

WEB TECHNOLOGIES LAB

M.Sc. Computer Science

PRACTICAL – II

FIRST YEAR, SEMESTER-II, PAPER-VII

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WEB TECHNOLOGIES LAB

First Edition : 2025

No. of Copies :

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Published by:

Prof. V. VENKATESWARLU

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Centre for Distance Education,

Acharya Nagarjuna University

Printed at:

FOREWORD

Since its establishment in 1976, Acharya Nagarjuna University has been forging ahead in the path of progress and dynamism, offering a variety of courses and research contributions. I am extremely happy that by gaining 'A+' grade from the NAAC in the year 2024, Acharya Nagarjuna University is offering educational opportunities at the UG, PG levels apart from research degrees to students from over 221 affiliated colleges spread over the two districts of Guntur and Prakasam.

The University has also started the Centre for Distance Education in 2003-04 with the aim of taking higher education to the door step of all the sectors of the society. The centre will be a great help to those who cannot join in colleges, those who cannot afford the exorbitant fees as regular students, and even to housewives desirous of pursuing higher studies. Acharya Nagarjuna University has started offering B.Sc., B.A., B.B.A., and B.Com courses at the Degree level and M.A., M.Com., M.Sc., M.B.A., and L.L.M., courses at the PG level from the academic year 2003-2004 onwards.

To facilitate easier understanding by students studying through the distance mode, these self-instruction materials have been prepared by eminent and experienced teachers. The lessons have been drafted with great care and expertise in the stipulated time by these teachers. Constructive ideas and scholarly suggestions are welcome from students and teachers involved respectively. Such ideas will be incorporated for the greater efficacy of this distance mode of education. For clarification of doubts and feedback, weekly classes and contact classes will be arranged at the UG and PG levels respectively.

It is my aim that students getting higher education through the Centre for Distance Education should improve their qualification, have better employment opportunities and in turn be part of country's progress. It is my fond desire that in the years to come, the Centre for Distance Education will go from strength to strength in the form of new courses and by catering to larger number of people. My congratulations to all the Directors, Academic Coordinators, Editors and Lesson-writers of the Centre who have helped in these endeavors.

*Prof. K. Gangadhara Rao
M.Tech., Ph.D.,
Vice-Chancellor I/c
Acharya Nagarjuna University.*

SEMESTER II
PRACTICAL - II
207CP24 WEB TECHNOLOGIES LAB
Syllabus

1. Develop and demonstrate a HTML document that illustrates the use external style sheet, ordered list, table, borders, padding, color, and the tag.
2. Write HTML code to provide intra document linking.
3. Create a form with the following specifications
 - a. Our form uses frames, one to hold the links bar at the top of the browser window.
 - b. Other is a larger frame that provides the main view.
 - c. The links. bar should contain 5 links, which when clicked, should display the appropriate HTML file in the larger frame.
4. to create a webpage with the following using html a. to embed an image in web page b. to fix the hot spots c. show all the related information when a hot spot is clicked in the map
5. Develop a HTML Form, which accepts any Mathematical expression. Write JavaScript code to Evaluates the expression and Displays the result.
6. Create a HTML form that has number of Textboxes. When the form runs in the Browser fill the textboxes with data. Write JavaScript code that verifies that all textboxes has been filled. If a textboxes has been left empty, popup an alert indicating which textbox has been left empty.
7. Write a JavaScript code to find the sum of N natural Numbers. (Use user-defined function)
8. Write a JavaScript code to find factorial of N. (Use recursive function)
9. Write a JavaScript code block using arrays and generate the current date in words, this should include the day, month and year.
10. Create a web page using two image files, which switch between one another as the mouse pointer moves over the images. Use the onMouseOver and onMouseOut event handlers.
11. Design an XML document to store information about a student in an engineering college affiliated to ANU. The information must include college id, Name of the College, Brach, Year of Joining, and e-mail id. Make up sample data for 3 students. Create a CSS style sheet and use it to display the document.
12. Create an XML document, which contains 10 users information. Implement a program, which takes User Id as an input and returns the user details by taking the user information from the XML document.
13. write a program for implementing student information using XML
14. write a java program to illustrate java to database connectivity using JDBC
15. Write a program to print the Fibonacci numbers using RMI.
16. Write a program using RMI to access the database using the primary key value and return the data to the client.
17. Write a html program for invoking servlet from applet
18. write a java servlet program to conduct online examination and to display student mark list available in a database.
19. Create a java program to create an airline reservation service and a travel agent and the travel agent is searching for an airline using web services and database.
20. Write a JSP program to calculate income tax, login and data capture.

SEMESTER-II (207CP24)
207CP24 WEB TECHNOLOGIES LAB

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- 1. Basics.css**
- 2. Write HTML code to provide intra document linking**
- 3. Create a form with the following specifications**
- 4. To create a webpage with the following using html**
- 5. Develop a HTML Form, which accepts any Mathematical expression. Write JavaScript code to Evaluates the expression and Displays the result.**
- 6. Create a HTML form that has number of Textboxes**
- 7. Write a JavaScript code to find the sum of N natural Numbers**
- 8. Write a JavaScript code to find factorial of N. (Use recursive function)**
- 9. Write a JavaScript code block using arrays and generate the current date in words, this should include the day, month and year.**
- 10. Create a web page using two image files, which switch between one another as the mouse pointer moves over the images. Use the onMouseOver and onMouseOut event handlers.**

207CP24: Web Technologies Lab

Programs List:

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3. Create a form with the following specifications
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 - b. Other is a larger frame that provides the main view.
 - c. The links bar should contain 5 links, which when clicked, should display the appropriate HTML file in the larger frame.
4. to create a webpage with the following using html
 - a. to embed an image in web page
 - b. to fix the hot spots
 - c. show all the related information when a hot spot is clicked in the map
5. Develop a HTML Form, which accepts any Mathematical expression. Write JavaScript
6. code to Evaluates the expression and Displays the result.
7. Create a HTML form that has number of Textboxes. When the form runs in the Browser fill the textboxes with data. Write JavaScript code that verifies that all textboxes has been filled. If a textboxes has been left empty, popup an alert indicating which textbox has been left empty.
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14. Write a program for implementing student information using XML.
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20. Create a java program to create an airline reservation service and a travel agent and the travel agent is searching for an airline using web services and database.
21. Write a JSP program to calculate income tax, login and data capture.

Programs and Results

1. Develop and demonstrate a HTML document that illustrates the use external style sheet, ordered list, table, borders, padding, color, and the tag.

Program:

```
<html>
  <head>
    <link rel="stylesheet" type="text/css" href="Basics.css"/>
    <title> CSS Basics </title>
  </head>
  <body>
    <h1> This header is 36 pt </h1>
    <h2> This header is black </h2>
    <p> This paragraph has a left margin of 50 pixels </p>
    <table>
      <tr>
        <th> Name </th>
        <th> Email </th>
        <th> Phone number </th>
      </tr>
      <tr>
        <td> manikanta </td>
        <td> manikantvemulapati@.com </td>
        <td> 9030404598 </td>
      </tr>
      <tr>
        <td> hari</td>
        <td> hari123@gmail.com </td>
        <td> 7895462132</td>
      </tr>
      <tr>
        <td> srini</td>
        <td> srini245@gmail.com </td>
        <td> 7856345263 </td>
      </tr>
    </table>
    <hr/>
    This is an ordered list.
    <ol>
      <li>MCA </li>
      <li>MSc(CS) </li>
      <li>ECE </li>
    </ol>
    <p>
      <span>This is some span text.</span>
      This is some random text.
      <span>This is some more span text.</span>
    </p>
```

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

Basics.css

```
body { background-color:yellow; }
table { border: 2px solid; padding: 5px; }
th { border: 1px solid blue; padding:8px; }
td { border: 1px solid blue; padding:8px; }
ol { font-size:80%; list-style:lower-roman;color:#770000 }
span { background-color:grey; font-size:120%; font-style:italic; }
p { font-size:90%; }
```

OUTPUT:

This header is 36 pt

This header is black

This paragraph has a left margin of 50 pixels

Name	Email	Phone number
manikanta	manikantvemulapati@.com	9030404598
hari	hari123@gmail.com	7895462132
srini	srini245@gmail.com	7856345263

This is an ordered list.

- i. MCA
- ii. MSc(CS)
- iii. ECE

This is some span text. This is some random text. *This is some more span text.*

2. Write HTML code to provide intra document linking.**Program:**

```
<!DOCTYPE html>
<html>
<head>
<title>Intra-document Linking Example</title>
</head>
<body>
<a href="#intradocument">Click this Link</a>
<h2 id="intradocument">Intradocument Linking</h2>
<a href="#namelist">See Name List</a>
```

```

<ul id="namelist">
<li>Alice</li><li>Bob</li><li>Charlie</li>
</ul>
<a href="#pagebottom">See Credits</a>
<footer id="pagebottom">Footer information</footer>
</body>
</html>

```

OUTPUT:



Output: - The page displays links such as “Click this Link” which scrolls to respective sections like “Intra document Linking”, “Name List”, and footer when clicked.

3. Create a form with the following specifications

- Our form uses frames, one to hold the links bar at the top of the browser window.
- Other is a larger frame that provides the main view.
- The links bar should contain 5 links, which when clicked, should display the appropriate HTML file in the larger frame.

Program:

5.html

```

<html>
  <title>Program3</title>
  <frameset cols="30%,*">
    <frame name="f1" src="5a.html">
    <frame name="f2">
  </frameset>
</html>

```

5a.html

```

<html>

```

```
<body>
  <a href="SE.html" target="f2">SE</a><br>
<a href="PYTHON.html" target="f2">PYTHON</a><br>
  <a href="CNS.html" target="f2">CNS </a><br>
  <a href="WT.html" target="f2">WT</a><br>
  <a href="AI.html" target="f2"> AI </a>
</body>
</html>
```

SE.html

```
<html>
  <title>SE</title>
  <body bgcolor="green ">
    This subject describes the Software Engineering
  </body>
</html>
```

PYTHON.html

```
<html>
  <title>PYTHON</title>
  <body bgcolor="red">
    This subject describes about PYTHON
  </body>
</html>
```

CNS.html

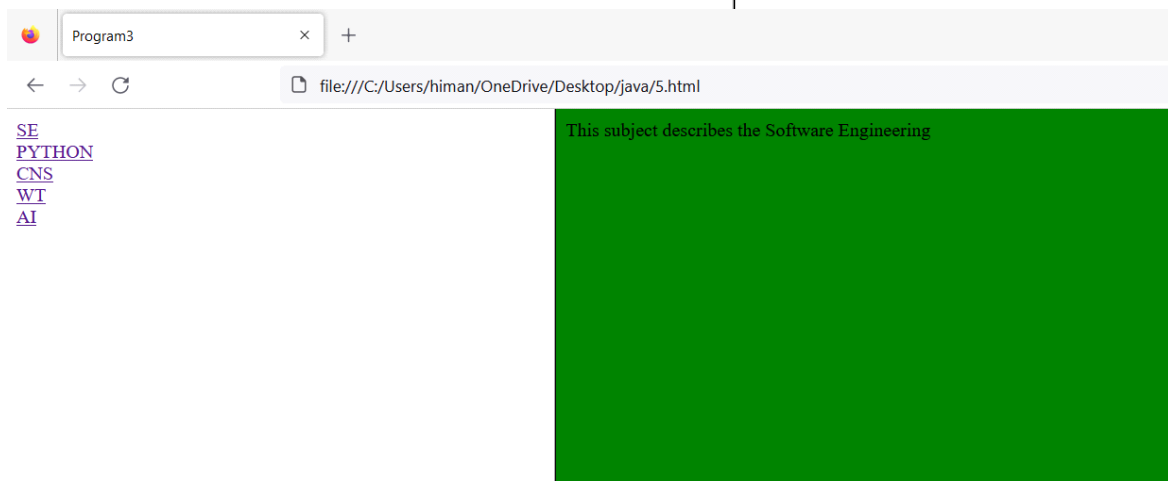
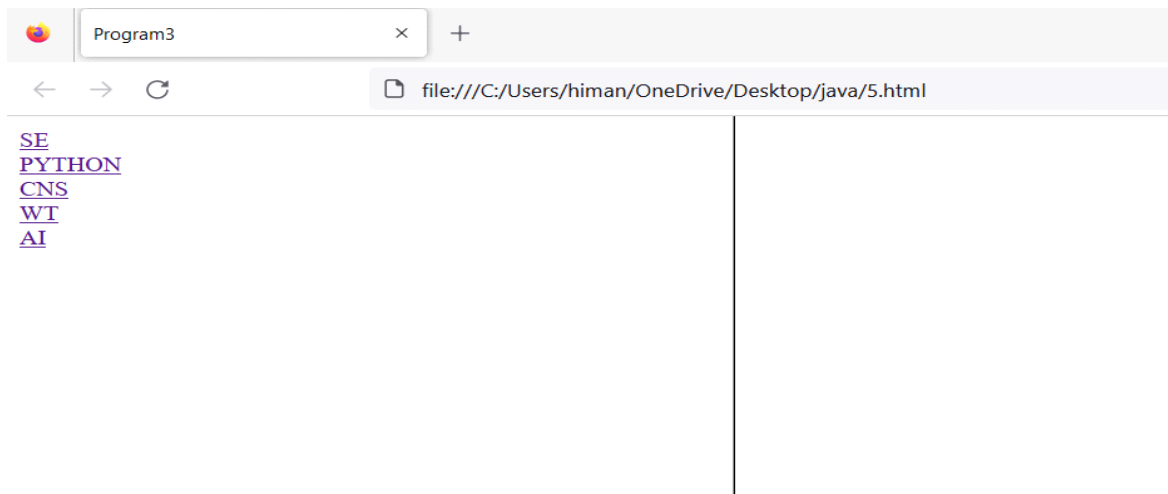
```
<html>
  <title>CNS</title>
  <body bgcolor="grey">
    This subject describes about the Computer Networks
  </body>
</html>
```

WT.html

```
<html>
  <title>WT</title>
  <body bgcolor="yellow">
    This subject describes Web Technologies
  </body>
</html>
```

AI.html

```
<html>
  <title>AI</title>
  <body bgcolor="blue">
    <font color="yellow">
      This subject describes about Artificial Intelligence
    </font></body>
</html>
```

OUTPUT:



4. To create a webpage with the following using html

- a. to embed an image in web page**
- b. to fix the hot spots**
- c. show all the related information when a hot spot is clicked in the map**

Program:

```
<html>
<head>
<title>India Map</title>
<head>
<body bgcolor="PINK">
```

```

<font face="Monotype Corsiva" color="BLUE" size="6">
<marquee direction="left" behavior="alternate">INDIA MAP
</marquee>
</font>
<hr size="6" color="RED">
<map name="pagemap">
<area shape="rect" coords="194,151,247,219" href="map1.html">
<area shape="rect" coords="291,268,384,337" href="map2.html">
<area shape="rect" coords="100,337,197,384" href="map3.html">
<area shape="rect" coords="236,543,344,577" href="map4.html">
</map>

</body>
<font color="#ff0000" size="5">
<p><b>Hints:</b><i>Click on the Name of the Cities in the map to know its
description</i></p>
</html>
/*map1.html*/
<html>
<body bgcolor="SKYBLUE">
<font face="Monotype Corsiva" size="18" color="RED">
<center><b><i>Delhi is the capital of our INDIA<br> and <br>More IT companies are
Camped at Delhi</i></b></center>
<a href="mapping.html">Home Page</a>
</font>
</body>
</html>
/*map2.html*/
<html>
<body bgcolor="SKYBLUE">
<font face="Times New Roman" size="18" color="RED">
<center><b><i>Calcutta is the wealthy city in WEST BENGAL<br> and <br>it has Famous
"Sunderbans Forests"</i></b></center>
<a href="mapping.html">Home Page</a>
</font></body></html>
/*map3.html*/
<html>
<body bgcolor="DARKGREEN">
<font face="Times New Roman" size="12" color="RED">
<center>MUMBAI is the capital of Maharashtra<br> and <br>it has Famous India
Gate</center>
<a href="mapping.html">Home Page</a>
</font>
</body>
</html>
/*map4.html*/
<html>
<body bgcolor="BLACK">
<font face="Times New Roman" size="12" color="RED">

```

```
<center>Chennai is hte capital of Tamil Nadu<br> and <br>More IT companies are camped  
at  
Chennai</center>  
<a href="mapping.html">Home Page</a>  
</font></body></html>
```

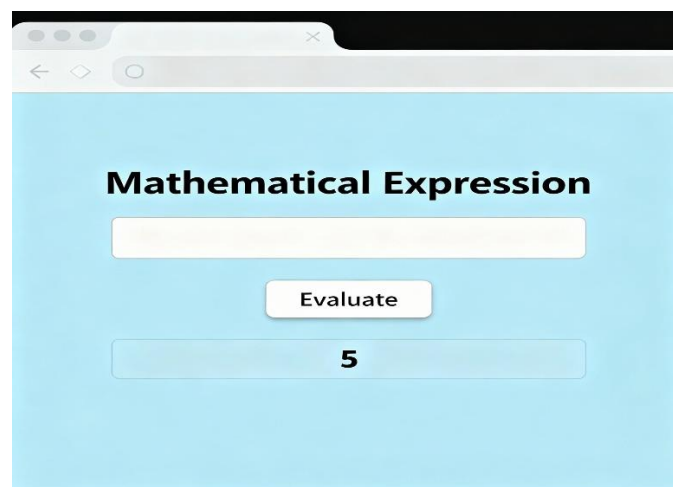
OUTPUT:

5. Develop a HTML Form, which accepts any Mathematical expression. Write JavaScript code to Evaluates the expression and Displays the result.

Program:

```
<!DOCTYPE html>  
<html>
```

```
<head>
<title>Evaluate Math Expression</title>
<script src="https://cdnjs.cloudflare.com/ajax/libs/mathjs/10.0.0/math.js"></script>
<script>
functionevaluateExpression() {
var expr =document.getElementById('expr').value;
try {
var result =math.evaluate(expr);
document.getElementById('output').innerText= result;
    } catch (e) {
document.getElementById('output').innerText='Invalid expression';
    }
}
</script>
</head>
<body>
<formonsubmit="evaluateExpression(); return false;">
<input type="text" id="expr" placeholder="Enter expression">
<button type="submit">Evaluate</button>
</form>
<div id="output"></div>
</body>
</html>
```

OUTPUT:

Output: - Inputting $2 + 3 * \sqrt{4} / 2$ and clicking Evaluate displays: 5

6. Create a HTML form that has number of Textboxes. When the form runs in the Browser fill the textboxes with data. Write JavaScript code that verifies that all textboxes has been filled. If a textbox has been left empty, popup an alert indicating which textbox has been left empty.

Program:

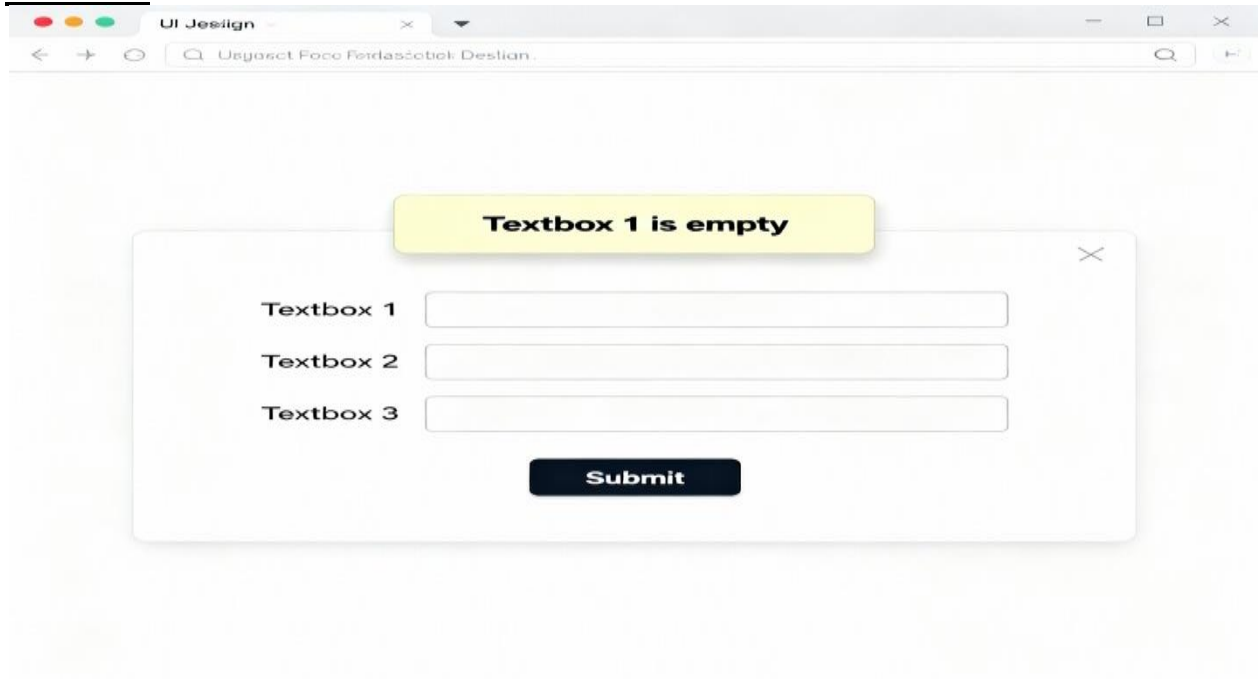
```
<!DOCTYPE html>
<html>
<head>
<title>Form Validation</title>
<script>
```

```
function validateForm() {  
    var form = document.forms["form1"];  
    for (var i = 0; i < form.length - 1; i++) {  
        if (form[i].type == "text" && form[i].value == "") {  
            alert("Textbox " + (i + 1) + " is empty!");  
            return false;  
        }  
    }  
    alert('All textboxes are filled.');
```



```
    return true;  
}  
</script>  
</head>  
<body>  
    <form name="form1" onsubmit="return validateForm();">  
        <input type="text" name="text1"><br>  
        <input type="text" name="text2"><br>  
        <input type="text" name="text3"><br>  
        <input type="submit" value="Submit"/>  
    </form>  
</body>  
</html>
```

OUTPUT:



Output: - If any textbox is empty and you press Submit, an alert appears such as “Textbox 2 is empty!” Otherwise, “All textboxes are filled.” is alerted.

7. Write a JavaScript code to find the sum of N natural Numbers. (Use user-defined function)**Program:***// JavaScript program to find sum of first n natural numbers.*

```
function findSum(n) {  
    let sum = 0;  
    for (let i = 1; i <= n; i++) {  
        sum = sum + i;  
    }  
    return sum;  
}  
  
// Example usage:  
const n = 5;  
console.log(findSum(n));
```

OUTPUT:

15

8. Write a JavaScript code to find factorial of N. (Use recursive function)**Program:**

```
<html>  
    <title>Validation</title>  
    <body>  
        <form name="f1">  
            Enter a Value<input type="text" name="t1"><br><br>  
            <input type="Button" value="Submit" OnClick=factorial()>  
            <input type="reset" value="clear">  
        </form>  
        <script language="javascript">  
            function factorial()  
            {  
                n=document.f1.t1.value;  
                var result = fact(n);  
                alert("Factorial of the given number " + result);  
            }  
            function fact(n)  
            {  
                if(n==0)  
                    return 1;  
                else  
                    return(n*fact(n-1));  
            }  
        </script>  
    </body>  
</html>
```

OUTPUT:

9. Write a JavaScript code block using arrays and generate the current date in words, this should include the day, month and year.

Program:

```
<!DOCTYPE html>
<html>
<head>
<script type="text/javascript">
    var d=new Date();
    var weekday=new
    Array("Sunday","Monday","Tuesday","wednesday","Thursday","Friday","Saturday");
    var monthname=new
    Array("Jan","Feb","Mar","Apr","May","Jun","Jul","Aug","Sep","Oct","Nov","Dec");
    document.write(weekday[d.getDay()]+""")
    document.write(d.getDay()+".");
    document.write(monthname[d.getMonth()]+""");
    document.write(d.getFullYear());
</script>
</head>
<body>

</body>
</html>
```

OUTPUT:

wednesday3.Jun2023

10. Create a web page using two image files, which switch between one another as the mouse pointer moves over the images. Use the onMouseOver and onMouseOut event handlers.

Program:

```
<html>
<head>
<script type = "text/javascript">
    function mouseover()
    {
        document.getElementById("img").src = "java.jpg";
    }
    function mouseout()
    {
        document.getElementById("img").src = html.jpg;
    }
}
```

```
</script>
</head>
<body>
<imgsrc = "image1.jpg" id = "img" onmouseover="mouseover()"
onmouseout="mouseout()"/>
</body>
</html>
```

OUTPUT:



11. Design an XML document to store information about a student in an engineering college affiliated to ANU. The information should include college id, Name of the College, Branch, Year of Joining, and e-mail id. Make up sample data for 3 students. Create a CSS style sheet and use it to display the document.

Program:

10a.css:

```
/* Define styling properties for each tag of the xml file */
student {margin-top:15px;font-weight:bold;color:pink;}
info {display:block;margin-left:15px;color:gray;}
usn, name {color:red;font-size:15pt;}
coll, branch {color:blue;font-size:15pt;}
yoj, email {color:green;font-size:15pt;}
```

10.xml:

```
<?xml-stylesheet type="text/css" href="10.css" ?>
<!DOCTYPE HTML>
<html>
<head>
<h1> STUDENTS DESCRIPTION </h1>
</head>
<students>
<student>
<USN>USN : 3GN07CS001</USN>
<name>NAME : SANTHOSH</name>
<college>COLLEGE : ANU</college>
<branch>BRANCH : Computer Science and Engineering</branch>
<year>YEAR : 2007</year>
<e-mail>E-Mail : santosh@gmail.com</e-mail>
</student>
<student>
<USN>USN : 3GN07IS001</USN>
<name>NAME : MANORANJAN</name>
<college>COLLEGE : ANU</college>
<branch>BRANCH : Information Science and Engineering</branch>
<year>YEAR : 2007</year>
<e-mail>E-Mail : manoranjana@gmail.com</e-mail>
</student>
<student>
<USN>USN : 3GN07EC001</USN>
<name>NAME : CHETHAN</name>
<college>COLLEGE : ANU</college>
<branch>BRANCH : Electronics and Communication Engineering
</branch>
<year>YEAR : 2007</year>
<e-mail>E-Mail : chethan@gmail.com</e-mail>
</student>
</students>

</html>
```

10.CSS

Student

```
{
display:block; margin-top:10px; color:Navy;
}
```

USN

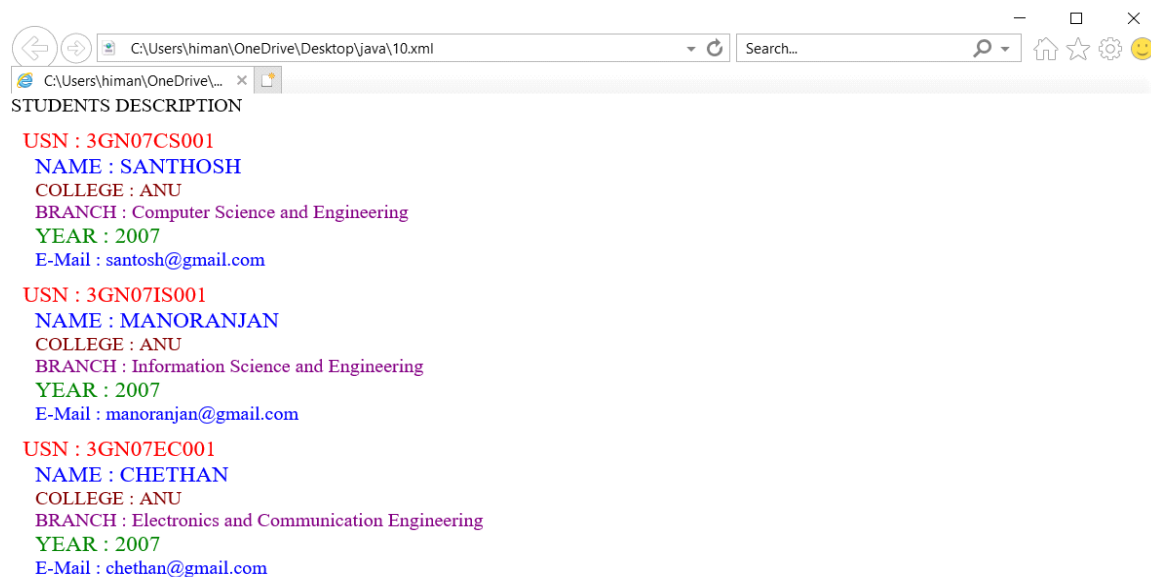
```
{
display:block; margin-left:10px;font-size:14pt; color:Red;
}
```

Name

```
{
```

```
display:block; margin-left:20px;font-size:14pt; color:Blue;
}
College
{
display:block; margin-left:20px;font-size:12pt; color:Maroon;
}
Branch
{
display:block; margin-left:20px;font-size:12pt; color:Purple;
}
Year
{
display:block; margin-left:20px;font-size:14pt; color:Green;
}
e-mail
{
display:block; margin-left:20px;font-size:12pt; color:Blue;
}
}
```

OUTPUT:



12. Create an XML document, which contains 10 users information. Implement a program, which takes User Id as an input and returns the user details by taking the user information from the XML document.

Program:

student.xml:

```
<?xml version="1.0" encoding="UTF-8"?>
<students-details>
<student>
<studentid>561</studentid>
```

```
<name>Ramu</name>
<address>ECIL</address>
<gender>Male</gender>
</student>
<student>
<studentid>562</studentid>
<name>Ramya</name>
<address>KBHP</address>
<gender>Female</gender>
</student>
<student>
<studentid>563</studentid>
<name>Mahi</name>
<address>BHEL</address>
<gender>Male</gender>
</student>
<student>
<studentid>564</studentid>
<name>Manvi</name>
<address>KOTI</address>
<gender>Female</gender>
</student>
<student>
<studentid>565</studentid>
<name>Ammu</name>
<address>ECIL</address>
<gender>Female</gender>
</student>
</students-details>
```

SAXParserxml.java:

```
import java.io.*;
import javax.xml.parsers.SAXParser;
import javax.xml.parsers.SAXParserFactory;
import org.xml.sax.Attributes;
import org.xml.sax.SAXException;
import org.xml.sax.helpers.DefaultHandler;
public class SAXParserxml extends DefaultHandler
{
    boolean studentid = true,name = false,address = false,gender = false;
    int flag=0,c=0;
    String sid,sname,sadd,sgender,tid;
    public void startDocument()
    {
        System.out.println("begin parsing document");
        System.out.print("Enter student ID:\t");
        try{
            BufferedReader reader = new BufferedReader(new InputStreamReader(System.in));
```

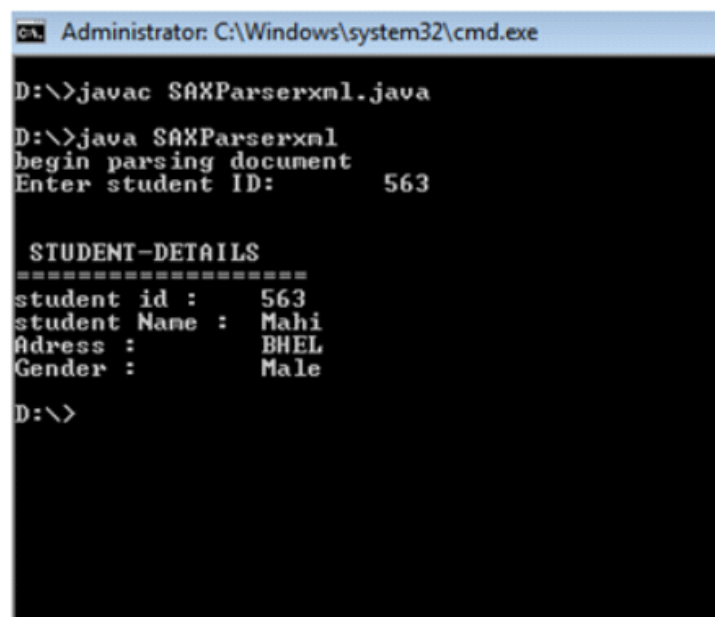
```
tid = reader.readLine();
} catch (Exception e) {}
}
public void startElement(String url, String localname, String qName, Attributes att) {
    if (qName.equalsIgnoreCase("studentid"))
    {
        studentid = true;
    }
    else if (qName.equalsIgnoreCase("name") && flag == 1)
    {
        name = true;
    }
    else if (qName.equalsIgnoreCase("address") && flag == 1)
    {
        address = true;
    }
    else if (qName.equalsIgnoreCase("gender") && flag == 1)
    {
        gender = true;
    }
}

public void characters(char[] ch, int start, int length) {
    if (studentid)
    {
        String x = new String(ch, start, length);
        if (x.equals(tid))
        {
            flag = 1; sid = x; c = 1;
        }
        else
            flag = 0;
        studentid = false;
    }
    else if (name)
    {
        String name = new String(ch, start, length); name = false;
    }
    else if (address)
    {
        String address = new String(ch, start, length); address = false;
    }
    else if (gender)
    {
        String gender = new String(ch, start, length); gender = false;
    }
}

public void endElement(String url, String localname, String qName) {}
public void endDocument()
{
}
```

```
if(c==0)
System.out.println("student Id is not present.Try Again!!!");
else
{
System.out.println("\n\n STUDENT-DETAILS");
System.out.println("=====");
System.out.println("student id :\t" +sid);
System.out.println("student Name :\t" +sname);
System.out.println("Adress :\t" +sadd);
System.out.println("Gender :\t" +sgender);
}
}
public static void main(String[] arg)throws Exception{
SAXParser p=SAXParserFactory.newInstance().newSAXParser();
p.parse(new FileInputStream("student.xml"), new SAXParserxml());
}
}
```

OUTPUT:



```
Administrator: C:\Windows\system32\cmd.exe

D:\>javac SAXParserxml.java

D:\>java SAXParserxml
begin parsing document
Enter student ID:      563

STUDENT-DETAILS
=====
student id :      563
student Name :    Mahi
Address :        BHEL
Gender :         Male
D:\>
```

13. write a program for implementing student information using XML

Program (stud.xml):

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="stud.xsl"?>
<studInfo>
<stud>
<name>Abhilash</name>
<dept>IT</dept>
<rno>97709205001</rno>
```

```
</stud>
<stud>
<name>Akhila</name>
<dept>IT</dept>
<rno>97709205002</rno>
</stud>
<stud>
<name>Anaswara</name>
<dept>IT</dept>
<rno>97709205003</rno>
</stud>
</studInfo>
```

Program (stud.xsl):

```
<?xml version="1.0" encoding="UTF-8"?>
<xsl:transform version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
<xsl:template match="/">
<html xmlns="http://www.w3.org/1999/xhtml">
<head><title>Student Details - Transformation</title></head>
<body>
<table border="1">
<caption>Student Details</caption>
<tr><th>Name</th><th>Department</th><th>Register No</th></tr>
<xsl:for-each select="/studInfo/stud">
<tr>
<td><xsl:value-of select="name"/></td>
<td><xsl:value-of select="dept"/></td>
<td><xsl:value-of select="rno"/></td>
</tr>
</xsl:for-each>
</table>
</body>
</html>
</xsl:template>
</xsl:transform>
```

OUTPUT: -



The screenshot shows a web browser window with a table titled 'Student Details'. The table has three columns: 'Name', 'Department', and 'Register Number'. It contains three rows of student data: Abhilash (IT, 12345), Akhila (IT, 12346), and Anaswara (IT, 12347).

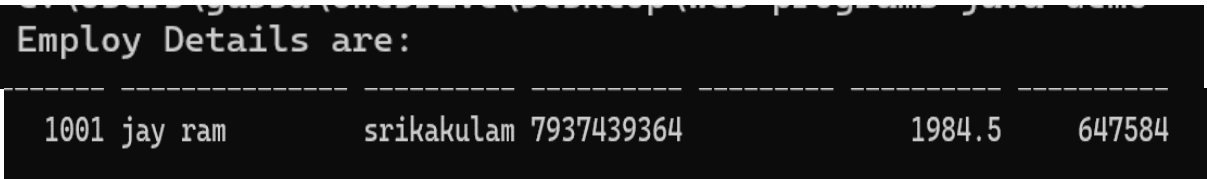
Name	Department	Register Number
Abhilash	IT	12345
Akhila	IT	12346
Anaswara	IT	12347

Displays a table with columns: Name, Department, Register No and rows for each student.

14. Write a java program to illustrate java to database connectivity using JDBC.**Program:**

JDBCEX.java:

```
import java.io.DataInputStream;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
public class JDBCEX {
    public static void main(String[] args) throws Exception {
        Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
        Connection
con=DriverManager.getConnection("jdbc:odbc:pvkr","scott","tiger");
        Statement stmt=con.createStatement();
        DataInputStream m=new DataInputStream(System.in);
        System.out.println("enter empid from emp");
        int n=Integer.parseInt(m.readLine());
        ResultSet rs=stmt.executeQuery("select * from emp where empno="+n);
        String s="";
        while(rs.next())
        {
            s=s+rs.getInt(1)+" ";
            s=s+rs.getString(2)+" ";
            s=s+rs.getString(3)+" ";
            s=s+rs.getInt(4)+" ";
            s=s+rs.getDate(5)+" ";
            s=s+rs.getDouble(6)+" ";
            s=s+rs.getDouble(7)+" ";
            s=s+rs.getInt(8)+" ";
        }
        System.out.println("Employ Details are:");
        System.out.println(s);
        rs.close();
        stmt.close();
        con.close();
    }
}
```

OUTPUT:A screenshot of a Java program's output. It shows the text "Employ Details are:" followed by a horizontal dashed line. Below the line, the output is formatted as a table with four columns: "1001", "jay ram", "srikakulam 7937439364", and "1984.5". The last column, "647584", is partially visible on the right edge of the screenshot.

Employ Details are:			

1001	jay ram	srikakulam 7937439364	1984.5
			647584

15. Write a program to print the Fibonacci numbers using RMI.**Program:**

RMIFiboInt.java:

```
import java.rmi.Remote;
public interface RMIFiboInt extends Remote {
    int[] fibo(int n) throws Exception;
}
```

RMIFiboImpl.java:

```
import java.rmi.server.UnicastRemoteObject;
public class RMIFiboImpl extends UnicastRemoteObject implements RMIFiboInt {
    RMIFiboImpl() throws Exception {
    }
    @Override
    public int[] fibo(int n){
        int x1,x2,i,t;
        int[] a=new int[n];
        x1=0;
        x2=1;
        for(i=0;i<n;i++){
            if(i==0)
                a[i]=x1;
            else if(i==1)
                a[i]=x2;
            else{
                t=x1;
                x1=x2;
                x2=x2+t;
                a[i]=x2;
            }
        }
        return a;
    }
}
```

RMIFiboServer.java:

```
import java.rmi.registry.LocateRegistry;
import java.rmi.registry.Registry;
public class RMIFiboServer {
    public RMIFiboServer(){
    }
    public static void main(String args[]){
        try{
            RMIFiboImpl fobj=new RMIFiboImpl();
            LocateRegistry.createRegistry(1099);
            Registry reg=LocateRegistry.getRegistry();
            reg.rebind("rmifibo",fobj);
        }
    }
}
```

```
        System.out.println("The RMI Server is ready");
    }
    catch(Exception e){
        System.out.println("Exception:"+e);
        System.exit(1);
    }
}
}
```

RMIFiboClient.java:

```
import java.io.DataInputStream;
import java.rmi.registry.LocateRegistry;
import java.rmi.registry.Registry;
public class RMIFiboClient {
    public static void main(String args[])throws Exception{
        try{

            Registry reg=LocateRegistry.getRegistry();
            RMIFiboInt f=(RMIFiboInt)reg.lookup("rmifibo");
            DataInputStream m=new DataInputStream(System.in);
            System.out.println("enter a value");
            int n1=Integer.parseInt(m.readLine());
            System.out.println("Fibonacci numbers are");
            int[] a=f.fibo(n1);
            for(int i=0;i<a.length;i++)
                System.out.println(a[i]);
        }
        catch(Exception e){
            System.out.println(e);
        }
    }
}
```

OUTPUT:

The RMI Server is ready....

Enter a value:

10

0**1****1****2****3****5****8****13****21****34**

16. Write a program using RMI to access the database using the primary key value and return the data to the client.

Program:

Remote Interface:

```
import java.rmi.Remote;
import java.rmi.RemoteException;
import java.util.*;
public interface Hello extends Remote {
    public List<Student> getStudents() throws Exception;
}
```

Implementation:

```
import java.sql.*;
import java.util.*;
public class ImplExample implements Hello {
    public List<Student> getStudents() throws Exception {
        List<Student> list = new ArrayList<Student>();
        Connection conn
        = DriverManager.getConnection("jdbc:mysql://localhost:3306/details", "myuser", "password");
        Statement stmt = conn.createStatement();
        ResultSet rs = stmt.executeQuery("SELECT * FROM student_data");
        while(rs.next()){
            Student student = new Student();
            student.setID(rs.getInt("id"));
            student.setName(rs.getString("name"));
        }
        return list;
    }
}
```

```
        student.setBranch(rs.getString("branch"));
        student.setPercent(rs.getInt("percentage"));
        student.setEmail(rs.getString("email"));
        list.add(student);
    }
    rs.close();
return list;
}
}
Server:
import java.rmi.registry.*;
import java.rmi.server.UnicastRemoteObject;
public class Server extends ImplExample {
    public static void main(String args[]) {
        ImplExample obj = new ImplExample();
        Hello stub = (Hello) UnicastRemoteObject.exportObject(obj, 0);
        Registry registry = LocateRegistry.getRegistry();
        registry.bind("Hello", stub);
        System.out.println("Server ready");
    }
}
Client:
import java.rmi.registry.LocateRegistry;
import java.util.*;
public class Client {
    public static void main(String[] args) throws Exception {
        Registry registry = LocateRegistry.getRegistry(null);
        Hello stub = (Hello) registry.lookup("Hello");
        List<Student> list = stub.getStudents();
        for (Student s : list) {
            System.out.println("ID: " + s.getId());
            System.out.println("name: " + s.getName());
            System.out.println("branch: " + s.getBranch());
            System.out.println("percent: " + s.getPercent());
            System.out.println("email: " + s.getEmail());
        }
    }
}
```

OUTPUT: -**17. Write a html program for invoking servlet from applet.****Program:**

Program:MyServer.java (Servlet):

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

public class MyServer extends GenericServlet {
    public void service(ServletRequest req, ServletResponse res) throws
        ServletException, IOException {
        PrintWriter pw = res.getWriter();
        Date d = new Date();
        pw.println("<html><body bgcolor=blue><h2>Server Response</h2>");
        pw.println("<h3>Current Date and Time From Server:</h3>");
        pw.println("<b>" + d + "</b></body></html>");
    }
}
```

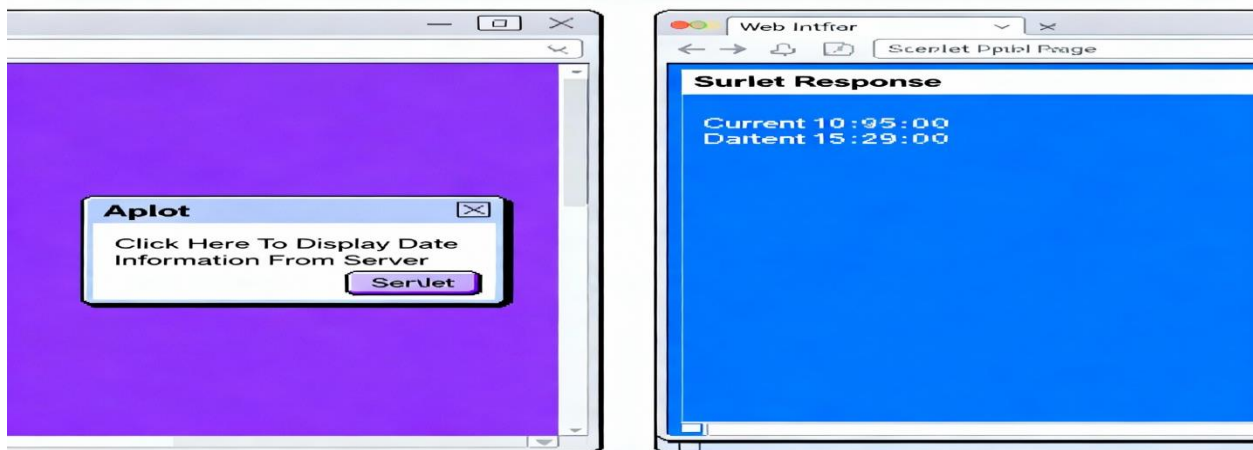
AppletClient.java (Applet):

```
import java.applet.*;
import java.awt.*;
import java.awt.event.*;
import java.net.*;

public class AppletClient extends Applet implements ActionListener {
    public void init() {
        Label la = new Label("INVOKING SERVLET FROM APPLET");
        add(la);
        Button b1 = new Button("Click Here To Display Date Information From Server");
        add(b1);
        b1.addActionListener(this);
    }
}
```

```
public void actionPerformed(ActionEvent ae){
    try{
        AppletContext ac = getAppletContext();
        URL url = new URL("http://localhost:8080/servlets3/MyServer");
        ac.showDocument(url);
    } catch (Exception e) {}
}
}
AppletClient.HTML
<html>
<head><title>Invoking Servlets From Applet</title></head>
<body bgcolor="violet">
<applet code="AppletClient.class" width="400" height="200"></applet>
</body>
</html>
```

OUTPUT: -



Pressing the button in the Applet opens a browser page displaying the date/time as returned by the servlet (blue background, date/time printed).

18. Write a java servlet program to conduct online examination and to display student mark list available in a database.

Program:

ExamServer.jsp:

```
<%@page contentType="text/html" language="java" import="java.sql.*"%>
<html>
<head>
<title>Online Exam Server</title>
<style type="text/css">
    body{background-color:black;font-family:courier;color:blue}
</style>
</head>
<body>
<h2 style="text-align:center">ONLINE EXAMINATION</h2>
```

```
<p>
<a href="ExamClient.html">Back To Main Page</a>
</p>
<hr/>
<%
String str1=request.getParameter("ans1");
String str2=request.getParameter("ans2");
String str3=request.getParameter("ans3");
int mark=0;
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection con=DriverManager.getConnection("jdbc:odbc:examDS");
Statement stmt=con.createStatement();
ResultSet rs=stmt.executeQuery("SELECT * FROM examTab");
int i=1;
while(rs.next())
{
if(i==1)
{
String dbans1=rs.getString(1);
if(str1.equals(dbans1))
{
mark=mark+5;
}
}
if(i==2)
{
String dbans2=rs.getString(1);
if(str2.equals(dbans2))
{
mark=mark+5;
}
}
if(i==3)
{
String dbans3=rs.getString(1);
if(str3.equals(dbans3))
{
mark=mark+5;
}
}
i++;
}
if(mark>=10)
{
out.println("<h4>Your Mark Is : "+mark+"</h4>");
out.println("<h3>Congratulations....! You Are Eligible For The Next Round...</h3>");
}
else
{
out.println("<h4>Your Mark is : "+mark+"</h4>");
}
```

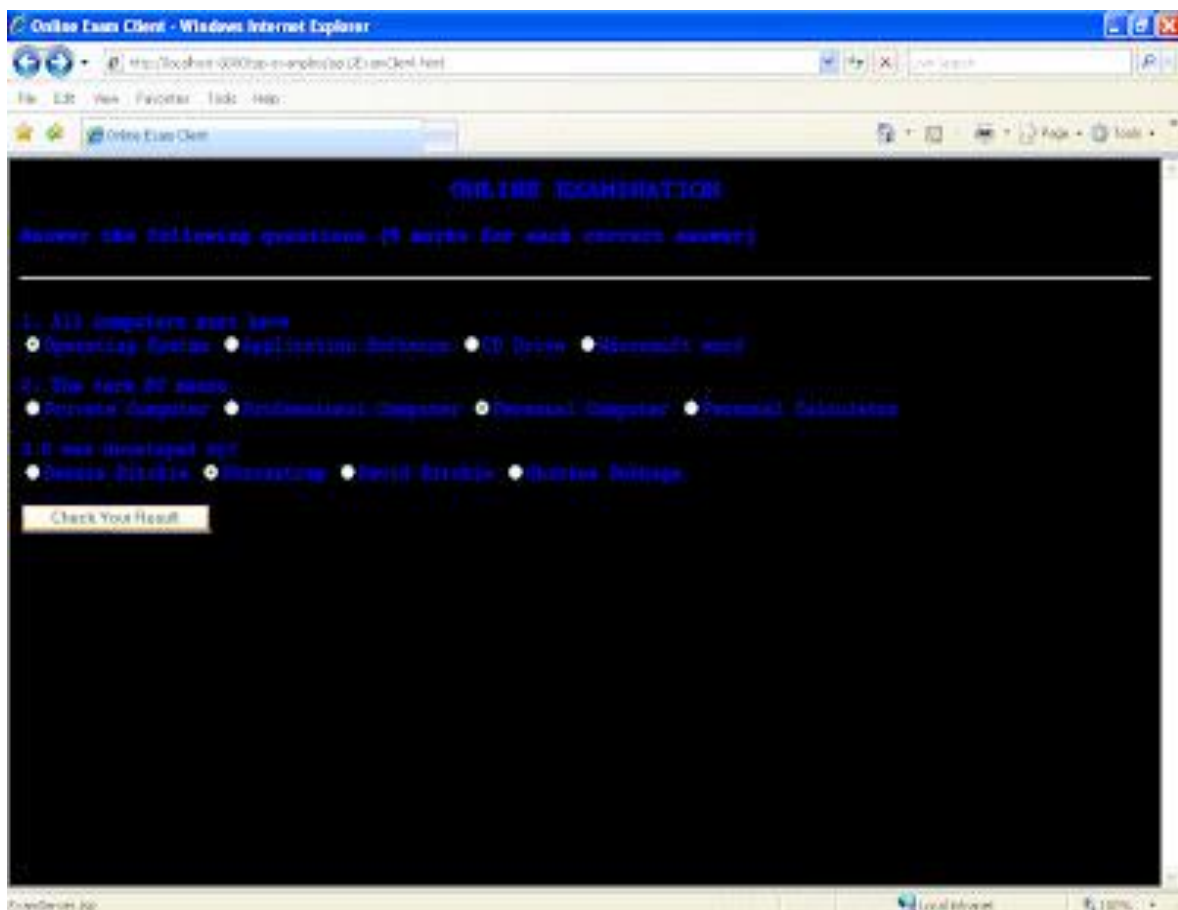
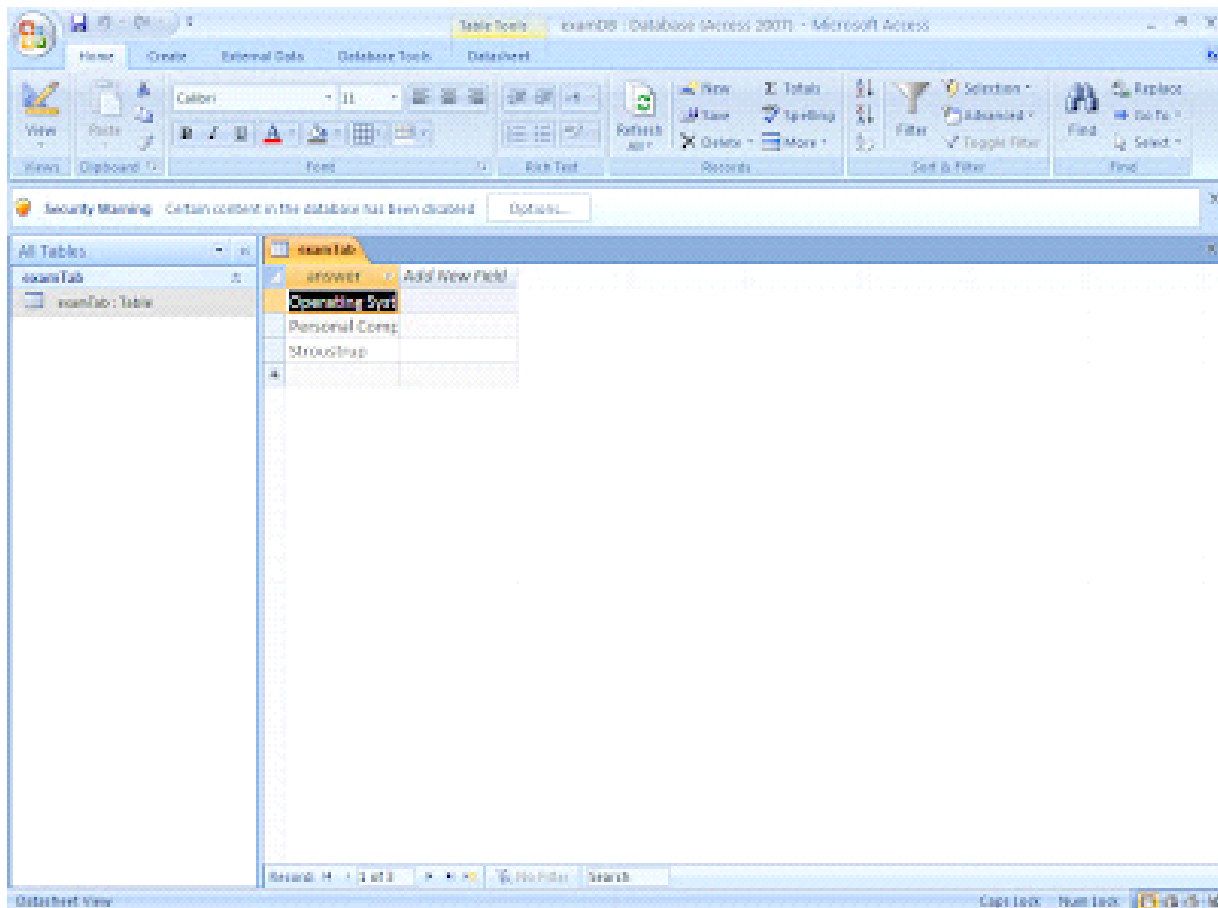
```
out.println("<h3>Sorry.....!! You Are Not Eligible For The Next Round...</h3>");
}
%>
</form>
</body>
</html>
```

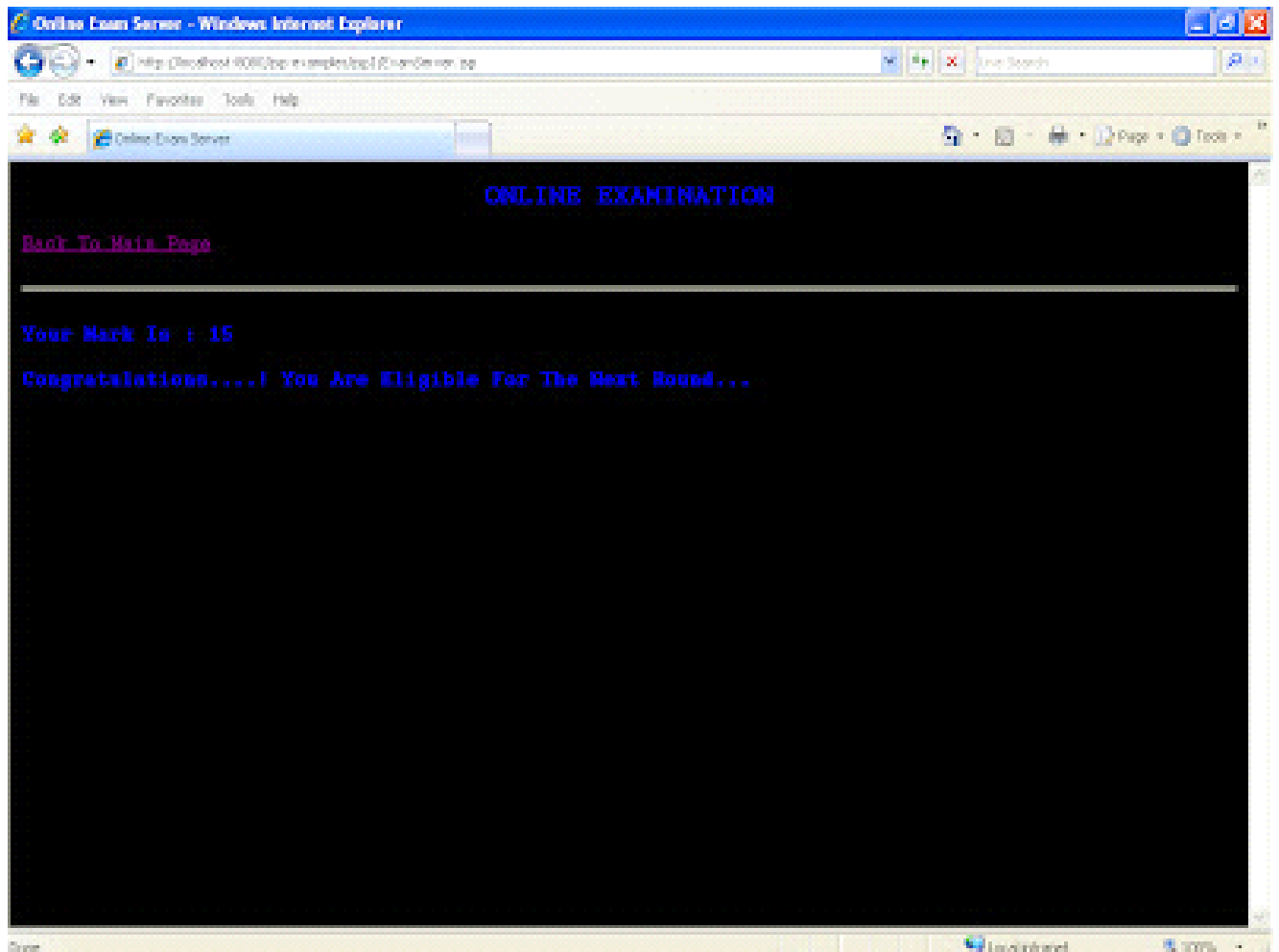
ExamClient.HTML:

```
<html>
<head>
<title>Online Exam Client</title>
<style type="text/css">
  body{background-color:black;font-family:courier;color:blue}
</style>
</head>
<body>
<h2 style="text-align:center">ONLINE EXAMINATION</h2>
<h3>Answer the following questions (5 marks for each correct answer)</h3>
<hr/>
<form name="examForm" method="post" action="ExamServer.jsp">
1. All computers must have <br/>
<input type="radio" name="ans1" value="Operating System">Operating System
<input type="radio" name="ans1" value="Application Software">Application Software
<input type="radio" name="ans1" value="CD Drive">CD Drive
<input type="radio" name="ans1" value="Microsoft word">Microsoft word
<br/><br/>
2. The term PC means <br/>
<input type="radio" name="ans2" value="Private Computer">Private Computer
<input type="radio" name="ans2" value="Professional Computer">Professional Computer
<input type="radio" name="ans2" value="Personal Computer">Personal Computer
<input type="radio" name="ans2" value="Personal Calculator">Personal Calculator
<br/><br/>
3.C was developed by?<br/>
<input type="radio" name="ans3" value="Dennis Ritchie">Dennis Ritchie
<input type="radio" name="ans3" value="Stroustrup">Stroustrup
<input type="radio" name="ans3" value="David Ritchie">David Ritchie
<input type="radio" name="ans3" value="Charles Babbage">Charles Babbage
<br/><br/>
<input type="submit" value="Check Your Result"/>
</form>
</body>
</html>
```

OUTPUT:

DATABASE





19. Create a java program to create an airline reservation service and a travel agent and the travel agent is searching for an airline using web services and database.

Program:

Database used: MS Access

index.jsp

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
    "http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>Travel Agency</title>
</head>
<body>
<center><h1>Travel Easy</h1>
<h3> - A Smarter way to travel</h3>
<br><br>
<b> Enter your Details</b>
<form name="index" action="AirlineList.jsp" method="post">
<br>
```

```

<table cellpadding="6" cellspacing="6">
<tr>
<td><b>From</b></td>
<td><input type="text" name="txt_from"></td>
</tr>
<tr>
<td><b>To</b></td>
<td><input type="text" name="txt_to"></td>
</tr>
<tr>
<td><b>Date of Journey</b></td>
<td><input type="text" name="txt_depart"></td>
</tr>
<tr>
<td><b>Number of Passengers</b></td>
<td><input type="text" name="txt_no"></td>
</tr>
<tr>
<td><b>Type of Flight</b></td>
<td><input type="Radio" name="group1" value="domestic">Domestic Flights</td>
</tr>
<tr>
<td></td>
<td><input type="Radio" name="group1" value="international">International Flights</td>
</tr>
<tr>
<td><b>Select desired Airlines</b></td>
<td>
<select name="airline">
<option>Kingfisher</option>
<option>SpiceJet</option>
</select>
</td>
</tr>
</table>
<br><br>
<input type="Submit" name="Submit" value="Find Flights">
</form>
</center>
</body>
</html>

```

airlinelist.jsp

```

<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">

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

```

```

<title>Domestic Flights</title>
</head>
<body>
<center><h1>Travel Easy</h1>
<h3> - A Smarter way to travel</h3>
</center>
<br><br>
<%@ page language="java" %>
<%@ page import ="java.sql.*" %>
<%@ page import =
"java.util.Date,java.text.SimpleDateFormat,java.text.ParseException"%>
<%
    String type = request.getParameter("group1");
    String from= request.getParameter("txt_from");
    String to = request.getParameter("txt_to");
    String depart= request.getParameter("txt_depart");
    String ret = request.getParameter("txt_return");
    String no = request.getParameter("txt_no");
    String airline = request.getParameter("airline");
    Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
    String sTable = type;
    String sSql = "SELECT * FROM " + sTable + " WHERE From='" + from + "' and TO='" + to
    + "' and DepartDate='" + depart + "' and SeatCapacity>=" + no + "'";
    String sDBQ = "d:/ " + airline + ".mdb";
    String database = "jdbc:odbc:Driver={Microsoft Access Driver (*.mdb)};DBQ="
    + sDBQ + ";DriverID=22;READONLY=true";
    Connection cn = null;
    Statement st = null;
    ResultSets = null;
    try {
    cn = DriverManager.getConnection( database ,"" , "");
    st = cn.createStatement();
    rs = st.executeQuery( sSql );
    ResultSetMetaData rsmd = rs.getMetaData();
    String s1,s2,s3,s4,s5,s6,s7,s8;
    int i=1;
    String flight_no[] = new String[100];
    //out.println("<form name='AirLine' action=" + method+'post'><b>" + i + " . "
    rs.getString(1) + "</b><br><br>");
    out.println("<h3><b>" + airline + " Flights</b></h3><br>");
    out.println("<table cellpadding=20 cellspacing=15>");
    out.println("<tr><th>Flight No</th><th>From</th><th>To</th><th>Departure
    Date</th><th>Arrival Date</th><th>Start Time</th>");
    out.println("<th>Reach Time</th><th>Seats Remaining</th></tr>");
    while(rs.next())
    {
    s1 = rs.getString(1);
    flight_no[i] = s1;
    s2 = rs.getString(2);
    s3 = rs.getString(3);

```

```

        s4 = rs.getString(4);
        s5 = rs.getString(5);
        s6 = rs.getString(6);
        s7 = rs.getString(7);
        s8 = rs.getString(8);
out.println("<tr><td>" s1 "</td>");
out.println("<td>" s2 "</td>");
out.println("<td>" s3 "</td>");
out.println("<td>" s4 "</td>");
out.println("<td>" s5 "</td>");
out.println("<td>" s6 "</td>");
out.println("<td>" s7 "</td>");
out.println("<td>" s8 "</td></tr>");
i ;
    }
out.println("</table>");
    if(i==1)
    {
out.println("<br><center><b>Sorry!! No flights scheudle available</b></center><br>");
    }
    else
    {
out.println("<form name='AirlineList' action='\" airline \".jsp' method='post'>");
out.println("<br><table><tr><td>Select Flight</td><td>");
out.println("<select name='flight_no'>");
for(int temp=1;temp<i;temp )
    {
out.println("<option>" flight_no[temp] "</option>");
    }
out.println("</select></td></tr><tr></tr>");
out.println("<tr><td><input type='hidden' name='no' value='\" no '\"</td>");
out.println("<td><input type='hidden' name='air_type' value='\" type '\"</td></tr>");
for(int j=1;j<=Integer.parseInt(no);j )
    {
out.println("<tr><th>Passenger " j " details</th></tr>");
out.println("<tr></tr>");
out.println("<tr><td>Name</td><td><input type='text' name='pas" j " '_name'</td></tr>");
out.println("<tr><td>Age</td><td><input type='text' name='pas" j " '_age'</td></tr>");
out.println("<tr><td>Sex</td><td><input type='text' name='pas" j " '_sex'</td></tr>");
out.println("<tr></tr>");
    }
out.println("</table><br><br><input      type='Submit'      name='Submit'      value='Book
Now'/></form>");
    }
    //out.println("<input name ='submit' value='Submit' type='submit'/>");
}
finally {
    try { if( null != rs ) rs.close(); } catch( Exception ex ) {}
    try { if( null != st ) st.close(); } catch( Exception ex ) {}
    try { if( null != cn ) cn.close(); } catch( Exception ex ) {}
}

```

```

    }
    %>
</body>
</html>

```

Kingfisher.jsp

```

<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
    "http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>Kingfisher Airlines</title>
</head>
<body>
<%@ page language="java" %>
<%@ page import ="java.sql.*" %>
<%
        String s = request.getParameter("no");
out.println("<h1><center>Kingfisher      Airlines</h1><br><h3>-      Have      a      nice
trip!!!</h3></center><br>");
out.println("<br><br>Your Booking Details");
out.println("<br><br><table cellpadding=10 cellspacing=10>");
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
        String sTable = request.getParameter("air_type");
        String sSql = "SELECT * FROM "      sTable      " WHERE FlightNo="
request.getParameter("flight_no") """;
        String sDBQ = "d:/kingfisher.mdb";

        String database = "jdbc:odbc:Driver={Microsoft Access Driver (*.mdb)};DBQ="
sDBQ " ";DriverID=22;READONLY=true";
        Connection cn = null;
        Statement st = null;
ResultSet rs = null;
        String name,age,sex,flightno,from,to,departure,arrival,starttime,reachtime,seat;
out.println("<tr><th>Name</th><th>Age</th><th>Sex</th><th>Flight
No</th><th>From</th><th>To</th><th>Departure      Date</th><th>Arrival
Date</th><th>Start Time</th><th>Reach Time</th><th>Seat No</th></tr>");
        try
        {
cn = DriverManager.getConnection( database ,"" , "");
st = cn.createStatement();
rs = st.executeQuery( sSql );
ResultSetMetaData rsmd = rs.getMetaData();
        int seat1=1;
        while(rs.next())
        {
flightno = rs.getString(1);
        from = rs.getString(2);
        to = rs.getString(3);

```

```

        departure = rs.getString(4);
        arrival = rs.getString(5);
starttime = rs.getString(6);
reachtime = rs.getString(7);
        seat = rs.getString(8);
        seat1 = Integer.parseInt(seat);
for(int i=1;i<=Integer.parseInt(s);i )
    {
        name= request.getParameter("pas" i "_name");
        age = request.getParameter("pas" i "_age");
        sex = request.getParameter("pas" i "_sex");
flightno = request.getParameter("flight_no");
out.println("<tr><td>" name "</td><td>" age "</td><td>" sex "</td>");
out.println("<td>" flightno "</td><td>" from "</td><td>" to "</td><td>" departure "</td>");
out.println("<td>" arrival "</td><td>" starttime "</td><td>" reachtime "</td><td>" seat1
"</td>");
        seat1--;
    }
}
Connection cn1 = null;
Statement st1 = null;
ResultSet rs1 = null;
try
{
sSql = "update " sTable " set SeatCapacity=" seat1 " WHERE FlightNo="
request.getParameter("flight_no") """;
rs1 = st.executeQuery( sSql );
}
catch(Exception e)
{
}

}
finally {
try { if( null != rs ) rs.close(); } catch( Exception ex ) {}
try { if( null != st ) st.close(); } catch( Exception ex ) {}
try { if( null != cn ) cn.close(); } catch( Exception ex ) {}
}
%>
</body>
</html>

```

SpiceJet.jsp

```

<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>SpiceJet Airlines</title>

```

```

</head>
<body>
<%@ page language="java" %>
<%@ page import ="java.sql.*" %>
<%
    String s = request.getParameter("no");
    out.println("<h1><center>SpiceJet      Airlines</h1><br><h3>-      Have      a      nice
trip!!!</h3></center><br>");
    out.println("<br><br>Your Booking Details");
    out.println("<br><br><table cellpadding=10 cellspacing=10>");
    Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
    String sTable = request.getParameter("air_type");
    String sSql = "SELECT * FROM "      sTable      " WHERE FlightNo="
request.getParameter("flight_no") """;
    String sDBQ = "d:/SpiceJet.mdb";

    String database = "jdbc:odbc:Driver={Microsoft Access Driver (*.mdb)};DBQ="
sDBQ " ";DriverID=22;READONLY=true";
    Connection cn = null;
    Statement st = null;
    ResultSets = null;
    String name,age,sex,flightno,from,to,departure,arrival,starttime,reachtime,seat;
    out.println("<tr><th>Name</th><th>Age</th><th>Sex</th><th>Flight
No</th><th>From</th><th>To</th><th>Departure      Date</th><th>Arrival
Date</th><th>Start Time</th><th>Reach Time</th><th>Seat No</th></tr>");
    try
    {
    cn = DriverManager.getConnection( database ,"" , "");
    st = cn.createStatement();
    rs = st.executeQuery( sSql );
    ResultSetMetaData rsmd = rs.getMetaData();
    int seat1=1;
    while(rs.next())
    {
    flightno = rs.getString(1);
    from = rs.getString(2);
    to = rs.getString(3);
    departure = rs.getString(4);
    arrival = rs.getString(5);
    starttime = rs.getString(6);
    reachtime = rs.getString(7);
    seat = rs.getString(8);
    seat1 = Integer.parseInt(seat);
    for(int i=1;i<=Integer.parseInt(s);i )
    {
    name= request.getParameter("pas" i " _name");
    age = request.getParameter("pas" i " _age");
    sex = request.getParameter("pas" i " _sex");
    flightno = request.getParameter("flight_no");
    out.println("<tr><td>" name "</td><td>" age "</td><td>" sex "</td>");

```

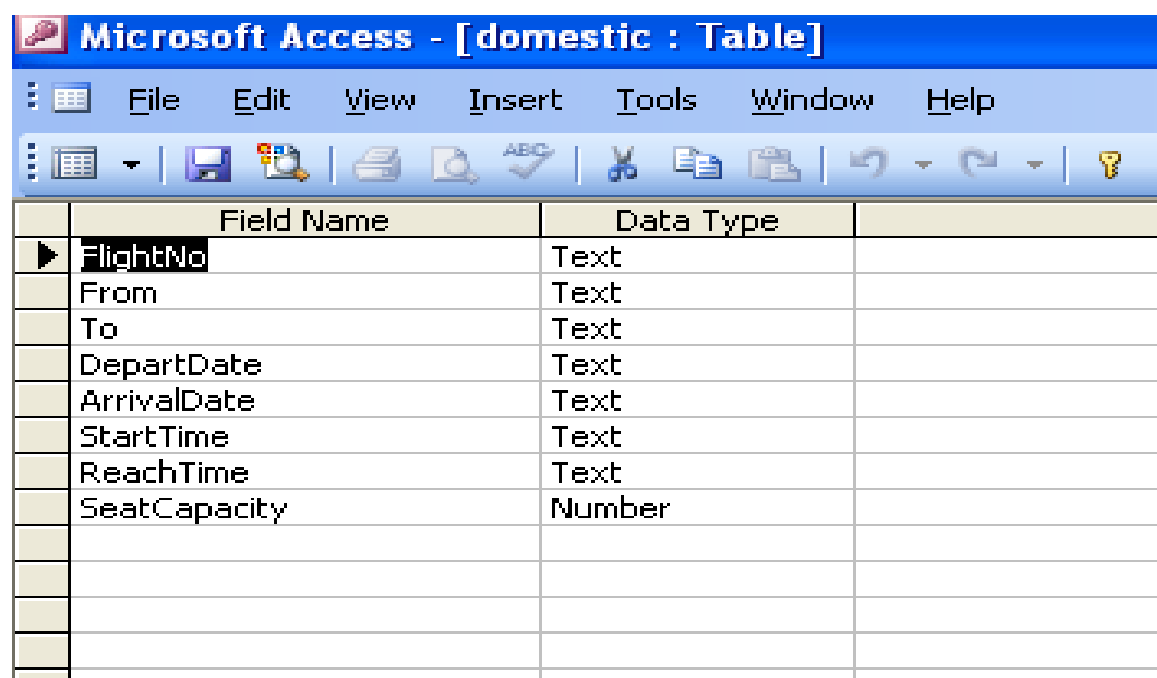
```

out.println("<td>" flightno "</td><td>" from "</td><td>" to "</td><td>" departure "</td>");
out.println("<td>" arrival "</td><td>" starttime "</td><td>" reachtime "</td><td>" seat1
"</td>");
        seat1--;
    }
}
Connection cn1 = null;
Statement st1 = null;
ResultSet rs1 = null;
try
{
sSql = "update "      sTable      " set SeatCapacity=" seat1 " WHERE FlightNo="
request.getParameter("flight_no") """;
rs1 = st.executeQuery( sSql );
}
catch(Exception e)
{
}

}
finally {
    try { if( null != rs ) rs.close(); } catch( Exception ex ) {}
    try { if( null != st ) st.close(); } catch( Exception ex ) {}
    try { if( null != cn ) cn.close(); } catch( Exception ex ) {}
}

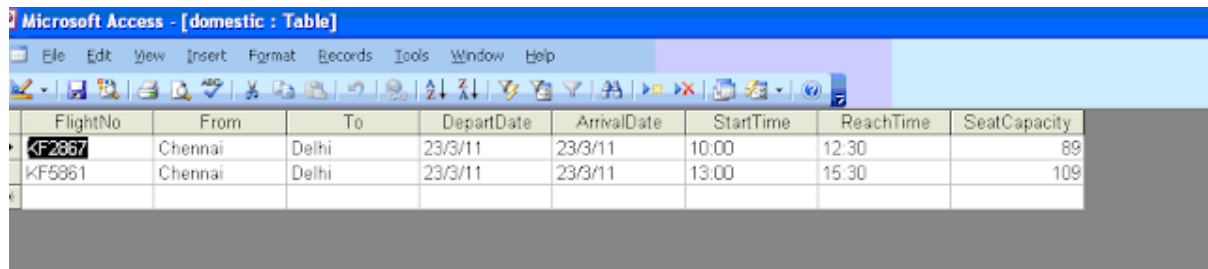
%>
</body>
</html>

```

OUTPUT:**Database**


The screenshot shows the Microsoft Access application window titled "Microsoft Access - [domestic : Table]". The menu bar includes File, Edit, View, Insert, Tools, Window, and Help. The toolbar contains various icons for file operations and editing. Below the toolbar is a table with the following structure:

	Field Name	Data Type
▶	FlightNo	Text
	From	Text
	To	Text
	DepartDate	Text
	ArrivalDate	Text
	StartTime	Text
	ReachTime	Text
	SeatCapacity	Number

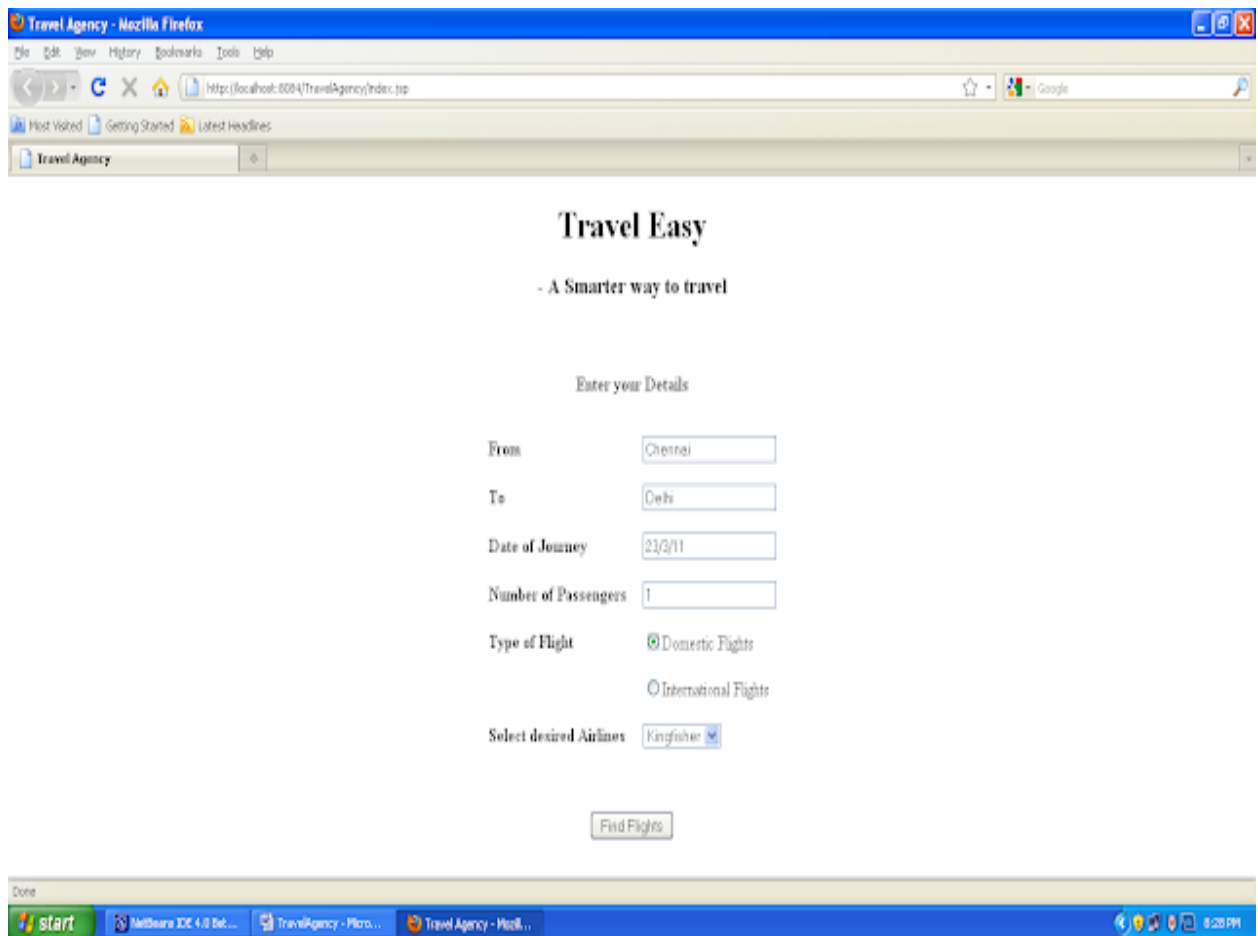


Microsoft Access - [domestic : Table]

FlightNo	From	To	DepartDate	ArrivalDate	StartTime	ReachTime	SeatCapacity
KF2867	Chennai	Delhi	23/3/11	23/3/11	10:00	12:30	89
KF5861	Chennai	Delhi	23/3/11	23/3/11	13:00	15:30	109

(similarly add for SpiceJet.mdb)

index.jsp



Travel Agency - Mozilla Firefox

http://localhost:8084/TravelAgency/index.jsp

Travel Easy

- A Smarter way to travel

Enter your Details

From:

To:

Date of Journey:

Number of Passengers:

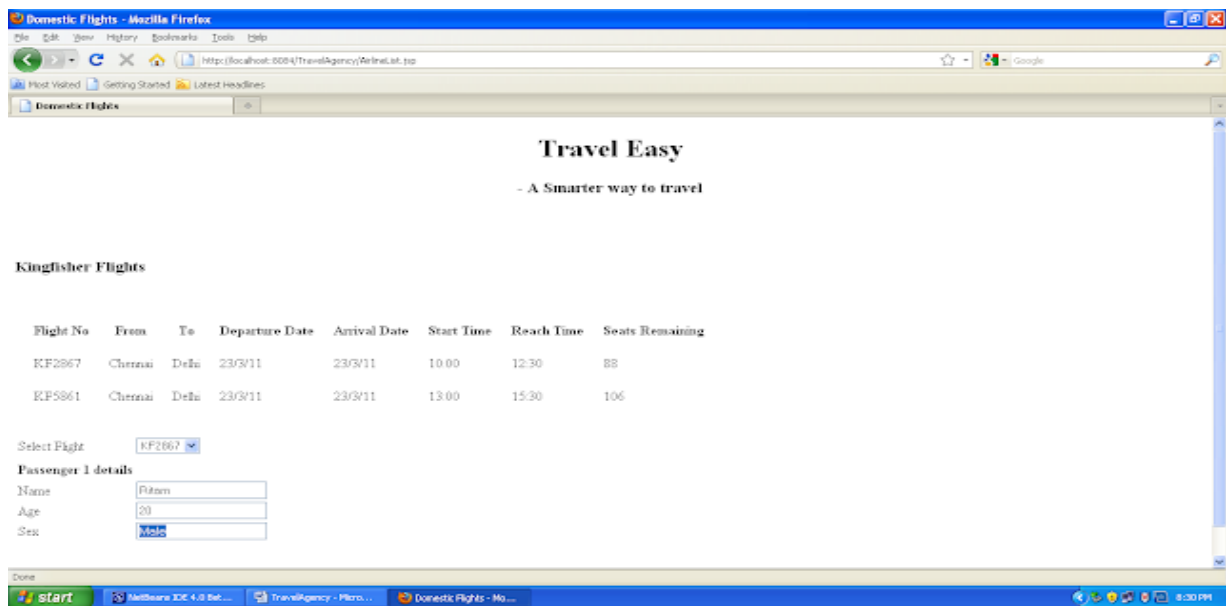
Type of Flight: ☒ Domestic Flights ☐ International Flights

Select desired Airlines:

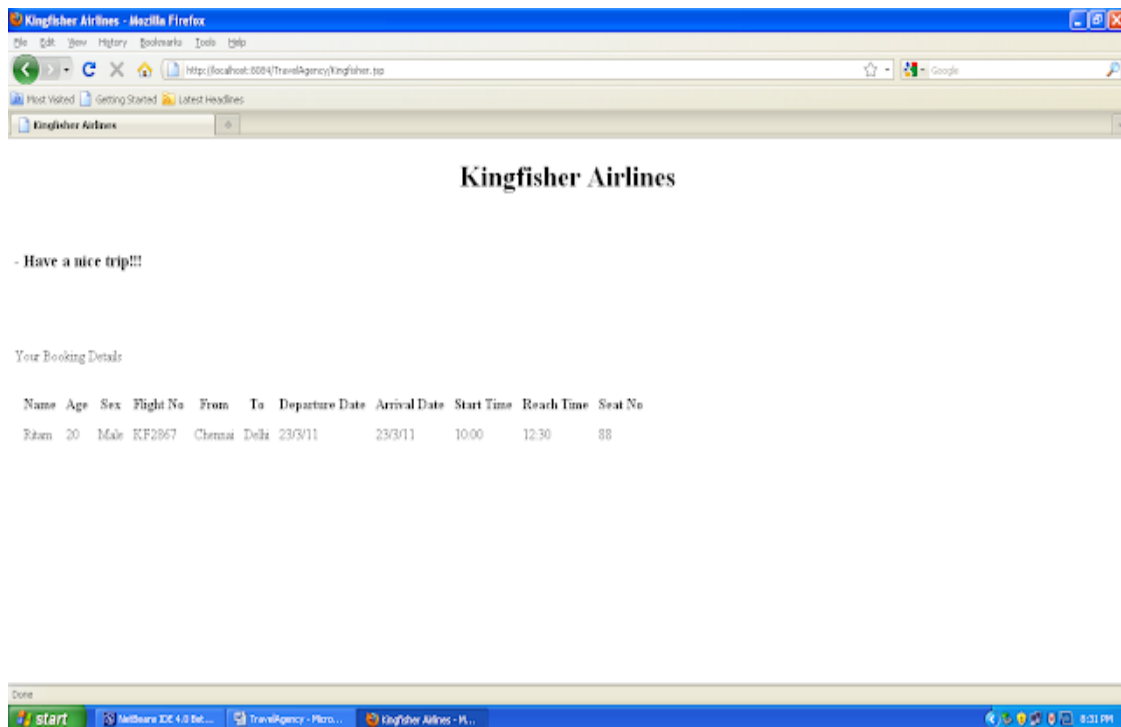
Done

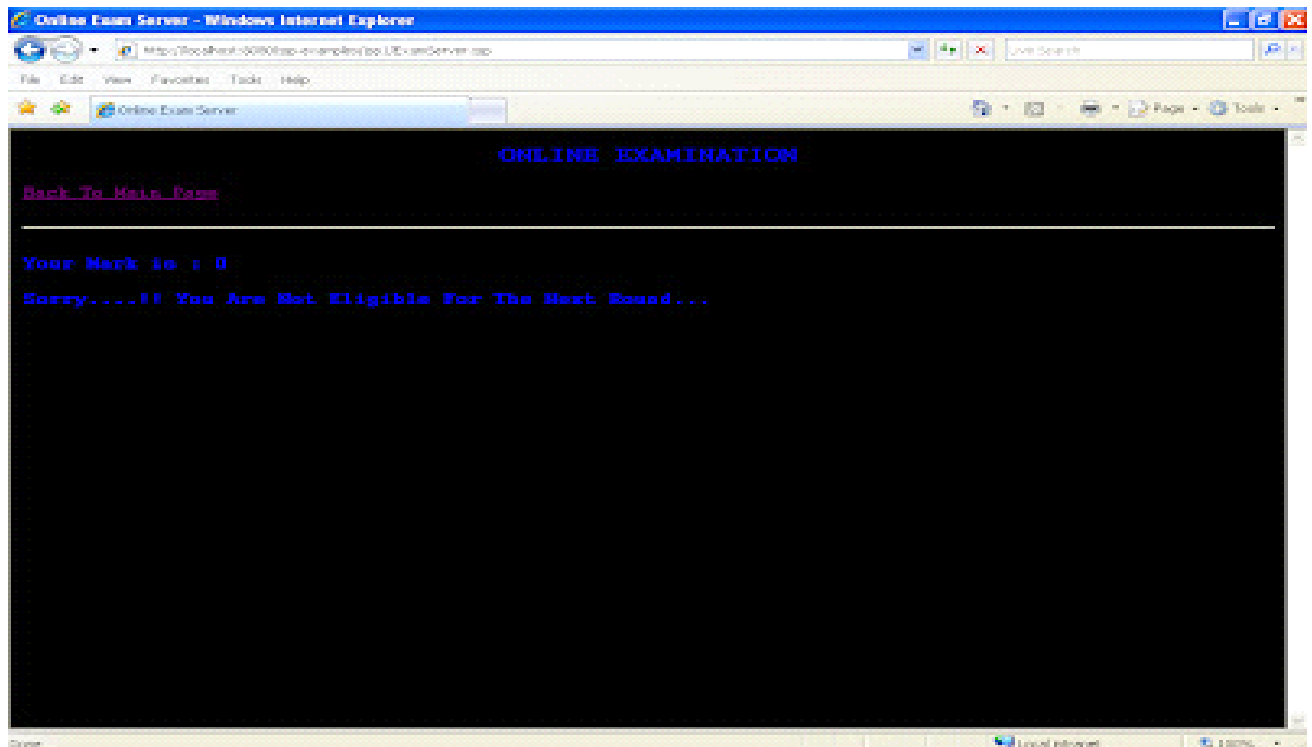
start | Database JDBC 4.0 Bet... | TravelAgency - Micro... | Travel Agency - Micro... | 8:28 PM

airlinelist.jsp



Kingfisher.jsp



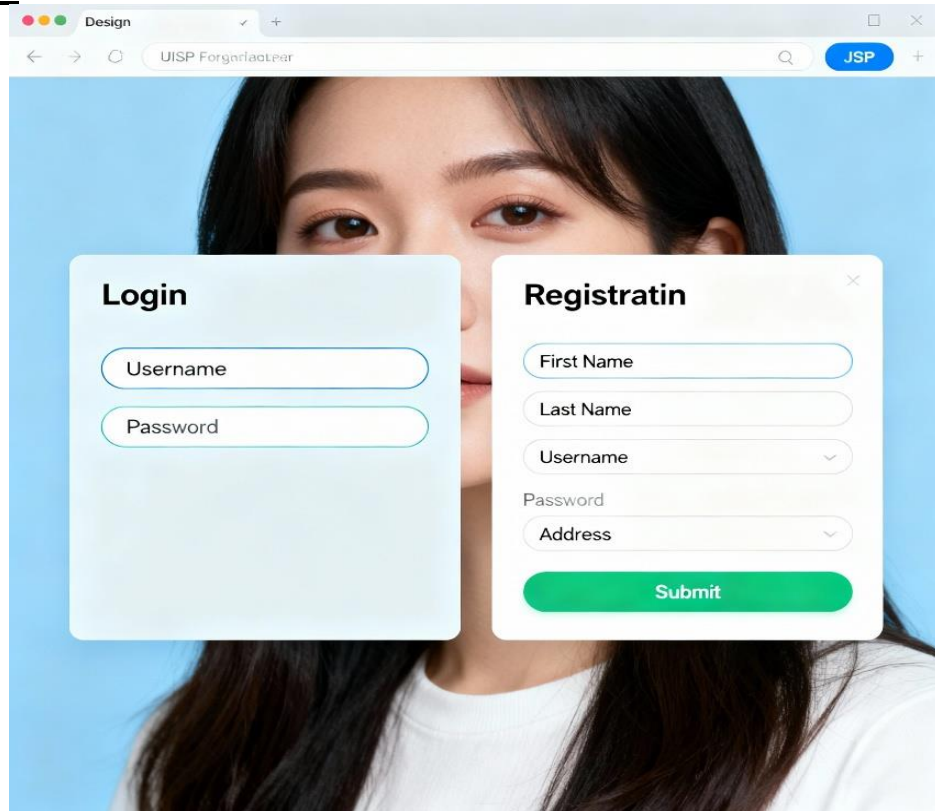


20. Write a JSP program to calculate income tax, login and data capture.

Program:

Login.jsp Page Example:

```
<html>
<head><title>Login Form</title></head>
<body>
<h3> Login here </h3>
<form action="user_login" method="post">
<table style="width: 20%">
<tr><td>UserName</td><td><input type="text" name="username"/></td></tr>
<tr><td>Password</td><td><input type="password" name="password"/></td></tr>
</table>
<input type="submit" value="Login"/>
</form>
</body>
</html>
```

OUTPUT:

Registration Form (Data Capture) – register.jsp:

```
<html>
<head><title>Registration Form</title></head>
<body>
<h1>User Register Form</h1>
<form action="user_register" method="post">
<table style="width: 20%">
<tr><td>First Name</td><td><input type="text" name="first_name"/></td></tr>
<tr><td>Last Name</td><td><input type="text" name="last_name"/></td></tr>
<tr><td>UserName</td><td><input type="text" name="username"/></td></tr>
<tr><td>Password</td><td><input type="password" name="password"/></td></tr>
<tr><td>Address</td><td><input type="text" name="address"/></td></tr>
</table>
<input type="submit" value="Submit"/>
</form>
</body>
</html>
```

Output: - User registration form is shown; entry of data and submit shows welcome message if fields are properly filled (“Welcome User..”).

Income Tax Calculation (Java code): -

```
import java.util.Scanner;
class Income
{
    public static void main(String args[])
    {
```

```
        double t=0;
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter income ");
        double i=sc.nextDouble();
        t=incomeTax(i);
        System.out.println("Income tax amount is "+t);
    }
static double incomeTax(double i)
{
    double tax;
    if(i<=200000)
        tax=0;
    else if(i<=300000)
        tax=0.1*(i-200000);
    else if(i<=500000)
        tax=(0.2*(i-300000))+10000;
    else if(i<=1000000)
        tax=(0.3*(i-500000))+50000;
    else
        tax=(0.4*(i-1000000))+200000;
    return tax;
}
}
```

Output:

```
Enter income
1300000
Income tax amount is 320000.0
```

Mrs.Appikarla Pushpa Latha