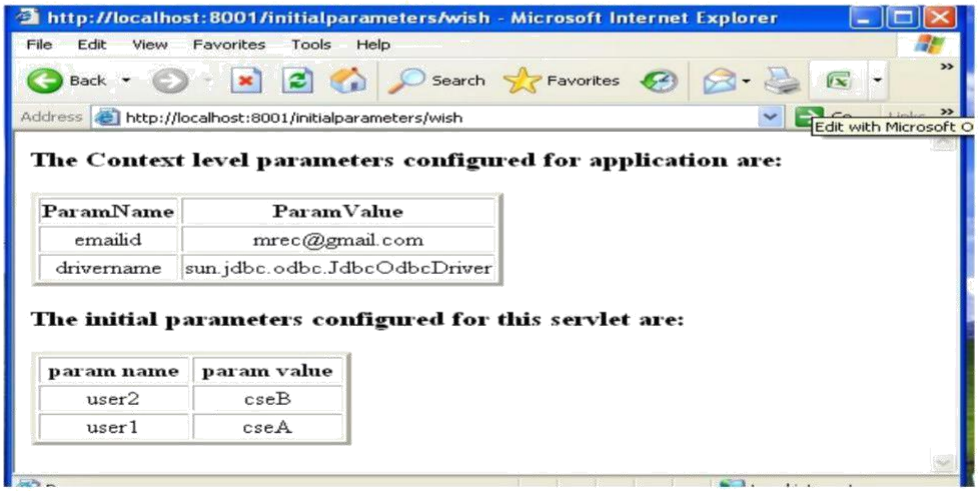
```
        out.println("<table width=\"200\"
        border=\"3\"><tr><th>ParamName</th><th>ParamValue</th></tr> ");

        Enumeration en=sct.getInitParameterNames();
        while(en.hasMoreElements()) {

                String name=(String)en.nextElement(); String
                value=sct.getInitParameter(name);



                out.println("<tr><td align=\"center\">"+ name +"</td><td
                align=\"center\">" + value + "</td></tr>");
        }
        out.println("</table>");
        out.println("<h3>The initial parameters configured for this servlet
        are:</h3><br/>"); out.println("<table width=\"200\"
        border=\"3\"><tr><th>param name</th><th>param value</th></tr>");


        Enumeration en1=scg.getInitParameterNames();
        while(en1.hasMoreElements()) {

                String name=(String)en1.nextElement(); String
                value=scg.getInitParameter(name); out.println("<tr><td
                align=\"center\">"+ name +"</td><td align=\"center\">" + value
                + "</td></tr>"); }

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

Compilation:

```
Javac MyServlet.java
```

Output:





Program 31:

Write an web application for retrieving request parameters

/requestparameters/form.html:

```
<html>
        <body>
                <center><u><h3>Program to get the request data from
                the client</h3></u></center>
                <form method="get" action="s1"> First-
                        Name:   <input type="text"
                        name="firstname"/><br/><br/> Last-
                        Name:    <input type="text"
                        name="lastname"/><br/><br/> Father-Name: <input
                        type="text" name="fathername"/><br/><br/>

                        <input type="submit" value="submit"/>
                </form>
        </body>
</html>
```

/requestparameters/WEB-INF/web.xml:

```
<web-app>
          <servlet>
             <servlet-name>HS</servlet-name> <servlet-
                  class>com.nit.reqdata.RequestData </servlet-class>

             </servlet>
             <servlet-mapping>
                  <servlet-name>HS</servlet-name>
                  <url-pattern>/s1</url-pattern>
             </servlet-mapping>
</web-app>
```

/requestparameters/WEB-INF/classes/RequestData.java:

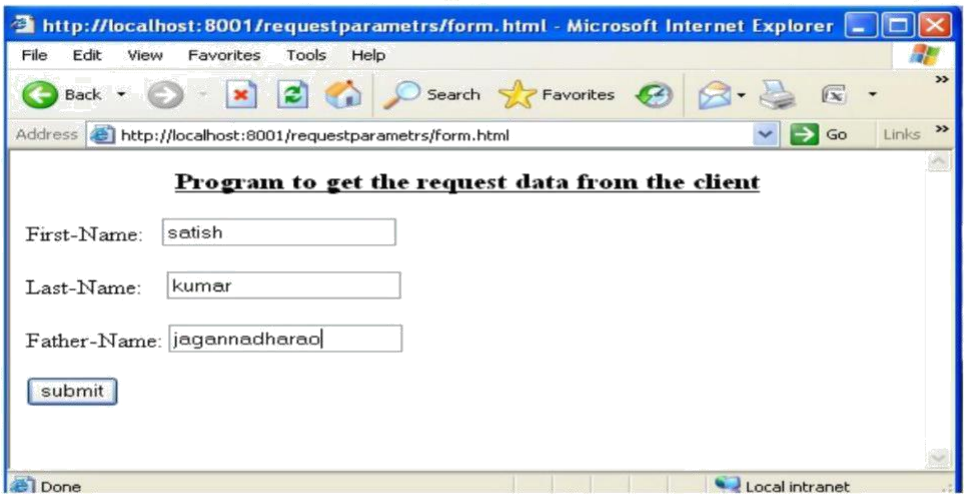
```
package com.nit.reqdata;
import java.io.*;
import javax.servlet.*;
public class RequestData extends GenericServlet {
```

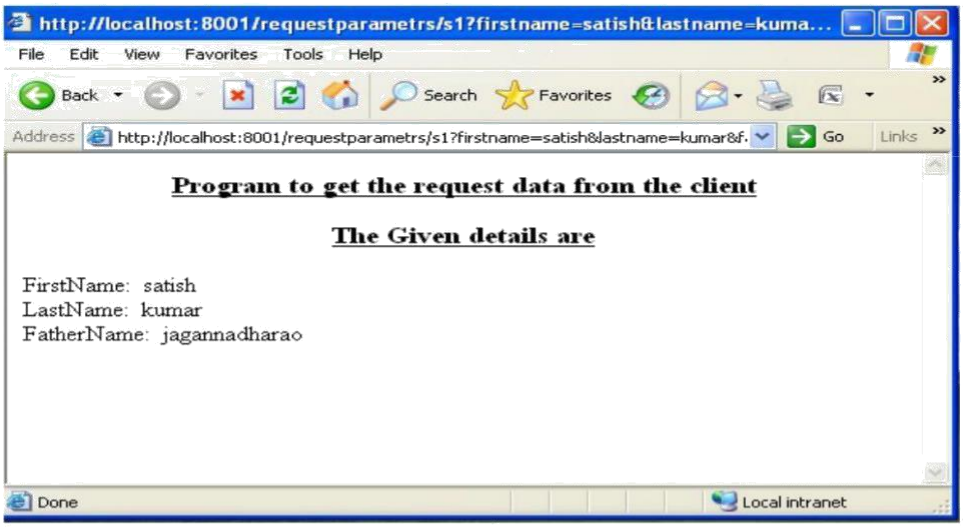
```
        public void service(ServletRequest req,ServletResponse
                        res)throws ServletException,IOException
        {
                String fn=req.getParameter("firstname");
                String ln=req.getParameter("lastname");
                String fathername=req.getParameter("fathername");
                res.setContentType("text/html");
                PrintWriter pw=res.getWriter(); pw.println("<html><body>");
                pw.println("<center><u><h3>Program to get the request

                                data from the client</h3></u></center>");
                pw.println("<center><u><h3>The Given details
                                are</h3></u></center>");
                pw.println("FirstName:  "+fn+"<br/>");
                pw.println("LastName:  "+ln+"<br/>");
                        pw.println("FatherName:  "+fathername+"<br/>
                                                                        ");
                pw.println("</html></body>");
        }
}
```

Compilation:

Javac –d . RequestData.java

Output:





Program 32:

Write an web application to create and retrieve cookies

/cookiesex/firstform.html:

<html>

```
        <body>
            <center><u><h3>Program to demonstrate use of
                        Cookies</h3></u></center>
            <form method="get" action="ser1">
               <center><h3> <u>
                   Enter cookie name and values
               </u></h3></center>
               Cookie1-name:
                   <input type="text" name="cookieonename"/>
                      
               Cookie1-value:
                   <input type="text" name="cookieonevalue"/><br/>
               Cookie2-name:
                   <input type="text" name="cookietwoname"/>
                      
               Cookie2-value:
                   <input type="text"
                   name="cookietwovalue"/> <br/><br/>
                   <input type="submit" value="submit"/>
            </form>
        </body>
</html>
```

/cookiesex/secondform.html:

```
<html>
        <body>
            <center><u><h3>
                   Program to demonstrate use of Cookies
            </h3></u></center>
            <form method="get" action="ser2">
                   <br/><br/><br/>

            <center><h3> <u>
            <a href="ser2">Click here to view the added
                          cookies</a>
            </u></h3></center>
            </form>
        </body>
</html>
```

/cookiesex/WEB-INF/web.xml:

```
<web-app>
      <servlet>
           <servlet-name>servlet1</servlet-name>
           <servlet-class>FirstServlet</servlet-class>
```

```
        </servlet>
        <servlet>
                <servlet-name>servlet2</servlet-name>
                <servlet-class>SecondServlet</servlet-class>
        </servlet>
        <servlet-mapping>
                <servlet-name>servlet1</servlet-name> <url-
                pattern>/ser1</url-pattern>
        </servlet-mapping>

        <servlet-mapping>
                <servlet-name>servlet2</servlet-name>
                <url-pattern>/ser2</url-pattern>
        </servlet-mapping>
</web-app>
```

/cookiesex/WEB-INF/classes/FirstServlet.java:

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class FirstServlet extends HttpServlet {

     public void doGet(HttpServletRequest req,HttpServletResponse
                                    res)throws ServletException,IOException
     {
        res.setContentType("text/html");
        PrintWriter pw=res.getWriter();
        String cookieonename=req.getParameter("cookieonename");
        String cookietwoname=req.getParameter("cookietwoname");
        String cookieonevalue=req.getParameter("cookieonevalue");
        String cookietwovalue=req.getParameter("cookietwovalue");
        Cookie c1=new Cookie(cookieonename,cookieonevalue);
        Cookie c2=new Cookie(cookietwoname,cookietwovalue);
        res.addCookie(c1);
        res.addCookie(c2);
        RequestDispatcher rd=
                            req.getRequestDispatcher("/secondform.html");
        rd.forward(req,res);
        }
}
```

/cookiesex/WEB-INF/classes/SecondServlet.java:

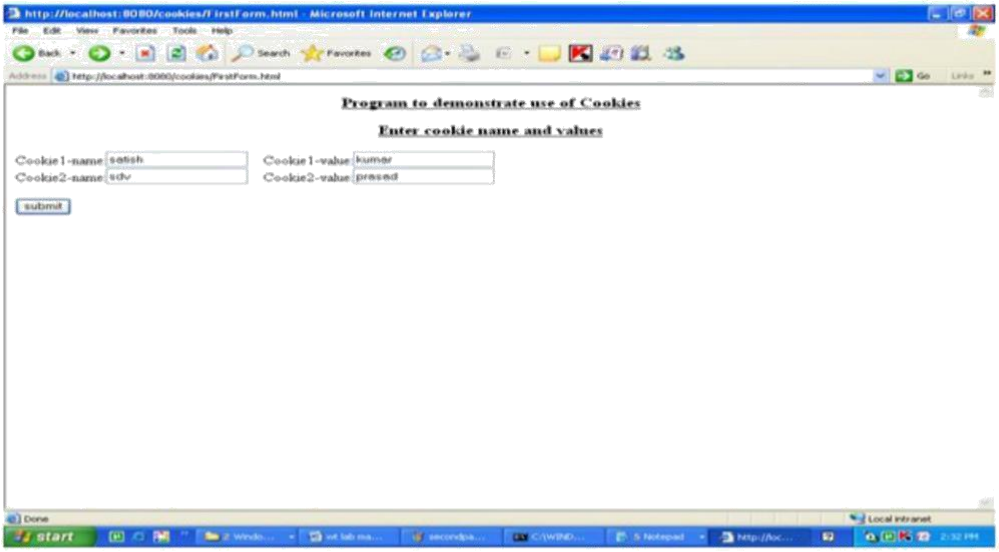
```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
```

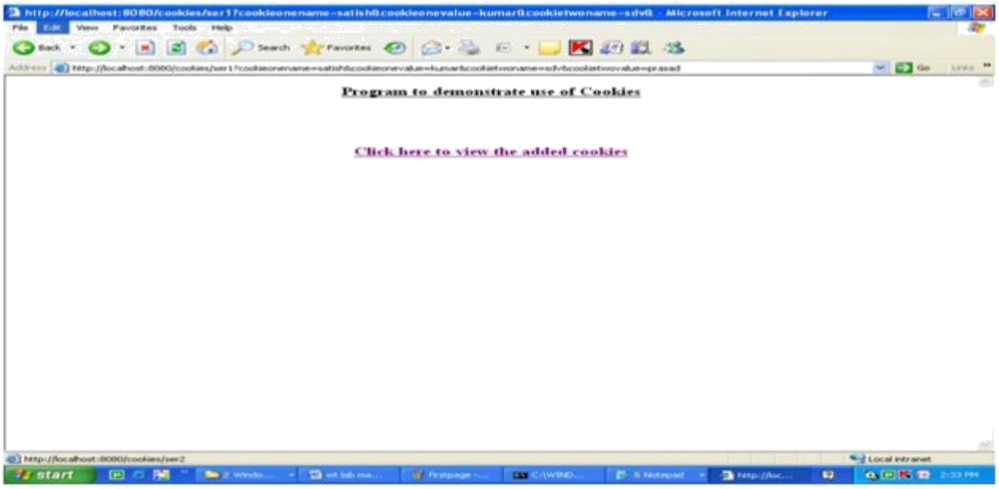
```
public class SecondServlet extends HttpServlet {

   public void doGet(HttpServletRequest req,HttpServletResponse res)throws
                                    ServletException,IOException
   {
        res.setContentType("text/html");
        PrintWriter pw=res.getWriter();
        pw.println("<html><body>");
        pw.println("<center><u><h3>Program to demonstrate Use of
                                        Cookies</h3></u></center>");
        pw.println("<center><u><h3>The Added Cookies
                                        are</h3></u></center>");
        Cookie c[]=req.getCookies();
        for(int i=0;i<c.length;i++)
        {
              pw.println("CookieName:  "+c[i].getName()+
                                                    "  ");
                          pw.println("cookievalue:  "+c[i].getValue());
              pw.println("<br/><br/>");
        }
        pw.println("<br/><br/><br/><br/>");
        pw.println("<center><h3> <u><a
                                  href=\"./firstform.html\">Click here to add more
                                                cookies</a> </u></h3></center>");
        pw.println("</html></body>");
    }
}
```

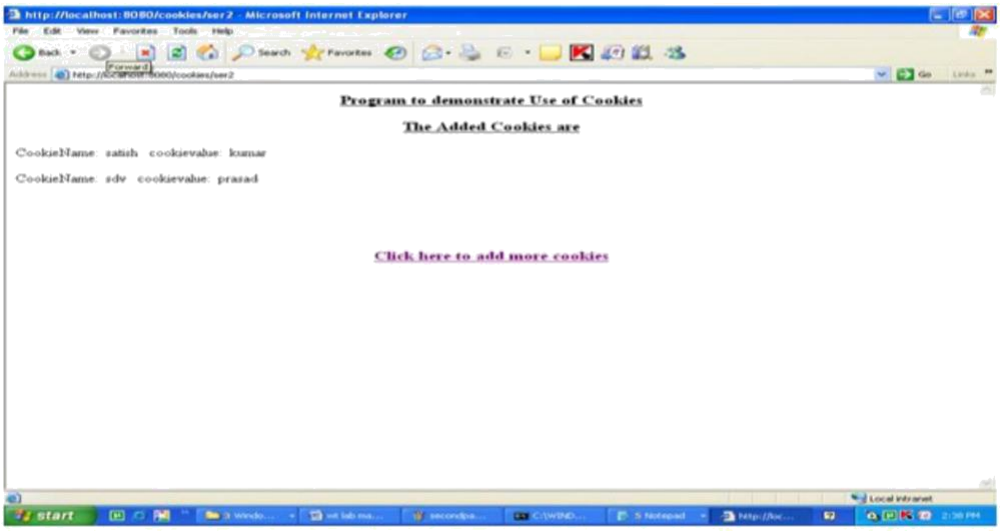
Compilation:

```
javac FirstServlet.java
javac SecondServlet.java
```

output:


http://localhost:8080/cookies/FirstForm.html - Microsoft Internet Explorer
Program to demonstrate use of Cookies
Enter cookie name and values
Cookie1-name: satish
Cookie1-value: kumar
Cookie2-name: sdv
Cookie2-value: prasad
submit


Program to demonstrate use of Cookies
Click here to view the added cookies



Program 33:

Write an web application to track user requests using HttpSession object

Session/firstform.html:

```
<html>
    <body>
        <center><u><h3>Program to demonstrate Session
                        Tracking</h3></u></center>
        <form method="get" action="ser1"> First-
            Name:   
            <input type="text" name="firstname"/><br/><br/>
            Last-Name:    
            <input type="text" name="lastname"/><br/><br/> Father-
            Name: 
            <input type="text" name="fathername"/><br/><br/> <input
            type="submit" value="submit"/>
        </form>
    </body>
</html>
```

Session/secondform.html:

```
<html>
        <body>
                <center><u><h3>
                   Program to demonstrate Session Tracking-Second Form
                </h3></u></center>
                <form method="get" action="ser2">
                        DateofBirth: 
                        <input type="text" name="dob"/><br/><br/><br/>
                        Address:     <textarea
                        name="address" cols="20" rows="5">
                        </textarea><br/><br/>
                        <input type="submit" value="submit"/>
                </form>
        </body>
</html>
```

/session/WEB-INF/web.xml:

```
<web-app>
            <servlet>
            <servlet-name>servlet1</servlet-name>
            <servlet-class>FirstServlet</servlet-class>
      </servlet>
      <servlet>
            <servlet-name>servlet2</servlet-name>
            <servlet-class>SecondServlet</servlet-class>
      </servlet>

      <servlet-mapping>
            <servlet-name>servlet1</servlet-name>
            <url-pattern>/ser1</url-pattern>
      </servlet-mapping>
      <servlet-mapping>
            <servlet-name>servlet2</servlet-name> <url-
            pattern>/ser2</url-pattern>
      </servlet-mapping>
</web-app>
```

/session/WEB-INF/classes/FirstServlet.java:

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class FirstServlet extends HttpServlet {
```

```
    public void doGet(HttpServletRequest req,HttpServletResponse res)throws
                                    ServletException,IOException
    {
        res.setContentType("text/html");
        PrintWriter pw=res.getWriter();
        HttpSession hs=req.getSession();
        String firstname=req.getParameter("firstname");
        String lastname=req.getParameter("lastname"); String
        fathername=req.getParameter("fathername");
        hs.setAttribute("firstname",firstname);
        hs.setAttribute("lastname",lastname);

        hs.setAttribute("fathername",fathername);
        RequestDispatcher rd=
                        req.getRequestDispatcher("/secondform.html");
        rd.forward(req,res);
     }
}
```

/session/WEB-INF/classes/SecondServlet.java:

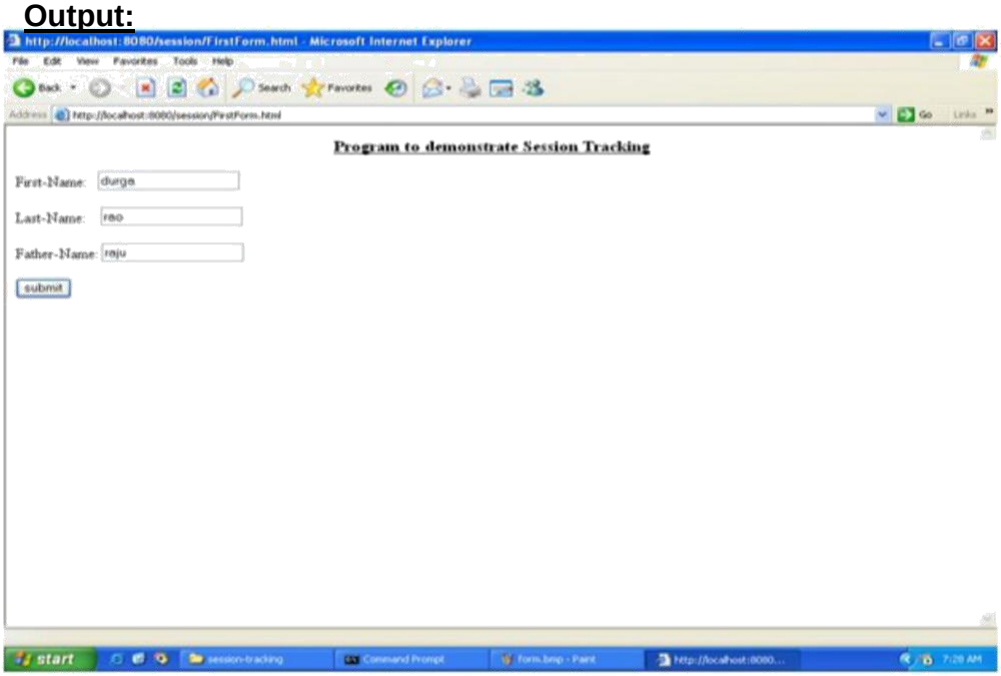
```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class SecondServlet extends HttpServlet {

    public void doGet(HttpServletRequest req,HttpServletResponse res)throws
                                    ServletException,IOException
    {
        res.setContentType("text/html");
        PrintWriter pw=res.getWriter();
        HttpSession hs=req.getSession();
        String dob=req.getParameter("dob");
        String address=req.getParameter("address");
        String firstname=(String)hs.getAttribute("firstname");
        String lastname=(String)hs.getAttribute("lastname");
        String fathername=(String)hs.getAttribute("fathername");
        pw.println("<html><body>");
        pw.println("<center><u><h3>Program to demonstrate Session
                                        Tracking</h3></u></center>");
        pw.println("<center><h3>The Details Given by you
                                        are</h3></center>");
        pw.println("First Name is:<h3>"+firstname+"</h3><br/>");
        pw.println("Last Name is:<h3>"+lastname+"</h3><br/>");
        pw.println("Father name is:<h3>"+fathername+"</h3><br/>");
        pw.println("Date of Birth:<h3>"+dob+"</h3><br/>"); pw.println("address
        is:<h3>"+address+"</h3><br/>");
```

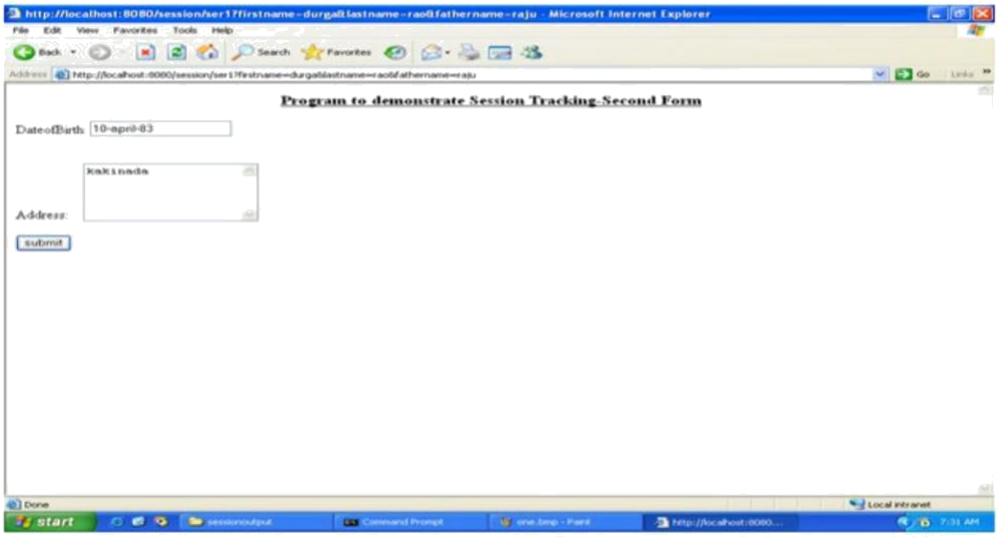
```
    }
}
```

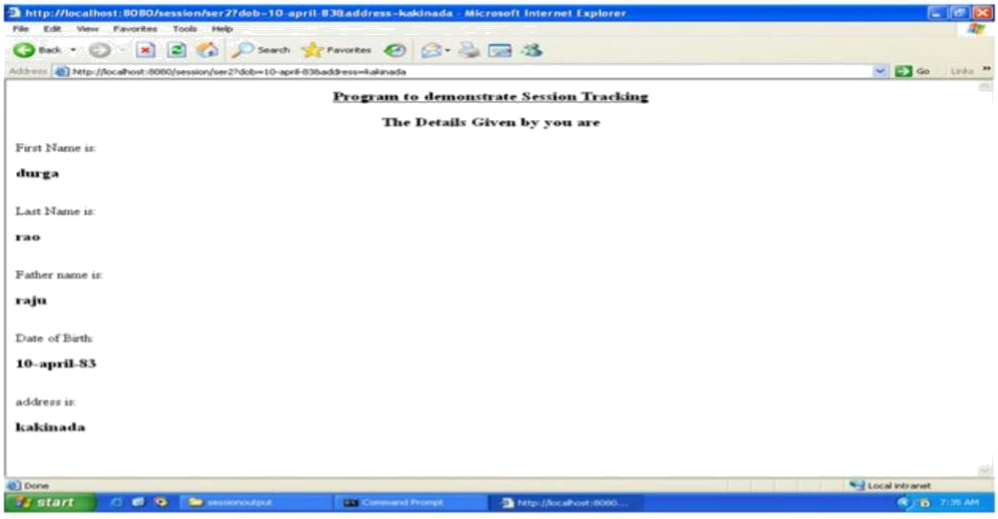
Compilation:

Javac FirstServlet.java
Javac SecondServlet.java

Output:







Program 34:

Install TOMCAT web server. Convert the static webpages of assignments 2 into dynamic webpages using servlets 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.

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 Portno 8080 is assigned for the tomcat.

Web.xml:

```
<?xml version="1.0" encoding="iso-8859-
1"?> <!DOCTYPE web-app
PUBLIC "-//Sun Microsystems, Inc.//DTD Web Application 2.3//EN"
"http://java.sun.com/dtd/web-app_2_3.dtd"> <web-app>

        <display-name>Servlet 2.4 Examples</display-name>
        <description>
        Servlet 2.4 Examples.
        </description>
        <servlet>
                <servlet-name>reg</servlet-name>
                <servlet-class>reg</servlet-class>
        </servlet>
        <servlet>
                <servlet-name>login</servlet-name>
                <servlet-class>login</servlet-class>
        </servlet>
        <servlet>
                <servlet-name>profile</servlet-name>
                <servlet-class>profile</servlet-class>
        </servlet>
```

```
        <servlet>
                <servlet-name>catalog</servlet-name>
                <servlet-class>catalog</servlet-class>
        <servlet-mapping>
                <servlet-name>order</servlet-name>
                <url-p</servlet>
        <servlet>
                <servlet-name>order</servlet-name>
                <servlet-class>order</servlet-class>
        </servlet>
        attern>order</url-pattern>
        </servlet-mapping>
        <servlet-mapping>
                <servlet-name>catalog</servlet-name> <url-
                pattern>catalog</url-pattern>
        </servlet-mapping>
        <servlet-mapping>
                <servlet-name>profile</servlet-name> <url-
                pattern>profile</url-pattern>
        </servlet-mapping>
        <servlet-mapping>
                <servlet-name>login</servlet-name> <url-
                pattern>login</url-pattern>
        </servlet-mapping>
        <servlet-mapping>
                <servlet-name>reg</servlet-name>
                <url-pattern>reg</url-pattern>
        </servlet-mapping>
</web-app>
```

Main.html:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd"> <html
xmlns="http://www.w3.org/1999/xhtml"> <body bgcolor="pink">

<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="/tr/login.html">LOGIN</a> <a
href="/tr/reg.html">
REGISTRATION</a></div></pre></body></html>
```

Login.html:

```
<html>
<body bgcolor="pink"><br /><br /><br />
<form name="myform" method="post" action="/tr/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>
```

Reg.html:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd"> <html
xmlns="http://www.w3.org/1999/xhtml"> <body bgcolor="pink"><br /><br />

<form name="myform" method="post" action="/tr/reg">
<div align="center"><pre>
NAME:<input type="text" name="name" /><br />
ADDRESS :<input type="text" name="addr" /><br />
CONTACT NUMBER :<input 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" />
</div>
</form>
</body>
</html>
```

Profile.html:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd"> <html
xmlns="http://www.w3.org/1999/xhtml"> <body bgcolor="pink"><br /><br /><br
/>
<form name="myform" method="post" action="/tr/profile"> <div
align="center"><pre>
LOGIN ID :<input type="text" name="id" /><br
/> </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>
```

Catalog.html:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0
Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-
transitional.dtd"> <html xmlns="http://www.w3.org/1999/xhtml">
<body bgcolor="pink"><br /><br /><br /> <form
method="post" action="/tr/catalog"> <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"
name="button1"/>      
<input type="reset" value="clear"                name="button2"/>
</div>
</form>
</body>
</html>
```

Order.html:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0
Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-
transitional.dtd"> <html xmlns="http://www.w3.org/1999/xhtml">
<body bgcolor="pink"><br /><br /> <form
method="post" action="/tr/reg"> <div
align="center"><pre>
NAME :<input type="text" name="name" /><br />
PASSWORD:<input type="password" name="pwd" />
TITLE:<input type="text" name="title" /><br />
NO. OF BOOKS:<input type="text" name="no" /><br />
DATE :<input type="text" name="date" /><br />
CREDIT CARD NUMBER:<input type="password" name="cno"
/><br /></pre><br /><br />
</div>
<br /><br />
<div align="center">
<input type="submit" value="ok" name="button1"/>
      <input
type="reset" value="clear" name="button2"/> </div>

</form>
</body>
</html>
```

Login.java:

```
import java.sql.*;
import java.io.*;
import java.util.*;
import javax.servlet.*;
```

```
import javax.servlet.http.*;
public class login extends HttpServlet
{

public void service(HttpServletRequest req,HttpServletResponse
                        resp)throws ServletException,IOException
{
        PrintWriter pw=resp.getWriter();
        pw.println("<html><body bgcolor=\"pink\");
        String id=req.getParamenter("id"); String
        pwd=req.getParameter("pwd"); try

        {
                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";
                ResultSet rs=stmt.executeQuery(sqlstmt); int flag=0;

                while(rs.next())
                {
                        if(id.equal(rs.getString(1))&&pwd.equals(
                                                        rs.getString(2)))
                        {
                                flag=1;
                        }
                }
                if(flag==0)
                {
                   pw.println("SORRY INVALID ID TRY AGAIN ID<br><br>");
                   pw.println("<a href=\"/tr/login.html\">press LOGIN
                                                        to RETRY</a>");
                }
                else
                {
                   pw.println("VALID LOGIN ID<br><br>");

                pw.println("<h3><ul>");
```

```
                pw.println("<li><ahref=\"profile.html\"><fontcolor=\"b
                  lack\">USER PROFILE</font> </a></li><br><br>");
                pw.println("<li><ahref=\"catalog.html\"><fontcolor=\"b
                        lack\">BOOKS CATALOG</font></a></li><br><br>");
                pw.println("<li><ahref=\"order.html\"><fontcolor=\"bla ck\">ORDER
                CONFIRMATION</font>
                        </a></li><br><br>");
             }
             pw.println("</body></html>");
          }
          catch(Exception e)
          {
                resp.sendError(500,e.toString());
          }
      }
}
```

Reg.java:

```
import java.sql.*;
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class login extends HttpServlet {

                public void service(HttpServletRequest req,HttpServletResponse
                        resp)throws ServletException,IOException
   {
        PrintWriter pw=resp.getWriter();
        pw.println("<html><body bgcolor=\"pink\");
        String name=req.getParamenter("name"); String
        addr=req.getParameter("addr"); String
        phno=req.getParameter("phno");

        String id=req.getParamenter("id"); String
        pwd=req.getParameter("pwd"); int
        no=Integer.parseInt(phno); try

        {
                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";
            ResultSet rs=stmt.executeQuery(sqlstmt); int flag=0;

            while(rs.next())
            {
                  if(id.equal(rs.getString(1))&&pwd.equals(
                                                      rs.getString(2)))
                  {
                        flag=1;
                  }
            }
            if(flag==1)
            {
                  pw.println("SORRY INVALID ID ALREADY EXITS TRY
                                          AGAIN WITH NEW ID<br><br>");
                  pw.println("<a href=\"/tr/reg.html\">press REGISTER to
                                          RETRY</a>");
            }
            else
            {
                  Statement stmt1=con.createStatement();
                  stmt1.executeUpdate("insert into login
                        values("+names","+addr+","+no+","+id+","+pwd +")");


                  pw.println("YOUR DETAILS ARE ENTERED<br><br>");
                  pw.println("<a href=\"/tr/login.html\">press
                                          LOGIN to login</a>");
            }
            pw.println("</body></html>");
      }
      catch(Exception e)
      {
            resp.sendError(500,e.toString());
      }
}
```

```
}
```

Catlog.java:

```
import java.sql.*;
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class login extends HttpServlet {

    public void service(HttpServletRequest req,
                                HttpServletResponse resp)
                                throws ServletException,IOException
  {
      PrintWriter pw=resp.getWriter();
      pw.println("<html><body bgcolor=\"pink\");
      String title=req.getParameter("title"); try

      {
            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";
      ResultSet rs=stmt.executeQuery(sqlstmt); int flag=0;

      while(rs.next())
      {
            pw.println(",div align=\"center\">");
            pw.println("TITLE:"+rs.getString(1)+"<br>");
            pw.println("AUTHOR :"+rs.getString(2)+"<br>");
            pw.println("VERSION :"+rs.getString(3)+"<br>");
            pw.println("PUBLISHER          :"+rs.getString(4)+"<br>");
            pw.println("COST               :"+rs.getString(5)+"<br>");
            pw.println("</div");
            flag=1;
```

```
        }
        if(flag==0)
        {
                pw.println("SORRY INVALID TITLE TRY AGAIN <br><br>");
                pw.println("<a href=\"/tr/catalog.html\">press HERE to
                                        RETRY</a>");
        }
                pw.println("</body></html>");
     }
     catch(Exception e)
     {
        resp.sendError(500,e.toString());
     }
  }
}
```

Profile.java:

```
import java.sql.*;
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class login extends HttpServlet {

                        public void service(HttpServletRequest
                         req, HttpServletResponse resp)throws
                                        ServletException,IOException
   {
        PrintWriter pw=resp.getWriter();
        pw.println("<html><body bgcolor=\"pink\");
        String id=req.getParamenter("id"); try

        {
           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 * from login where id="+id+""; ResultSet
            rs=stmt.executeQuery(sqlstmt); int flag=0;

            pw.println("<br><br><br>");
            while(rs.next())
            {
                pw.println("<div align=\"center\">");
                pw.println("NAME :"+rs.getString(1)+"<br>");
                pw.println("ADDRESS :"+rs.getString(2)+"<br>");
                pw.println("PHONE NO          :"+rs.getString(3)+"<br>");
                pw.println("</div>");
                flag=1;

                }
                if(flag==0)
                {
                   pw.println("SORRY INVALID ID TRY AGAIN ID<br><br>");
                   pw.println("<a href=\"/tr/profile.html\">press HERE
                                                              to RETRY</a>");
                }
                pw.println("</body></html>");
        }
        catch(Exception e)
        {
                resp.sendError(500,e.toString());
        }
    }
}
```

Order.java:

```
import java.sql.*;
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class login extends HttpServlet {
```

```
                public void service(HttpServletRequest req,HttpServletResponse
                                                resp)throws ServletException,IOException
{
    PrintWriter pw=resp.getWriter();
    pw.println("<html><body bgcolor=\"pink\");
    String id=req.getParamenter("id"); String
    pwd=req.getParameter("pwd"); String
    title=req.getParameter("title"); String
    count1=req.getParameter("no"); String
    date=req.getParameter("date");

    String cno=req.getParameter("cno");
    int count=Integer.parseInt(count1);
    try
    {
        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"; ResultSet
        rs=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)
        {
           pw.println("SORRY INVALID ID TRY AGAIN D<br><br>");
           pw.println("<a href=\\"/tr/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;
                pw.println("AMOUNT:"+amount+"<br><br><br>");
                Statement stmt1=con.createStatement();
                stmt1.executeUpdate("insert into details
              values('"+id+"','"+title+"'+amount+"','"+cno+"')");
                pw.println("YOUR ORDER has taken<br>");
              }
              if(flag1==0)
              {
                pw.println("SORRY INVALID ID TRY AGAIN ID<br><br>");
                pw.println("<a href=\\"/tr/order.html\\">press HERE
                                                          to RETRY</a>");
              }
          }
          pw.println("</body></html>");
          con.close();
      }
      catch(Exception e)
      {
          resp.sendError(500,e.toString());
      }
  }
```

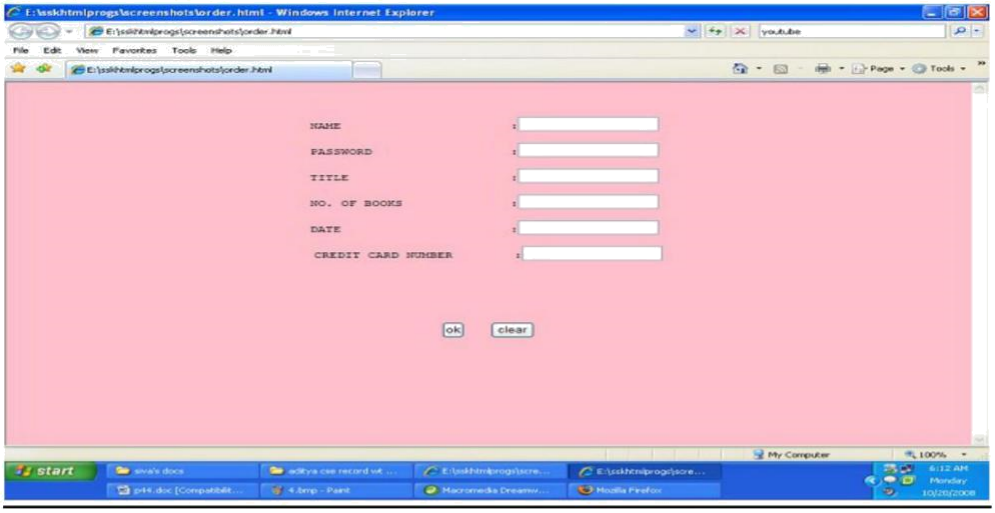
Output:


E:\sskhtmlprogs\screenshots\login.html - Windows Internet Explorer
LOGIN ID :
PASSWORD :
ok
clear


E:\sskhtmlprogs\screenshots\reg.html - Windows Internet Explorer
NAME :
ADDRESS :
CONTACT NUMBER :
LOGINID :
PASSWORD :
ok
clear


E:\sskhtmlprogs\screenshots\profile.html - Windows Internet Explorer
LOGIN ID :
ok
clear


E:\sskhtmlprogs\screenshots\catalog.html - Windows Internet Explorer
BOOK TITLE :
ok
clear



Program 35:

Write a Program to Explain Accessing Java Beans From Java Server Pages

/javabeans/firstpage.html:

<html>

```
        <body>
          <center><u><h3>
               Program to demonstrate accessing javabeans from jsp
          </h3></u></center>
          <form action="First.jsp">
               First-name:<input type="text" name="firstName"/> <br/><br/>

               Last-Name:<input type="text"
               name="lastName"/> <br/></br>
               Dateofbirth:<input type="text" name="dob"/><br/><br/>
               Address:<textarea name="address" rows="5"
               cols"10"/> </textarea><br/><br/>
               <input type="submit" value="submit"/>
          </form>
        </body>
</html>
```

/javabeans/First.jsp:

```
<html>
        <body>
          <center><u><h3>
               Program to demonstrate accessing javabeans from jsp
          </h3></u></center><br/><br/>
        <%@page language="java" import="com.nit.beans.FirstBean"
          %> <jsp:useBean id="bean" scope="session"
                                        class="com.nit.beans.FirstBean">
               <jsp:setProperty name="bean" property="*"/>
        </jsp:useBean>



        <center><a href="Second.jsp">
               <h2>click here to view Details</h2></a> </center>

   </body>
</html>
```

/javabeans/Second.jsp:

```
<html>
        <body>
          <center><u><h3>
               Program to demonstrate accessing javabeans from jsp
        </h3></u></center><br/><br/>
        <%@ page import="com.nit.beans.FirstBean"
        %> <jsp:useBean id="bean" scope="session"
```

```
                        class="com.nit.beans.FirstBean"/>
        FirstName is:   
        <jsp:getProperty name="bean" property="firstName"/>
        <br/><br/>
        LastName is:   
        <jsp:getProperty name="bean" property="lastName"/>
        <br/><br/>
        Dateofbirth is:   
        <jsp:getProperty name="bean" property="dob"/><br/><br/>
        address is:   
        <jsp:getProperty name="bean" property="address"/><br/><br/> </body>

</html>
```

/javabeans/WEB-INF/web.xml:

```
<web-app/>
```

/javabeans/WEB-INF/classes/FirstBean.java:

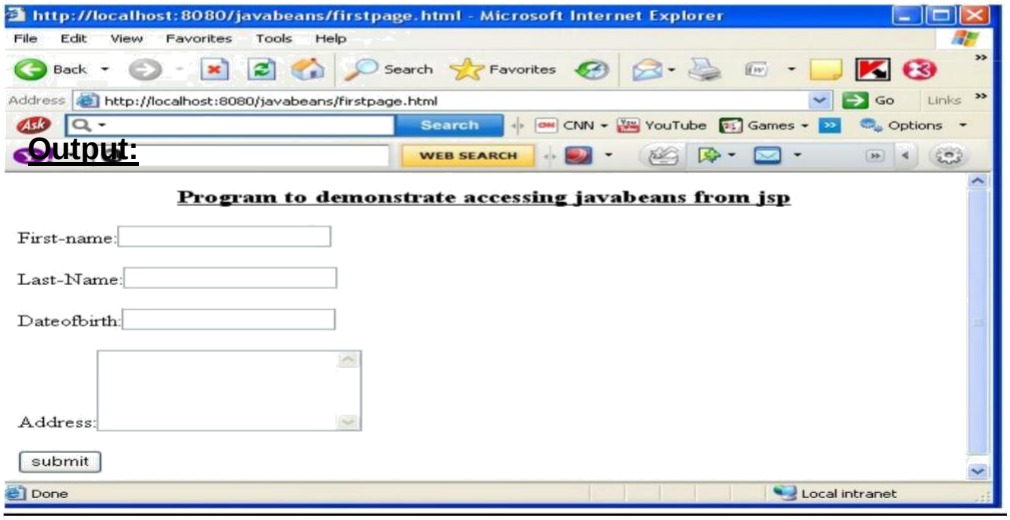
```
package com.nit.beans;
public class FirstBean
{
        private String firstName,lastName,address,dob;


        public void setFirstName(String fname)
        {
                firstName=fname;
        }
        public String getFirstName()
        {
                return firstName;
        }
        public void setLastName(String lname)
        {
                lastName=lname;
        }
        public String getLastName()
        {
                return lastName;
        }
        public void setAddress(String addr)
        {
                address=addr;
        }
        public String getAddress()
```

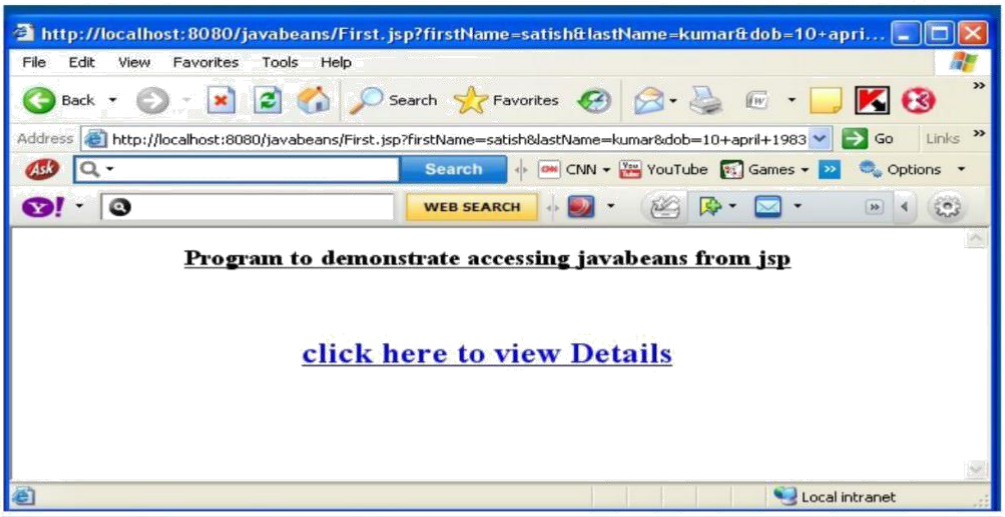
```
    {
        return address;
    }
    public void setDob(String d)
    {
        dob=d;
    }
    public String getDob()
    {
        return dob;
    }
}
```

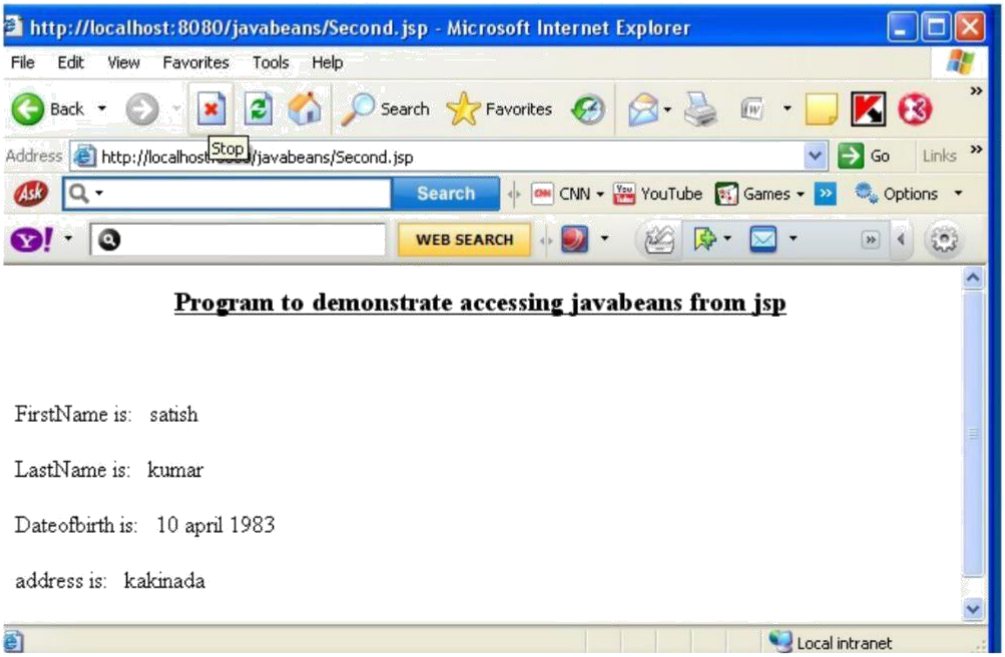
Compilation:

Javac –d . FirstBean.java

Output:




http://localhost:8080/javabeans/First.jsp?firstName=satish&lastName=kumar&dob=10+apri...
File Edit View Favorites Tools Help
Back Search Favorites
Address http://localhost:8080/javabeans/First.jsp?firstName=satish&lastName=kumar&dob=10+april+1983
Go Links
Search CNN YouTube Games Options
WEB SEARCH
Program to demonstrate accessing javabeans from jsp
click here to view Details
Local intranet


http://localhost:8080/javabeans/Second.jsp - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Stop
Address http://localhost:8080/javabeans/Second.jsp
Go Links
Search CNN YouTube Games Options
WEB SEARCH
Program to demonstrate accessing javabeans from jsp
FirstName is: satish
LastName is: kumar
Dateofbirth is: 10 april 1983
address is: kakinada
Local intranet

Program 36:

Redo the previous task using JSP by converting the static web pages of assignments 2 into dynamic web pages. Create a database with user information and books 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

4) at I.E give url as http://localhost:8081/tr1/main.html Main.html:

```
<html>
<body bgcolor=”pink”>
<br><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=”/tr/login.html”>LOGIN</a>
  href=”/tr/login.html”>REGISTRATION</a></div></pre>
  </body></html>
```

Login.html:

```
<html>
          <body bgcolor=”pink”><br><br><br>
         <form name="myform" method="post" action=/tr1/login.jsp"> <div
         align="center"><pre>
         LOGINID: <input type="passwors" name="pwd"></pre><br><br>
         PASSWORD:<input type="password" name="pwd"></pre><br><br>
         </div>
         <br><br>
         <div align="center">
         <inputtype="submit"value="ok" onClick="validate()">
               
        <input type="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"><pre>
            NAME :<input type="text" name="name"><br> ADDRESS
            :<input type="text" name="addr"><br> CONTACT NUMBER
            : <input type="text" name="phno"><br> LOGIN ID : <input
            type="text" name="id"><br>
            PASSWORD:<inputtype="password" name="pwd">
            </pre><br><br>
            </div>
            <br><br>
            <div align="center">
            <inputtype="submit"value="ok" onClick="validate()">()">
                  <input type="reset"
            value="clear"> </form>

          </body>
        </html>
```

file.html:

```
<html>
  <body bgcolor="pink"><br><br>
  <form name="myform"
                        method="post" action="/tr1/profile.jsp">
  <div align="center"><pre>
    LOGIN ID : <input type="text" name="id"><br>
    </pre><br><br>
    </div>
    <br><br>
    <div align="center">
    <inputtype="submit"value="ok" onClick="validate()">()">
            
     <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"><pre>
   BOOK TITLE : <input type="text" name="title"><br>
   </pre><br><br>
   </div>
   <br><br>
   <div align="center">
   <input type="submit" value="ok" name=”button1”>
             
    <input type="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"><pre>
         LOGIN ID :<input type="text" name="id"><br> PASSWORD :
         <input type="password" name="pwd"><br>
         TITLE        :<input type="text" name="title"><br>
         NO. OF BOOKS   : <input type="text" name="no"><br>
         DATE               : <input type="text" name="date"><br>
           CREDITCARDNUMBER:<input type="password" name="cno">
                                  <br></pre><br><br>
         </div>
         <br><br>
         <div align="center">
            <input type="submit" value="ok" name=”button1”>
                          
          <input type="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+””;
     ResultSet rs=stmt.executeQuery(sqlstmt); int
     flag=0;

    while(rs.next())
     {
        flag=1;
     }
     if(flag==0)
     {
        out.println(“SORRYINVALID ID TRY AGAIN
        ID<br>”); out.println(“<a href=\”/tr1/login.html\”>
```

```
                                                press LOGIN to RETRY</a>”);
            }
            else
            {
               out.println(“VALID LOGIN ID<br><br>”);
               out.println(“<h3><ul>”);
               out.println(“<li><ahref=\”profile.html\”>
                                        <fontcolor=\”black\”>USER
                                PROFILE</font></a></li><br><br>”);
               out.println(“<li><ahref=\”catalog.html\”>
                                        <fontcolor=\”black\”>BOOKS
                                CATALOG</font></a></li><br><br>”);

           out.println(“<li><ahref=\”order.html\”><fontcolor=\”bl
           ack\”>ORDER CONFIRMATION</font></a></li><br><br>”);
                    out.println(“</ul>”);
              }
              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”;
 ResultSet rs=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><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.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 login where id="+id+""; ResultSet
             rs=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("SORRYINVALID ID TRY AGAIN ID <br><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 ();
        Stringsqlstmt="select * from book where title="+title+"";
        ResultSet rs=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><br>");
              out.println("<a href=\"/tr1/catalog.html\">press HERE
                                                          to RETRY </a>");
        }
        out.println ("</body></html>");
```

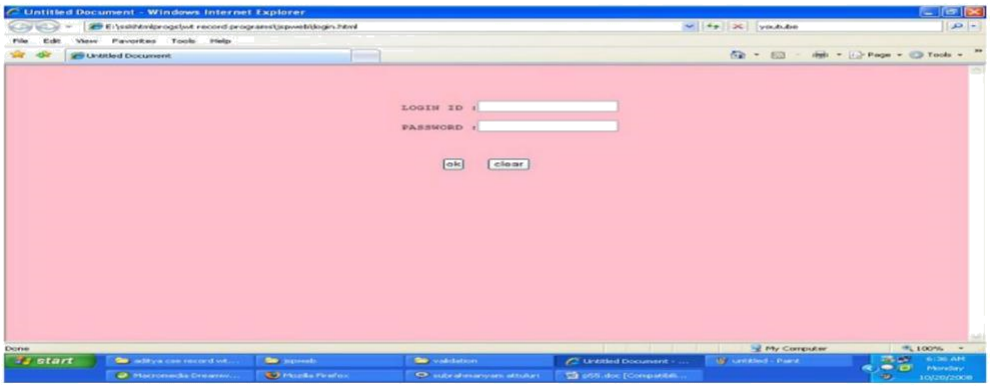
```
%>
```

Order.jsp:

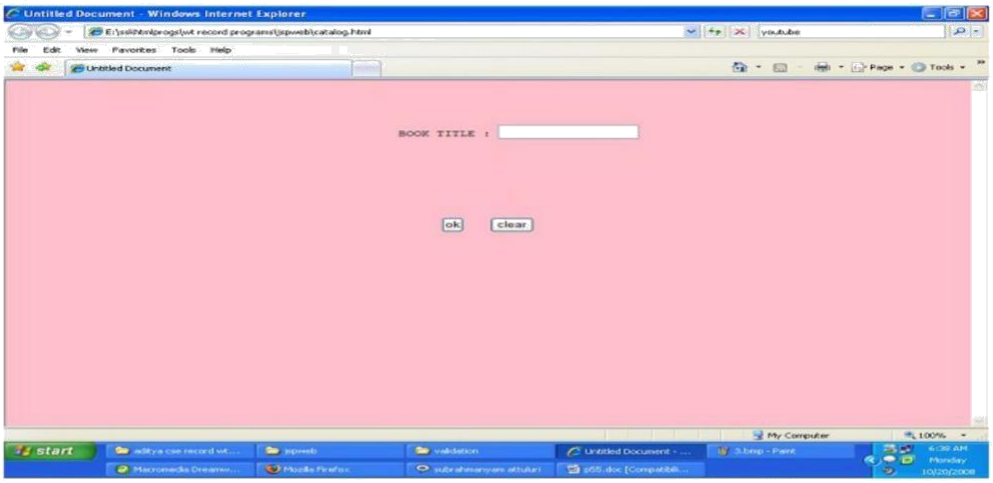
```
<%@page import="java.sql.*"%>
<%@page import="java.io.*"%>
<%
        out.println ("<html><body bgcolor=\"pink\">"); String
        id=request.getParameter ("id"); String
        pwd=request.getParameter ("pwd"); String
        title=request.getParameter ("title"); String
        count1=request.getParameter ("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"; ResultSet
        rs=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>"); Statement
                    stmt1=con.createStatement (); stmt1.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><br>");
            out.println("<a href=\"/tr1/order.html\">press HERE to
                                                        RETRY </a>");
        }
    }
    out.println ("</body></html>");
%>
```

Output:


Untitled Document - Windows Internet Explorer
LOGIN ID :
PASSWORD :
ok
clear


Untitled Document - Windows Internet Explorer
NAME :
ADDRESS :
CONTACT NUMBER :
LOGIN ID :
PASSWORD :
ok
clear



Program 37:

Write a jdbc program to retrieve empno,ename,job from the emp Table

ResultSetEx.java:

```
import java.sql.*;
public class ResultSetEx
{
   public static void main(String args[]) throws Exception {

        Class.forName("oracle.jdbc.driver.OracleDriver");
        Connection con=DriverManager.getConnection("jdbc:
                oracle:thin:@localhost:1521:mrec","scott","tiger");
        Statement st=con.createStatement();
        ResultSet rs=st.executeQuery("select empno,ename,job from emp");

        while(rs.next())
        {
                int no=rs.getInt(1);
                String name=rs.getString(2); String job=rs.getString("job");
                System.out.println(no+"\t"+name+"\t"+job+"\n");

        }
        rs.close();
        st.close();
        con.close();
   }
}
```

Compilation:

```
Javac ResultSetEx.java
```

Execution:

```
Java ResultSetEx
```

Output:

```
7369   SMITH       CLERK
7499   ALLEN       SALESMAN
7521   WARD        SALESMAN
7566   JONES       MANAGER
7654   MARTIN      SALESMAN
7698   BLAKE       MANAGER
7782   CLARK       MANAGER
7788   SCOTT       ANALYST
7839   KING        PRESIDENT
7844   TURNER      SALESMAN
7876   ADAMS       CLERK
```

```
7900 JAMES      CLERK
7902 FORD       ANALYST
7934 MILLER     CLERK
```

Program 38:

Write a jdbc program to insert empno,empname,job into emp table using PreparedStatement

InsertEx.java:

```
import java.sql.*;
public class InsertEx
{
   public static void main(String args[]) throws Exception {

        Class.forName("oracle.jdbc.driver.OracleDriver");
        Connection con=DriverManager.getConnection("jdbc:
                oracle:thin:@localhost:1521:mrec","scott","tiger");
        PreparedStatement ps=con.prepareStatement("insert into
                                        emp(empno,ename,job) values(?,?,?)");
```

```
        ps.setInt(1,101);
        ps.setString(2,"satish");
        ps.setString(3,"teamlead");
        int i=ps.executeUpdate();
        System.out.println("row inserted successfully");
        ps.setInt(1,201);
        ps.setString(2,"prasad");
        ps.setString(3,"manager");
        i+=ps.executeUpdate();
        System.out.println(i+"rows inserted successfully");
        con.close();
    }
}
```

Compilation:
Javac InsertEx.java
Execution:
Java InsertEx

Output:
row inserted successfully
2rows inserted successfully

Program 39:

Write a jdbc program to retrieve data from a given table name using ResultSetMeatData interface

RSMDEX.java:

```
import java.sql.*;
import java.util.*;
public class RSMDEX
{
    public static void main(String s[])throws Exception {

        String tablename=s[0];
        Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
        Connection con=DriverManager.getConnection("jdbc:
                                        odbc:cseb","scott","tiger");
        Statement st=con.createStatement();
        ResultSet rs=st.executeQuery("select                    * from "+tablename);
        ResultSetMetaData rsmd=rs.getMetaData();
        int col_count=rsmd.getColumnCount();
        System.out.println("----------------------------------                    ");
        for(int i=1;i<=col_count;i++)
```

```
    {
            System.out.print(rsmd.getColumnName(i) + "\t");
    }
    System.out.println();
    System.out.println(" ---------------------------------------- ");
    while(rs.next())
    {
            for(int i=1;i<=col_count;i++)
            {
                int type=rsmd.getColumnType(i);
                if(type==Types.INTEGER)
                {
                    System.out.print(rs.getInt(i) + "\t");
                }
                else if(type==Types.DOUBLE)
                {

                    System.out.print(rs.getDouble(i) + "\t");
                }
                else
                {
                    System.out.print(rs.getString(i) + "\t");
                }
            }
            System.out.println();
        }
    }
}
```

Output:

```
-----------------------------------
DEPTNO      DNAME              LOC
-----------------------------------
   10       ACCOUNTING         NEW YORK
   20       RESEARCH           DALLAS
   30       SALES              CHICAGO
   40       OPERATIONS         BOSTON
```