WEB TECHNOLOGIES LAB SYLLABUS

OBJECTIVE:

The objective of this lab is to develop an ability to design and implement static and dynamic website.

OUTCOMES:

At the end of the course, students should be able to:

• Design and implement dynamic websites with good aesthetic sense of designing and latest technical know-how's.

• Have a Good grounding of Web Application Terminologies, Internet Tools, E – Commerce and other web services.

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WEB TECHNOLOGIES LAB MANUAL   R13 REGULATION

EXPERIMENT- 1

1.1 OBJECTIVE:
Write a java Program which stores the user login information in database in a server, creates user interface for inserting, deleting, retrieving information from the database accepts user login information and verifies it.

1.2 RESOURCE:
Microscoft MS Access,JDK 1.6

1.3 PROGRAM LOGIC:
1. Establish connection between MS Access and JDBC.
2. Create Table
3. Insertion of values in table.
4. Retriving values from database table.
5.Deleting values in Database.

1.4 PROCEDURE:
1.Go to ODBC and create System DSN.
2.Install JDK
3.Compile Java Program

1.5 PROGRAM:

```java
import java.sql.*;

class OracleCon{

public static void main(String args[]){

try{

//step1 load the driver class

Class.forName("sun.jdbc.odbc.JdbcOdbc");

String url = "jdbc:odbc:Driver={Microsoft Access Driver (*.mdb, *.accdb)};DBQ=" +
"C:\\Database1.accdb";

 //step2 create  the connection object

Connection con=DriverManager.getConnection(  url);

//"jdbc:odbc:tag","scott","tiger");

 //step3 create the statement object

Statement stmt=con.createStatement();

 //step4 execute query

ResultSet rs=stmt.executeQuery("select * from bank");
```

while(rs.next())

System.out.println(rs.getInt(1)+" "+rs.getString(2));

  //step5 close the connection object

con.close();

  }catch(Exception e){ System.out.println(e);}

  }

}

1.6 PRE LAB QUESTIONS
1.   what is jdbc?
2.   Which driver we are using in the lab?
3.   Differentiate Jdbc and Odbc?
4.   What are the classes avialble in the java.sql package
5.   What is the query for Insert the data in the database

1.7 LAB ASSIGNMENT
1. Create table in MS Access.
2.Practice SQL Queries Related to Insert ,Delete and Select.
3. Write a simple java program and Compile and Excecute.

1.8 POST LAB QUESTIONS
1.   Which function we are using for getting the data from the database
2.   Does java is Platform Independent?
3.   What is authentication?
4.   Which method is used to get the form information at the server side?
5.   What is server side validations?

1.9 INPUT & OUTPUT:
Input & output:

1 tagore

2 sai

EXPERIMENT- 2

2.1 OBJECTIVE:
Write a java Program which establish a connection between client and severand transfers data. Transfers the data without establishing a connection.

2.2 RESOURCE:
JDK 1.6

2.3 PROGRAM LOGIC:
1. Compile java program with Command Line argument.
2. Convert given port number into integer.
3. Through Socket Connect client and Server program with same portnumber.

2.4 PROCEDURE:
1.Compile client and server programs
2.Execute Server Program
3.Execute Client Program in separate Command Prompt.

2.5 PROGRAM:
Client Program:

```java
import java.net.*;

import java.io.*;

public class GreetingClient

{

  public static void main(String [] args)

  {

    String serverName = args[0];

    int port = Integer.parseInt(args[1]);

    try

    {

    System.out.println("Connecting to " + serverName +

            " on port " + port);

      Socket client = new Socket(serverName, port);

      System.out.println("Just connected to "

            + client.getRemoteSocketAddress());
```

```java
        OutputStream outToServer = client.getOutputStream();

        DataOutputStream out = new DataOutputStream(outToServer);

        out.writeUTF("Hello from "   + client.getLocalSocketAddress());

        InputStream inFromServer = client.getInputStream();

        DataInputStream in =  new DataInputStream(inFromServer);

        System.out.println("Server says " + in.readUTF());

        client.close();

      }catch(IOException e)

      {

        e.printStackTrace();

      }

  }

}
```

ServerProgram:

```java
import java.net.*;

import java.io.*;

public class GreetingServer extends Thread

{

  private ServerSocket serverSocket;

    public GreetingServer(int port) throws IOException

  {

    serverSocket = new ServerSocket(port);

    serverSocket.setSoTimeout(10000);

  }

  public void run()

  {

    while(true)
```

```java
    {
      try
      {
        System.out.println("Waiting for client on port " +

        serverSocket.getLocalPort() + "...");

        Socket server = serverSocket.accept();

        System.out.println("Just connected to "

            + server.getRemoteSocketAddress());

        DataInputStream in =

            new DataInputStream(server.getInputStream());

        System.out.println(in.readUTF());

        DataOutputStream out =

            new DataOutputStream(server.getOutputStream());

        out.writeUTF("Thank you for connecting to "   + server.getLocalSocketAddress() +
"\nGoodbye!");

        server.close();

      }catch(SocketTimeoutException s)

      {

        System.out.println("Socket timed out!");

        break;

      }catch(IOException e)

      {

      e.printStackTrace();

        break;

      } } }
  public static void main(String [] args)

  {
```

```
    int port = Integer.parseInt(args[0]);

    try

    {

      Thread t = new GreetingServer(port);

      t.start();

    }catch(IOException e)

    {

      e.printStackTrace();    } } }
```

2.6 PRE LAB QUESTIONS
1. What is client?
2. What is server?
3. Which server you are using in the Lab.
4. What is URL?
5. Define Socket Programming

2.7 LAB ASSIGNMENT

1. Simple java program on Java Networking?
2. Simple Java Program using Socket classes and methods?
3. Simple java program on java IOExeption?

2.8 POST LAB QUESTIONS
1. Connection is an Interface or not?
2. Define Abstract class?
3. which interfaces you are using in the Lab to establish a connection
4. what is ipaddress.
5. what are themethods using to perform this program

2.9 INPUT & OUTPUT:
Input:
$ java GreetingServer 6066
Waiting for client on port 6066
$java GreetingClient localhost 6066
Connecting localhost on port 6066
Just connected to localhost/127.0.0.1:6066
Server says thank u for connecting to /127.0.0.1:6066
GoodBye!

EXPERIMENT- 3

3.1 OBJECTIVE:
Write a java program to create an employee class with the data members Emp_id, name, Department and create member function to get the employee information ,display the details.

3.2 RESOURCE:
JDK 1.6

3.3 PROGRAM LOGIC:
1. Define Class and members and methods.
2. Create member function
3. Read the information from class.

3.4 PROCEDURE:
1. Compile Java Program.
2. Execute Java Program.

3.5 PROGRAM:

```java
import java.util.Scanner;

  class Employee

  {

    int Id;

    String Name;

    int Age;

    long Salary;


    void GetData()          // Defining GetData()

    {

      Scanner sc = new Scanner(System.in);

      System.out.print("\n\tEnter Employee Id : ");

      Id = Integer.parseInt(sc.nextLine());

      System.out.print("\n\tEnter Employee Name : ");

      Name = sc.nextLine();

      System.out.print("\n\tEnter Employee Age : ");
```

```
        Age = Integer.parseInt(sc.nextLine());

        System.out.print("\n\tEnter Employee Salary : ");

        Salary = Integer.parseInt(sc.nextLine());

            }

    void PutData()          // Defining PutData()

    {

            System.out.print("Display:");

            System.out.print("\n\tEmployee Id : "+Id);

    System.out.print("\n\tEmployee Name : "+Name);

    System.out.print("\n\tEmployee Age : "+Age);

    System.out.print("\n\tEmployee Salary : "+Salary);

        }


    public static void main(String args[])

    {

    Employee E = new Employee();// Creating Object

    E.GetData();          // Calling GetData()

    E.PutData();          // Calling PutData()

    }

}
```

3.6 PRE LAB QUESTIONS
1. What is function?
2. Difference between Class and Object.
3. What is method Overloading
4. Difference between method overloading and method overriding?
5. Define String args []..?

3.7 LAB ASSIGNMENT
1. Write a java program object and class concept.
2. Write a java program on calling of class methods.
3. Write a java program on Scanner class.

3.8 POST LAB QUESTIONS
1. How to convert from string to Integer?
2. How to call a function?
3. What is meant by method signature?
4. How to create an object?
5. Difference between static and Heap memory

3.9 INPUT & OUTPUT:
Input:
Enter Employee Id:100

Enter Employee Name:Tagore

Enter Employee Age:38

Enter Emplyee Salary:25000

OutPut:

Display:

Enter Employee Id:100

Enter Employee Name:Tagore

Enter Employee Age:38

Enter Emplyee Salary:25000

EXPERIMENT- 4

4.1 OBJECTIVE:
Write a java program to create a package for simple arithmetic operations

4.2 RESOURCE:
Jdk 1.6

4.3 PROGRAM LOGIC:
1. import user define package .
2. do arthemetic operations with different methods.
3. call the methods with Math object.

4.4 PROCEDURE:
1.Create a folder for Package purpose.
2.keep the class file in created folder and Compile java program
3. Execute Java Program

4.5 PROGRAM:
Testprogram:

```
import arthemetic.*;

class Test

{

public static void main(String as[])

{

MyMath m=new MyMath();

System.out.println(m.add(8,5));

System.out.println(m.sub(8,5));

System.out.println(m.mul(8,5));

System.out.println(m.div(8,5));

System.out.println(m.mod(8,5));

}


}
```

Package Program:

```java
package arthemetic;

public class MyMath

{

public int add(int x,int y)

{

return x+y;

}

public int sub(int x,int y)

{

return x-y;

}

public int mul(int x,int y)

{

return x*y;

}

public double div(int x,int y)

{

return (double)x/y;

}

public int mod(int x,int y)

{

return x%y;

}

}
```

4.6 PRE LAB QUESTIONS
1. Define package?
2. What is purpose of "extend" keyword?
3. What do you mean classpath?
4. How to create a package?
5. How to import a package?

4.7 LAB ASSIGNMENT
1. Write a java program with Math class and Methods.
2. Write a java program create class with methods with different argument methods.

4.8 POST LAB QUESTIONS
1. What is difference between absolute path and classpath
2. What is purpose of "return" keyword ?
3. What is purpose of "this" keyword?
4. How to access a class in another package?
5. What is difference between class and interface?

4.9 INPUT & OUTPUT:
Input & OutPut:

13

3

40

1.6

3

EXPERIMENT- 5

5.1 OBJECTIVE:
Write a java Program to create userdefined Exception called"String NotFound" Exception"
when the user entered input is not Equal to "INDIA".

5.2 RESOURCE:
JDK 1.6

5.3 PROGRAM LOGIC:
1. Create a user define method.
2. Check whether input is string.
3. Catch the Exception.

5.4 PROCEDURE:
1.Compile the java program
2. Execute the java program

5.5 PROGRAM:
import java.io.*;

import java.lang.Exception;

class stringnotmatch extends Exception

{

stringnotmatch(String msg)

{

super(msg);

}

}

class india

{

public static void main(String args[]) throws Exception

{

String s1;

System.out.println("enter string");

BufferedReader br=new BufferedReader(new InputStreamReader(System.in));

s1=br.readLine();

```
try{

if(s1.equalsIgnoreCase("INDIA"))

System.out.println("match");

else

throw new stringnotmatch("no match");

}

catch(stringnotmatch e)

{

System.out.println("stringnotmatch caught");

System.out.println(e.getMessage());

}

}

}
```

5.6 PRE LAB QUESTIONS
1. What is Exception handling?
2. What is Exception?
3. What is the difference between Exception and Error in java ?
4. What is the difference between throw and throws ?
5. What is the importance of finally block in exception handling ?

5.7 LAB ASSIGNMENT
1. Write a java program for simple Exception Check?
2. Write a java program to read input from System.in?

5.8 POST LAB QUESTIONS
1. What will happen to the Exception object after exception handling ?
2. How does finally block differ from finalize() method ?
3. Define user defined Exception?
4. What is Bug?
5. What is the use of try,catch,finally blocks?

5.9 INPUT & OUTPUT:
Input & OutPut:

Enter string:india

Stringmatched

Enter string:Tagore

Stringnotmatched caught exception

EXPERIMENT- 6

6.1 OBJECTIVE:
Write a HTML to create user registration form with the following constraints; validate the registration, user login, user profile, and payment by credit card pages using javascript.

6.2 RESOURCE:
Internet Explorer,Notepad

6.3 PROGRAM LOGIC:
1. Enter the values in Registration Form.
2. Validate all the fields in Registration Form.

6.4 PROCEDURE:
Enter the URL path in Internet Explorer.

6.5 PROGRAM:
HTML code: Demo Registration.html

```
<html >
<head>


    <!--external javascript-->
<script typ="text/javascript" src="validation.js" >
</script>


</head>
<body>


<center>
<h1>Demo Registration Form</h1>
<form name="form1"  method="post" action="success.html">


<table border='0'>
 <tr>
  <td><LABEL for="firstname">First Name:<sup style="color:#F00">*</sup>
</LABEL></td>
      <td><INPUT type="text" id="firstname"></td>
 </tr>
 <tr>
```

```
 <td><LABEL for="lastname">Last Name:<sup style="color:#F00">*</sup>
</LABEL></td>
 <td><INPUT type="text" id="lastname"></td>
 </tr>


 <tr>
   <td><LABEL for="gender">Gender:<sup style="color:#F00">*</sup> </LABEL></td>
<td><INPUT type="radio" name="gender" value="Male"> Male
   <INPUT type="radio" name="gender" value="Female"> Female </td>
 </tr>
 <tr>
  <td><LABEL for="dob">Date of Birth:<sup style="color:#F00">*</sup>
</LABEL></td>
 <td>
 <select id="dd">
     <option value="dd">DD</option>
     <script type="text/javascript">
  for(var i=1;i<32;i++)
   document.write("<option value='"+i+"'>" + i+"</option> ");
  </script>
     </select>
          </select>
           <select id="mmm">
      <option value="mmm">MMM</option>
      <option value="0">JAN</option>
      <option value="1">FEB</option>
      <option value="2">MAR </option>
      <option value="3">APR</option>
      <option value="4">MAY</option>
      <option value="5">JUN</option>
      <option value="6">JUL</option>
      <option value="7">AUG</option>
      <option value="8">SEP</option>
      <option value="9">OCT</option>
      <option value="10">NOV</option>
      <option value="11">DEC</option>
```

```
        </select>
        <select id="yyyy">
          <option value="yyyy"selected>YYYY</option>
        <script type="text/javascript">
  var dt= new Date();
  for(var i=1979;i<=dt.getFullYear();i++)
   document.write("<option value='"+i+"'>" + i+"</option> ");
  </script>
  </select>


  </td>
 </tr>
 <tr>
  <td><LABEL for="address" style="text-align:left;">Address:<sup
style="color:#F00">*</sup> </LABEL></td>
  <td><textarea id="address"  name="address" rows="4" cols="20"></textarea>
  </td>



 </tr>
 <tr>
  <td><LABEL for="contctno">Contact Number:<sup style="color:#F00">*</sup>
</LABEL></td>
  <td><INPUT type="text" id="contctno"></td>
 </tr>
 <tr>
  <td><LABEL for="email">Email:<sup style="color:red;">*</sup> </LABEL></td>
  <td><INPUT type="text" id="email"></td>
 </tr>
 <tr>
  <td></td><td><br/><INPUT type="submit" onClick="return validateForm()"
value="Submit">
  <INPUT type="reset" onClick="return confirmreset()"></td>
 </tr>


 <tr>
```

```
  <td></td><td style="font-size:12px;text-align:right;"><br/><i style="color:red;font-
size:12px;align:right;" >* - Mandatory</i></td>
 </tr>
   </table>
 </FORM></center>
```

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

Javascript code: validation.js

```javascript
function validateForm()
{

 var x=document.forms["form1"]["firstname"];
 if (x.value=="")
  {
 alert("Please enter the First name.");
 x.focus();
 return false;
  }

 else if(x.value.length>20)
  {
  alert("First name cannot be greater than 20 characters.");
 x.value="";
 x.focus();
 return false;
  }
 else if ((!namepattern.test(x.value)))
  {
 alert("First name should contain only alphabets.");
 x.value="";
 x.focus();
```

```javascript
 return false;
  }

x=document.forms["form1"]["lastname"];
if(x.value=="")
  {
 alert("Please enter the Last name.");
 x.focus();
 return false;
}
 else if(x.value.length>20)
  {
 alert("Last name cannot be greater than 20 characters.");
 x.value="";
 x.focus();
 return false;
}
 else if (!namepattern.test(x.value))
  {
   alert("Last name should contain only alphabets.");
 x.value="";
 x.focus();
 return false;
 }

if((document.form1.gender[0].checked==false)&&(document.form1.gender[1].checked==f
alse))
 {
 document.form1.gender[0].focus();
 alert("Please select a gender.");
 return false;
 }
 var dd=document.form1.dd.value;
 var mmm=document.form1.mmm.value;
 var yyyy=document.form1.yyyy.value;
```

```
if(!validdate(dd,mmm,yyyy))
{
 return false;
}


x= document.getElementById("address");
if(x.value==null || x.value=="" )
{
 alert("Please enter the Address.");
 x.value="";
 x.focus();
 return false;
}
else if(x.value.length<20)
  {
 alert("Address should be greater than 20 characters.");
 x.value="";
 x.focus();
 return false;
}
x=document.form1.contctno;
if(x.value=="")
{
 alert("Please enter the Contact number.");
 x.value="";
 x.focus();
 return false;
}
else if(isNaN(x.value))
{
 alert("Contact number should contain only digits.");
 x.value="";
 x.focus();
 return false;
}
else if(x.value.length!=10)
```

```
 {
  alert("Contact number should contain only 10 digits.(Mobile number)");
  x.value="";
  x.focus();
  return false;
 }
 else if(!phonepattern.test(x.value))
 {
  alert("Invalid Contact number.");
  x.value="";
  x.focus();
  return false;
 }
 x=document.form1.email;
 if(!emailpattern.test(x.value))
 {
  alert("Invalid email id.");
  x.value="";
  x.focus();
  return false;
 }
 if(confirm("Do you want to submit the form?"))
{
alert("Registration Form Submitted Successfully.");
}
else
return false;
}
function validdate(dd,mm,yyyy)
 {
  var dateobj = new Date(yyyy, mm, dd);
  var datecurrent= new Date();

if((dateobj.getMonth()!=mm)||(dateobj.getDate()!=dd)||(dateobj.getFullYear()!=yyyy)||(dateobj>datecurrent))
  {
```

```
   alert("Please select a valid date.");

   return false;

 }

 return true;

 }


 function confirmreset()

 {

 return confirm("Do you want to reset the form?");

 }
```

6.6 PRE LAB QUESTIONS
1. What is HTML?
2. What is Form tag and its attributes.
3. What are the restrictions of GET and POST methods
4. What is validation?
5. What is meant by client side validations?

6.7 LAB ASSIGNMENT
1. Write a simple HTML program.
2. Write a simple Java Script program.
3. Write a simple HTML program With Form attributes.

6.8 POST LAB QUESTIONS
1. What is the purpose of alert box?
2. Define javascript objects
3. How to handle events in javascript
4. What is meant by confirm box in javascript
5. what is the purpose of document object

6.9 INPUT & OUTPUT:
Enter URL path in Explorer:
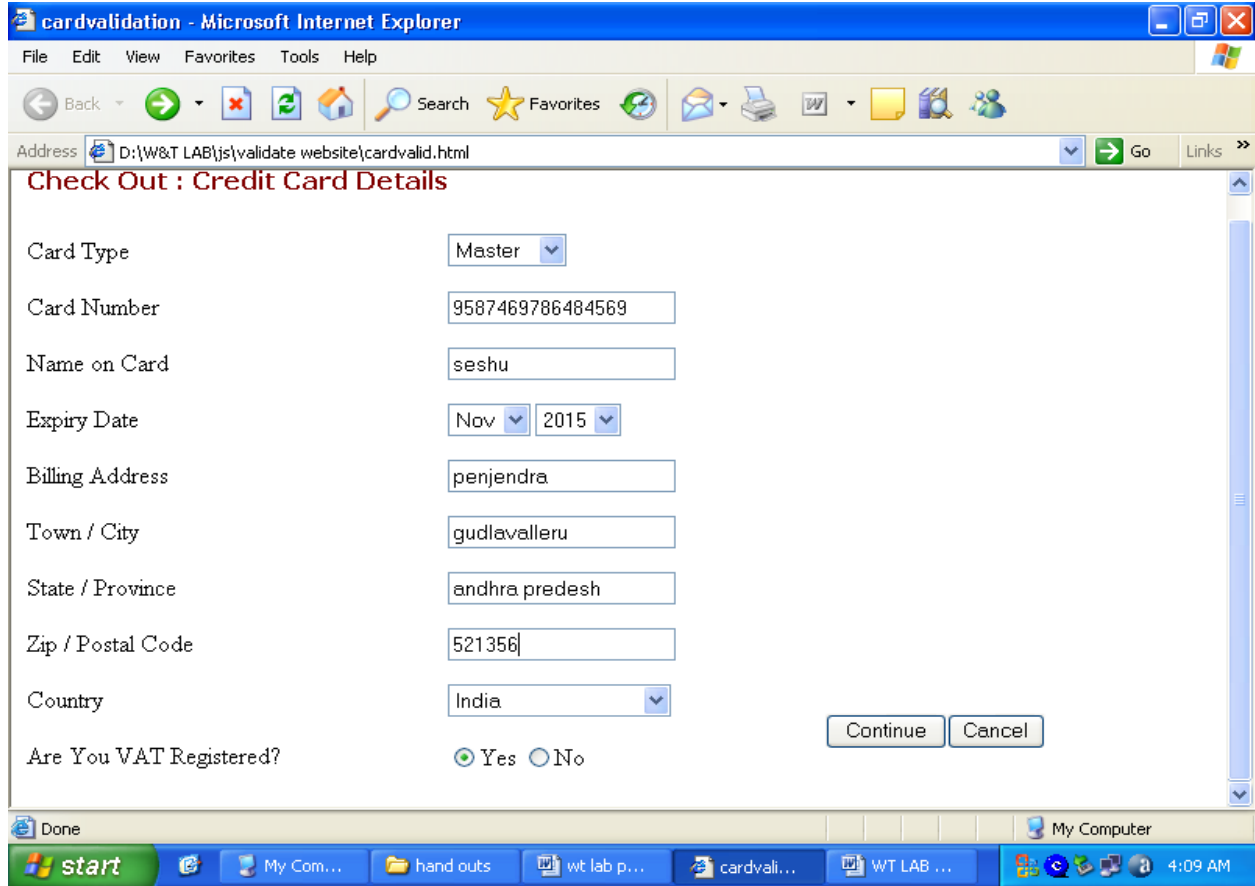
EXPERIMENT- 7

7.1 OBJECTIVE:
Create and save an XML document at the server, which contains 10 users information .Write a program which takes user id as input and returns the user details by taking the user information from the XML document.

7.2 RESOURCE:
NotePad,Internet Explorer,TomCat Server.

7.3 PROGRAM LOGIC:
1. Create Ten users information in XML.
2. Create an HTML File with Textbox and Button.
3. Extract values from XML.

7.4 PROCEDURE:
Enter User id in TextBox and click submit button

7.5 PROGRAM:
student.dtd:

```
<!ELEMENT student(rollnum,name,parntname,branch,year,addr,email,phno)>

<!ELEMENT roll_no(#PCDATA)>

<!ELEMENT name(first_name,last_name)>

<!ELEMENT first_name(#PCDATA)>

<!ELEMENT last_name(#PCDATA)>

<!ELEMENT father_name(fname,mname,lname)>

<!ELEMENT first_name(#PCDATA)>

<!ELEMENT last_name(#PCDATA)>

<!ELEMENT branch(#PCDATA)>

<!ELEMENT year(#PCDATA)>

<!ELEMENT address(door_no,street,city)>

<!ELEMENT door_no(#PCDATA)>

<!ELEMENT street(#PCDATA)>

<!ELEMENT city(#PCDATA)>

<!ELEMENT email(#PCDATA)>

<!ELEMENT phno(#PCDATA)>
```

student.xsd:

```
<xs:schema>
 <xs:element name="student">
<xs:complextype>
<xs:sequence>
<xs:element name="roll_no" type="xs:string"/>
<xs:element name="name">
<xs:complextype>
<xs:sequence>
<xs:element name="first_name" type="xs:string"/>
<xs:element name="last_name" type="xs:string"/>
</xs:sequence>
</xs:complextype>
</xs:element>
<xs:element name="father-name">
<xs:complextype>
<xs:sequence>
<xs:element name="first_name" type="xs:string"/>
<xs:element name="last_name" type="xs:string"/>
</xs:sequence>
</xs:complextype>
</xs:element>
<xs:element name="branch" type="xs:string"/>
<xs:element name="year" type="xs:integer"/>
<xs:element name="addr">
<xs:complextype>
```

```
<xs:sequence>

<xs:element name="door-no" type="xs:string"/>

<xs:element name="street" type="xs:string"/>

<xs:element name="city" type="xs:string"/>

</xs:sequence>

</xs:complextype>

</xs:element>

<xs:element name="email" type="xs:string"/>

<xs:element name="phno" type="xs:integer"/>

</xs:sequence>

</xs:complextype>

</xs:element>

</xs:schema>
```

student.xml:

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

- <student xmlns:xsi="xmlschema-instance"

xsi:SchemaLocation="student.xsd">

<roll_no>08A01D2501</roll_no>

- <name>

<first_name>A</first_name>

<Last_name>Aruna</Last_name>

</name>

- <father_name>

<first_name>Venkateswara</first_name>

<Last_name>Rao</Last_name>

</father_name>

<branch>computer engineering</branch>
```

```
<year>1ST Year</year>

- <address>

<door-no>32-15/1-44</door-no>

<street>B.R.Nagar-1</street>

<city>Gurgaon</city>

</address>

<email>iaaruna@yahoo.com</email>

<phno>9949643372</phno>

<roll_no>08A01D2501</roll_no>

- <name>

<first_name>Prathap</first_name>

<Last_name>Rudra</Last_name>

</name>

- <father_name>

<first_name>Venkateswara </first_name>

<Last_name>B</Last_name>

</father_name>

<branch> computer engineering (mtech) </branch>

<year>1st Year</year>

- <address>

<door-no>door no 603/n</door-no>

<street>Recoloney</street>

<city>Delhi</city>

</address>

<email>brprathap@gmail.com</email>

<phno>9866145423</phno>

<roll_no>08A01D2503</roll_no>
```

- <name>

<first_name>Ramesh</first_name>

<Last_name>Kumar</Last_name>

</name>

- <father_name>

<first_name>Venkateswara</first_name>

<Last_name>Rao</Last_name>

</father_name>

<branch> computer engineering(mtech) </branch>

<year>1

st Year</year>

- <address>

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<street>B.R.Nagar-1</street>

<city>Gurgaon</city>

</address>

<email>itrameshch@gmail.com</email>

<phno>9985150379</phno>

<roll_no>08A01D2504</roll_no>

- <name>

<first_name>kishore</first_name>

<Last_name>Galla</Last_name>

</name>

- <father_name>

<first_name>Venkateswara</first_name>

<Last_name>Rao</Last_name>

</father_name>

<branch> Computer engineering (mtech) </branch>

<year>1st Year</year>

- <address>

<door-no>32-15/1-44</door-no>

<street>B.R.Nagar-1</street>

<city>Gurgaon</city>

</address>

<email>galla_kishore@yahoo.com</email>

<phno>990837394</phno>

<roll_no>08A01D2505</roll_no>

- <name>

<first_name>Madhu</first_name>

<Last_name>Garlapati</Last_name>

</name>

- <father_name>

<first_name>Venkateswara</first_name>

<Last_name>Rao</Last_name>

</father_name>

<branch> commputer engineering (mtech) </branch>

<year>1st Year</year>

- <address>

<door-no>32-15/1-44</door-no>

<street>B.R.Nagar-1</street>

<city>Gurgaon</city>

</address>

<email>madhubabu.garlapati@gmail.com</email>

<phno>9908005778</phno>

</student>

7.6 PRE LAB QUESTIONS

1. What is meant by XML?
2. Explain the purpose of XML?.
3. What is meant by userdefined tags?
4. Explain the purpose of XML parser.
5. What is the difference between DOM and SAX parser

7.7 LAB ASSIGNMENT

1. Write a simple XML.
2. Write a simple HTML program.
3. Installation Procedure of TomCat.

7.8 POST LAB QUESTIONS
1. What is the difference between PCDATA and CDATA
2. What is DTD?
3. How can we define schema?
4. what is meant by wellformed XML document.
5. what is meant by namespace?

7.9 INPUT & OUTPUT:
Enter User ID In TextBox:

VASU	CD425	TRAINEE	vasu_v@gmail.com	09866421685	KERALA
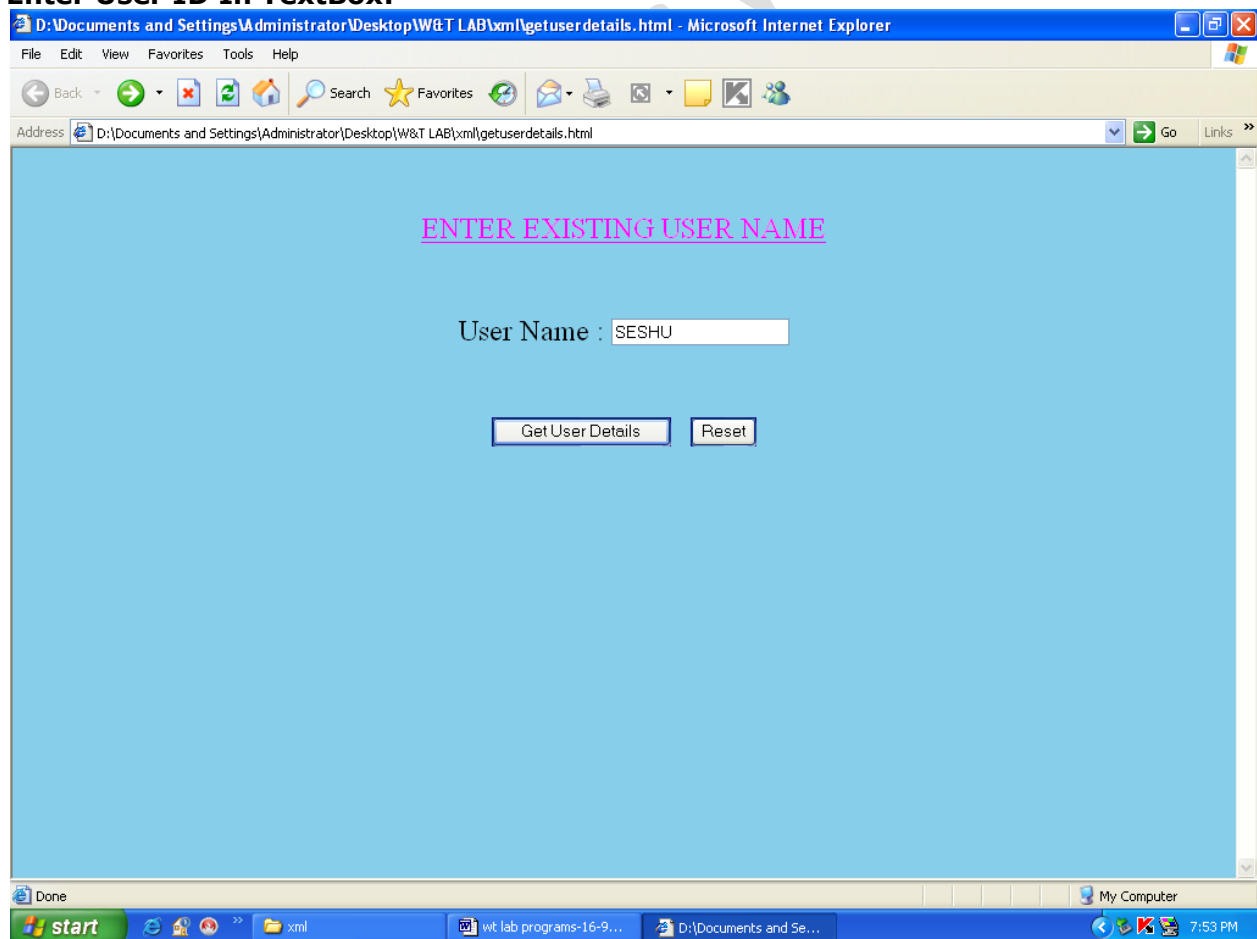
EXPERIMENT- 8

8.1 OBJECTIVE:
Write   a XHTML from for Employee information like Emp_id,Name,Department
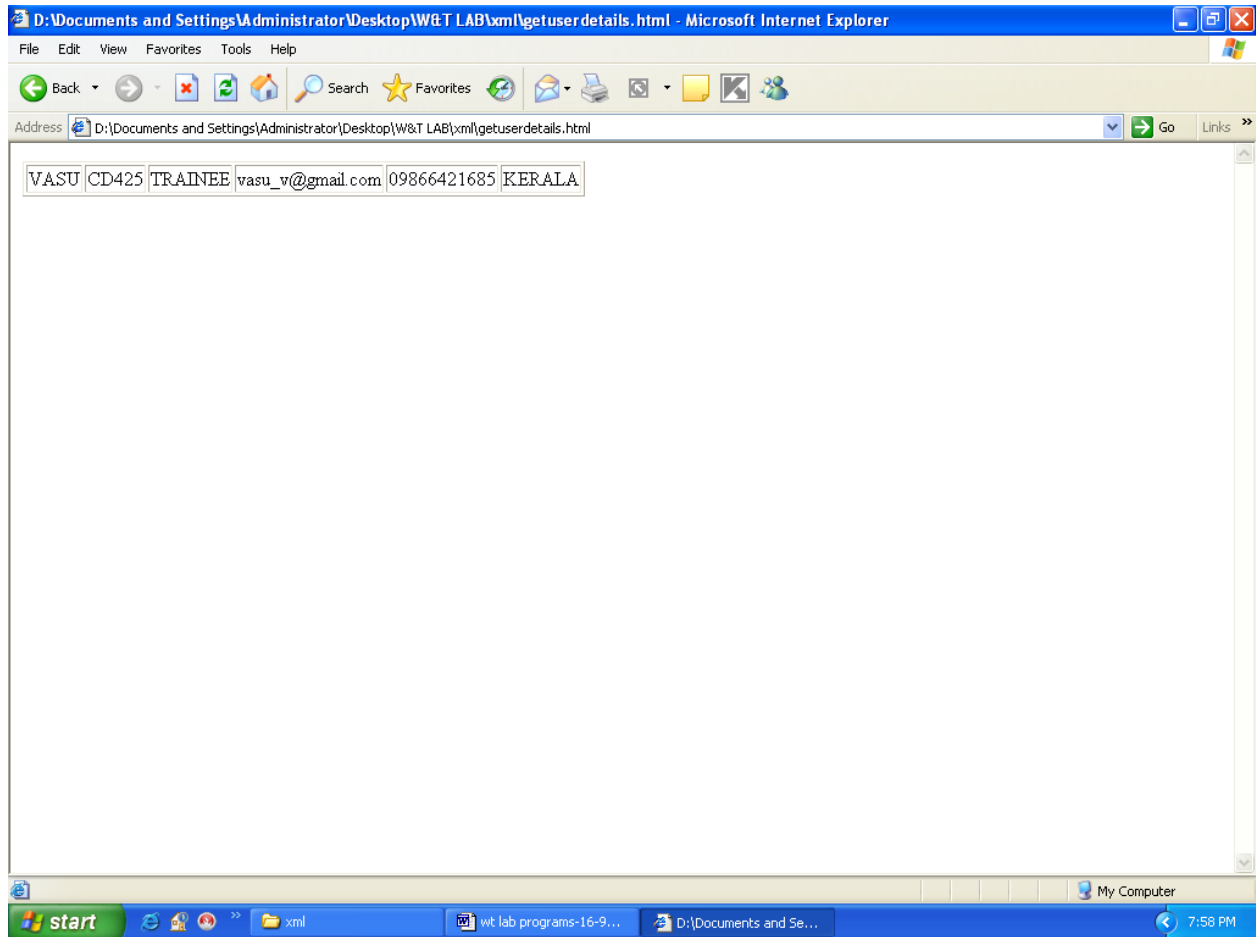Name,Phone,Email using JavaScript check the validation for each fields(the first character of
Emp_id is followed by number ,name should accept 20 characters, Phone max 8 digits,
email)

8.2 RESOURCE:
Notepad,Internet Explorer

8.3 PROGRAM LOGIC:
1. Enter the values in Employee information Form.
2. Check fields with java script validation name 20 characters and Phone 8 digits(max).

8.4 PROCEDURE:
1.Create HTML File with employee Details.
2.Check validation with JavaScript.

8.5 PROGRAM:

```
<html>

<head>

<title>Registration Form</title>

<script type="text/javascript">

<!--

function validate_form ( )

{

 if ( document.emp.emp_name.value == "" )

{

alert ( "Please fill in the 'Your Employee Name' box." );

return false;

}
```

```javascript
if ( document.emp.num.value == "" )

{

alert ( "Enter Employee Number" );

return false;

}

alert("sucessfully Submitted");

return true;

}


if (!(/^\w+([\.-]?\w+)*@\w+([\.-
]?\w+)*(\.\w{2,3})+$/).test(document.emp.email_id.value))

 {

   alert("You have entered an invalid email address!")

   return (false)

 }

function isNumberKey(evt)

    {

     var charCode = (evt.which) ? evt.which : event.keyCode;

      if (charCode != 46 && charCode > 31

        && (charCode < 48 || charCode > 57))

{alert("Enter Number");

return false;
```

```
        }

            return true;

        }

    //-->

    </script>

    </head>

    <body bgcolor="#FFFFFF">

    <form name="emp" action="" onsubmit="return validate_form();" method="post">

    <table align="center" width=40% width="100%" cellspacing="2" cellpadding="2"
    border="5">

        <tr>

            <td colspan="2" align="center"><b>Employee Registration Form.</b></td>

                </tr>

        <tr>

            <td align="left" valign="top" width="41%">Employee Name<span
    style="color:red">*</span></td>

             <td width="57%"><input type="text" value="" name="emp_name"
    size="24"></td>

        </tr>
        <tr>

            <td align="left" valign="top" width="41%">Employee Number<span
    style="color:red">*</span></td>

            <td width="57%">
```

```
        <input type="text" value="" name="num" onkeypress="return
isNumberKey(event)"  size="24"></td>

    </tr>

<tr>

      <td align="left" valign="top" width="41%">Address</td>

       <td width="57%"><textarea rows="4" maxlen="200" name="S2"
cols="20"></textarea></td>

    </tr

    <tr >

       <td align="left" valign="top" width="41%">Contact Number</td>

      <td width="57%">

      <input type="text" value="" onkeypress="return isNumberKey(event)"
name="txtFName1" size="24"></td>

    </tr>

    <tr >

      <td align="left" valign="top" width="41%">Job Location</td>

      <td width="57%"><select name="mydropdown">

<option value="Default">Default</option>

<option value="Chennai">Chennai</option>

<option value="Bangalore">Bangalore</option>

<option value="Chennai">Pune</option>

<option value="Bangalore">Mysore</option>

<option value="Chennai">Chandigarh</option>
```

```
   </select></td>

  </tr>

    <tr >

      <td align="left" valign="top" width="41%">Designation</td>

      <td width="57%">

<select name="mydropdown">

<option value="Default">Default</option>

<option value="Systems Engineer">Systems Engineer</option>

<option value="Senior Systems Engineer">Senior Systems Engineer</option>

<option value="Technology Analyst">Technology Analyst</option>

<option value="Technology Lead">Technology Lead</option>

<option value="Project Manager">Project Manager</option>

 </select></td>

    </tr>

    <tr>

      <td align="left" valign="top" width="41%">Email<span
style="color:red">*</span></td>

      <td width="57%">

      <input type="text" value="" name="email_id" size="24"></td>

    </tr>

    <tr>

      <td colspan="2">
```
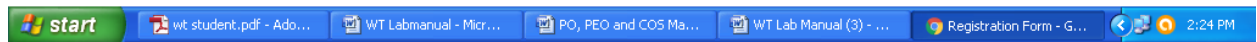
```
        <p align="center">

        <input type="submit" value=" Submit"
  name="B4">          &nbs
  p;    

        <input type="reset" value=" Reset All  " name="B5"></td>

    </tr>

 </table>

 </form>

 </body>

</html>
```

8.6 PRE LAB QUESTIONS
   1   What is purpose of marque tag
   2   What is the difference between HTML and XML
   3   What is the purpose of DHTML
   4   What is meant by XHTML?
   5   Which tag is used to represent a row in the table?

8.7 LAB ASSIGNMENT
   1. Write a simple XHTML program.
   2. Write a simple Java Script program.

8.8 POST LAB QUESTIONS
   1 What is difference between button and submit in the form.
   2 What is the purpose of
   3 What is the use of align attribute in any tag?
   4 What is the purpose of select tag
   5 Syntax for creation of Textbox

8.9 INPUT & OUTPUT:

EXPERIMENT- 9

9.1 OBJECTIVE:
Write a java servlet program to display the current time on the server

9.2 RESOURCE:
Tomcat Server,JDK 1.6,Servlet API.

9.3 PROGRAM LOGIC:
1. Read the input from system .
2. Display the Time from System.

9.4 PROCEDURE:
1.Set ClassPath for running Servlet.
2.Install Tomcat Server.
3.Compile Servlet Program.
4. Execute Servlet Program.

9.5 PROGRAM:

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

// Extend HttpServlet class
public class CurrentDate extends HttpServlet {

  public void doGet(HttpServletRequest request,
                HttpServletResponse response)
         throws ServletException, IOException
  {
     // Set response content type
     response.setContentType("text/html");

     PrintWriter out = response.getWriter();
     String title = "Display Current Date & Time";
     Date date = new Date();
     String docType =
     "<!doctype html public \"-//w3c//dtd html 4.0 " +
     "transitional//en\">\n";
     out.println(docType +
      "<html>\n" +
      "<head><title>" + title + "</title></head>\n" +
      "<body bgcolor=\"#f0f0f0\">\n" +
      "<h1 align=\"center\">" + title + "</h1>\n" +
      "<h2 align=\"center\">" + date.toString() + "</h2>\n" +
      "</body></html>");
  }
}
```

9.6 PRE LAB QUESTIONS
1   What is difference between CGI and Servlets
2   What is Servlet?
3   Mention the interface available in the javax.servlet package
4   What are the differences between GenericServlet and HttpServlet?
5   Explain about Servlet Lifecycle methods?

9.7 LAB ASSIGNMENT
1. Write a simple Servlet program.
2. Install Procedure for Tomcat.

9.8 POST LAB QUESTIONS
1   What is the use of service method?
2   What is the use if init() method?
3   What is the use of destroy() method?
4   What is difference between java and javax?
5   Tell some packages in javax?

9.9 INPUT & OUTPUT:
Input:

Display Current Date & Time
Mon Jun 21 21:46:49 GMT+04:00 2010

EXPERIMENT- 10

10.1 OBJECTIVE:
To write html and servlet to demonstrate invoking a servlet from html

10.2 RESOURCE:
NotePad,TomCat Server,ServletAPI

10.3 PROGRAM LOGIC:
1. Enter user information username and password.
2. Get the form Details in the Service method of Servlet.
3. Display the data.

10.4 PROCEDURE:
1.Run the Servlet Web Application
2.Enter the URL in Explorer.
3. Enter user information username and password.
4.Get the details from Server.

10.5 PROGRAM:
One.html

```
<html>

<head>
<title>New Page 1</title>
</head>

<body>

<h2>Login</h2>
<p>Please enter your username and password</p>
<form method="GET" action="/htmlform/LoginServlet">
  <p> Username  <input type="text" name="username" size="20"></p>
  <p> Password  <input type="text" name="password" size="20"></p>
  <p><input type="submit" value="Submit" name="B1"></p>
</form>
<p> </p>

</body>

</html>
```

LoginServlet.java

```
import java.io.*;

import javax.servlet.*;

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

```java
public class LoginServlet extends HttpServlet{
 public void doGet(HttpServletRequest request,
 HttpServletResponse response)
 throws ServletException, IOException {
 response.setContentType("text/html");
 PrintWriter out = response.getWriter();
 String name = request.getParameter("username");
 String pass = request.getParameter("password");
 out.println("<html>");
 out.println("<body>");
 out.println("Thanks  Mr." + " " + name + " "
 + "for visiting roseindia<br>" );
 out.println("Now you can see your password : "
 + " " + pass + "<br>");
 out.println("</body></html>");
 }
}
```

 web.xml file for this program:

```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>
 <servlet>
 <servlet-name>Hello</servlet-name>
 <servlet-class>LoginServlet</servlet-class>
 </servlet>
 <servlet-mapping>
 <servlet-name>Hello</servlet-name>
 <url-pattern>/LoginServlet</url-pattern>
```

 </servlet-mapping>

</web-app>

10.6 PRE LAB QUESTIONS
1. How to get Form fields at the server side
2. What is the purpose of Service() method in servlets
3. How many times the service() will be called
4. What is the use of contentType()
5. How to display the result to the end user in servlets

10.7 LAB ASSIGNMENT
1. Write a simple HTML program.
2. Write a simple servlet Parameter Passing Program?

10.8 POST LAB QUESTIONS
1. How we pass parameter from html to servlet?
2. What are different attributes in form tag?
3. What are attributes of text tag?
4. Tell some methods in servlet class?

10.9 INPUT & OUTPUT:
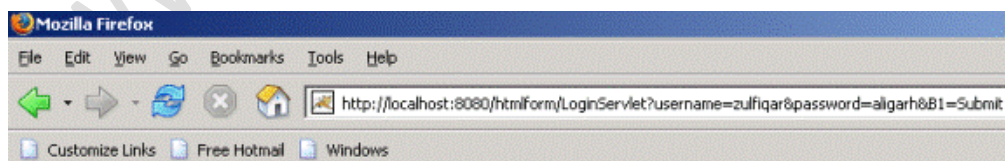The output of the program is given below:

EXPERIMENT- 11

11.1 OBJECTIVE:
Write a java servlet program to change the Background color of the page by the color selected by the user from the list box

11.2 RESOURCE:
Notepad, Tomcat Server, ServletAPI

11.3 PROGRAM LOGIC:
1. Select the Color from the ListBox from user.
2. To change the Background color based upon Selection.

11.4 PROCEDURE:
1. Enter the URL in Explorer.
2. Select the Color in List Box.

11.5 PROGRAM:

```html
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Select the list of colors</title>
</head>
<body>
        <form action = "/ServletProject/ColorPage">
                <select name = "colors" size = 5 multiple>
                        <option selected>Green</option>
                        <option>Red</option>
                        <option>Yellow</option>
                        <option>Blue</option>
                        <option>Black</option>
                </select>
                <input type = "submit" name = "submit">
        </form>
</body>
</html>
```

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

/**
* Servlet implementation class for Servlet: ColorPage
*
*/
public class ColorPage extends javax.servlet.http.HttpServlet implements
javax.servlet.Servlet {
/* (non-Java-doc)
* @see javax.servlet.http.HttpServlet#HttpServlet()
*/
```

```java
public ColorPage() {
super();
}

/* (non-Java-doc)
* @see javax.servlet.http.HttpServlet#doGet
  (HttpServletRequest request, HttpServletResponse response)
*/
protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
// TODO Auto-generated method stub
response.setContentType("text/html");
PrintWriter pw = response.getWriter();
HttpSession session = request.getSession();
String colors[] = request.getParameterValues("colors");
if(session!=null)
{
session.setAttribute("color",colors);
session.setMaxInactiveInterval(60);
}
pw.println("<html><body bgcolor =cyan>");
for(int i = 0; i<colors.length; i++)
{
pw.println("The selected colors are" + colors[i]+ "<br>");
}
pw.println("<form action = /ServletProject/GetColors>");
pw.println("<input type = submit name= submit)>");
pw.println("</form></body></html>");
}

/* (non-Java-doc)
* @see javax.servlet.http.HttpServlet#doPost(HttpServletRequest request,
  HttpServletResponse response)
*/
protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
// TODO Auto-generated method stub
}
}


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

/**
* Servlet implementation class for Servlet: GetColors
*
*/
public class GetColors extends HttpServlet {
/* (non-Java-doc)
* @see javax.servlet.http.HttpServlet#HttpServlet()
*/
```

```
public GetColors() {
super();
}

/* (non-Java-doc)
* @see javax.servlet.http.HttpServlet#doGet(
HttpServletRequest request, HttpServletResponse response)
*/
protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
// TODO Auto-generated method stub
response.setContentType("text/html");
PrintWriter pw = response.getWriter();
HttpSession session = request.getSession(false);
if(session == null)
{
pw.println("No session is available");
pw.println("We are creating a session for you. Creating.....");
session = request.getSession();
}
else
{
String getColors[] = (String[])session.getAttribute("color");
pw.println("<html><body bgcolor = cyan>");
for(int i= 0; i<getColors.length;i++)
{
pw.println("The selected colors are " + getColors[i] + "<br>");
}
pw.println("<html><body>");
}
}

/* (non-Java-doc)
* @see javax.servlet.http.HttpServlet#doPost(
HttpServletRequest request, HttpServletResponse response)
*/
protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
// TODO Auto-generated method stub
}
}
```

11.6 PRE LAB QUESTIONS

1. What is the purpose of javax,servlet.http package
2. What is use of web.xml document
3. What is purpose of doGet() and doPost() methods
4. What is an Interface?
5. What is menat by Business Logic in servlets?
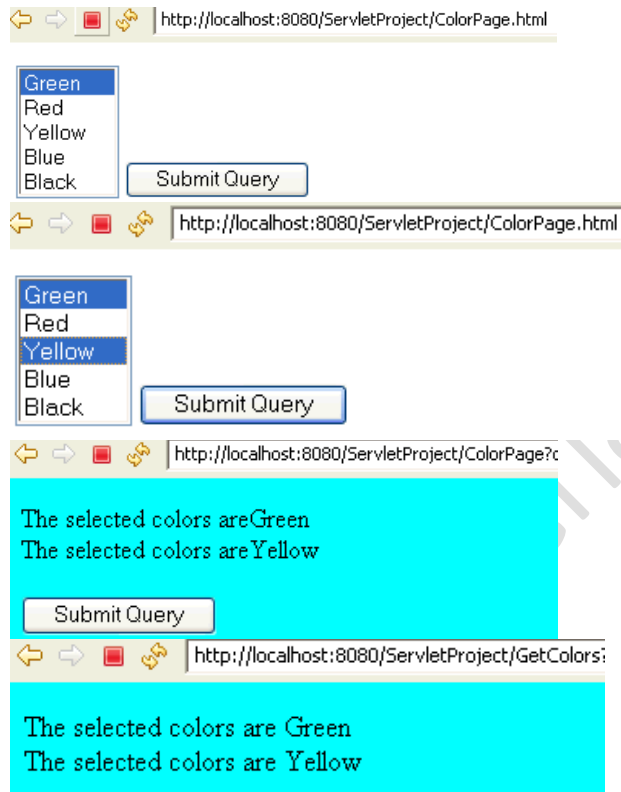
11.7 LAB ASSIGNMENT
1. Write a simple servlet program.
2. Write a java program with List Box.
3. Write a HTML program.

11.8 POST LAB QUESTIONS
1. What is difference between class and interface?
2. What are the methods in servlet lifecycle?
3. How we declare list in program?
4. What are methods of color?

11.9 INPUT & OUTPUT:

The output of the program is given below:

EXPERIMENT- 12

12.1 OBJECTIVE:
Write a java servlet program to get personal Details about the user(Like
name,Address,City,Email-id) and check whether the user is eligible to vote or not

12.2 RESOURCE:
NotePad,TomCat Server,ServletAPI

12.3 PROGRAM LOGIC:
1. Enter User information.
2. Click the Summit Button.

12.4 PROCEDURE:
1.Create HTML file with user information.
2.Enter the Details in form.
3.Compile Servlet Program.
4.Execute the Servlet Program.

12.5 PROGRAM:

```
<html>

<head>
<title>New Page 1</title>
</head>

<body>

<h2>Login</h2>
<p>Please enter your username and password</p>
<form method="GET" action="/htmlform/LoginServlet">
 <p> Username  <input type="text" name="username" size="20"></p>
 <p>Address <input type="text" name="address" size="20"></p>
<p>City <input type="text" name="city" size="20"></p>

<p>Age<input type="text" name="age" size="20"></p>

<p>Email id <input type="text" name="mail id" size="20"></p>

 <p><input type="submit" value="Submit" name="B1"></p>
</form>
<p> </p>

</body>

</html>
```

LoginServlet.java

```java
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class LoginServlet extends HttpServlet{
  public void doGet(HttpServletRequest request,HttpServletResponse response)
  throws ServletException, IOException {
  response.setContentType("text/html");
  PrintWriter out = response.getWriter();
  String name = request.getParameter("username");
  String  address = request.getParameter("address");
String C = request.getParameter("city");


String age = request.getParameter("age");


String emailid = request.getParameter("mailid");


 if(age>18)


 out.println("you  are eligible for voting");
else
out.println("you  are not eligible for voting");


 }
}
```

12.6 PRE LAB QUESTIONS
1. What is the difference between presentation logic and business logic?
2. Explain the role of init parameters
3. What is meant by deploying in servlets?
4. What is the advantage of Servlets?
5. What is the use getWrier() method in servlets.

12.7 LAB ASSIGNMENT
   1. Write a simple servlet program.
   2. Write a HTML program.

12.8 POST LAB QUESTIONS
   1.   What is the use of PrintWriter?
   2.   What is the use of out?
   3.   What is the use of Contenttype()?

12.9 INPUT & OUTPUT:

Output:

Enter the age:19

you are eligible for voting

EXPERIMENT- 13

13.1 OBJECTIVE:

Write a java servlet program to create cookie and keep it alive on the client for 30 minutes

13.2 RESOURCE:
Tomcat server,servletAPI

13.3 PROGRAM LOGIC:
1. Create a Cookie
2. Set and Get the cookies
3. Display the cookies
4. Check the cookie, whether it is alive or not foe 30 minuetes

13.4 PROCEDURE:
1.Run the WebApplication
2.Enter the URL on Explorer

13.5 PROGRAM:
```java
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;

public class UseCookies extends HttpServlet {
  public void doGet ( HttpServletRequest request,
   HttpServletResponse response )throws ServletException, IOException {
 PrintWriter out;
 response.setContentType("text/html");
 out = response.getWriter();
 Cookie cookie = new Cookie("CName","Cookie Value");
 cookie.setMaxAge(100);
 response.addCookie(cookie);

 out.println("<HTML><HEAD><TITLE>");
 out.println(" Use of cookie in servlet");
 out.println("</TITLE></HEAD><BODY BGCOLOR='cyan'>");
 out.println(" <b>This is a Cookie example</b>");
 out.println("</BODY></HTML>");
 out.close();
 }
}
```

13.6 PRE LAB QUESTIONS
1. What is meant by Cookie?
2. Explain the role of context parameters
3. What is meant by setMaxAge()
4. What is the disadvantages of cookies
5. What is the use of setCookie() in servlets.

13.7 LAB ASSIGNMENT

1. Write a Simple Servlet Program.
2. Write a Simple Cookie program with related methods.

13.8 POST LAB QUESTIONS
1. What is the use of getCookies() in servlet.
2. What are packages are imported todo Cookie program?
3. What is the use of init() method in servlet?

13.9 INPUT & OUTPUT:
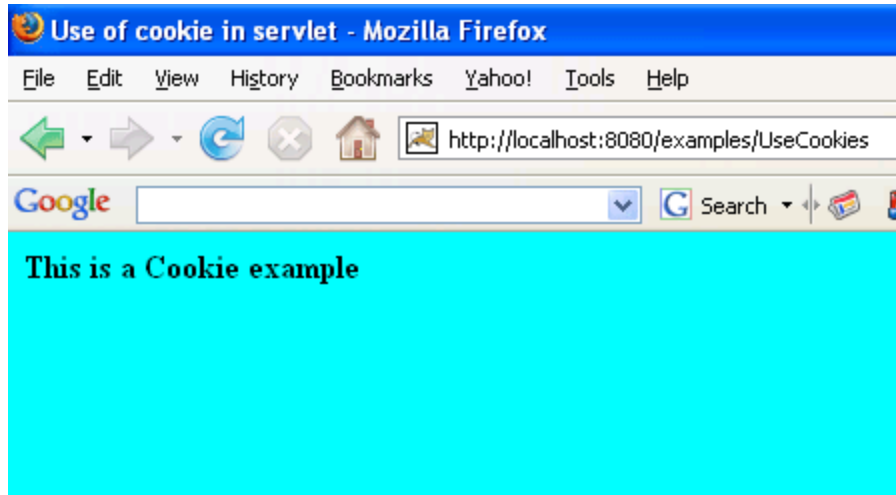
EXPERIMENT- 14

14.1 OBJECTIVE:

Write a java servlet program to display the various client information like

Connection,Host,Accept-Encoding,UserAgent

14.2 RESOURCE:
Tomcat server,servletAPI

14.3 PROGRAM LOGIC:
1. Read the getHeader() function
2. Display the details like Connection,Host,Accept-Encoding,UserAgent

14.4 PROCEDURE:
1.Run the WebApplication
2.Enter the URL on Explorer

14.5 PROGRAM:

```java
import java.io.IOException;
import java.io.*;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

public class AcceptCharset extends HttpServlet {

 public void doGet(HttpServletRequest request,
HttpServletResponse response)
 throws ServletException,IOException {
 response.setContentType("text/html");
 PrintWriter out= response.getWriter();
 String acceptLanguage = request.getHeader("Accept-Language");
 String acceptCharset = request.getHeader("Accept-Charset");
 out.println("<html><head><title>Accept Language and
 Accept Charset</title>
 </head></html>");
 out.println("<h2>Accept Language and Accept Charset</h2>");
 out.println("AcceptLanguage: " + acceptLanguage+"<br>");
 out.println("AcceptCharset" + acceptCharset);
 }
}
```

In web.xml, do the servlet mapping.

```xml
<servlet>
<servlet-
name>AcceptCharset</servlet-
name>
```

```
<servlet-
class>AcceptCharset</servlet-
class>
</servlet>

<servlet-mapping>
<servlet-
name>AcceptCharset</servlet-
name>
<url-pattern>/AcceptCharset</url-
pattern>
</servlet-mapping>
```

14.6 PRE LAB QUESTIONS
1. What is getHeader() in servlets
2. Explain the role of sessions
3. What is meant by httpheader?
4. What are the disadvantages of cookies?
5. What are the disadvantages of servlets?

14.7 LAB ASSIGNMENT
1. Write a simple XML program.
2. Write a simple Servlet Program.

14.8 POST LAB QUESTIONS
1. Difference between get and post methods?
2. What is the return type of getHeader?
3. What is advantages of sessions?

14.9 INPUT & OUTPUT:

Accept Language and Accept Charset - Mozilla Firefox

File   Edit   View   History   Bookmarks   Tools   Help

http://localhost:8080/Myexamples/AcceptC

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Accept Language and Accept Charset

AcceptLanguage: en-us,en;q=0.5
AcceptCharsetISO-8859-1,utf-8;q=0.7,*;q=0.7

EXPERIMENT- 15

15.1 OBJECTIVE:
Write a java servlet program to conduct online examinations and to display student mark list available in the database.

15.2 RESOURCE:
Tomcat server,servletAPI

15.3 PROGRAM LOGIC:
1. Connect to the database
2. Conduct Online Examinations
3. display the marks of the students

15.4 PROCEDURE:
1.Run the WebApplication
2.Enter the URL on Explorer

15.5 PROGRAM:

```jsp
// OnlineExam.jsp
<%@ page language="java" import="java.sql.*" %>
<%@ page import="java.io.*" %>
<%@ page import="java.util.*" %>


<%
String SeatNum,Name;
String ans1,ans2,ans3,ans4,ans5;
int a1,a2,a3,a4,a5;
a1=a2=a3=a4=a5=0;
Connection connect=null;
Statement stmt=null;
ResultSet rs=null;
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
String url = "jdbc:odbc:ExamStudent";
connect = DriverManager.getConnection(url," "," ");
if(request.getParameter("action")!=null)
{
SeatNum = request.getParameter("Seat_no");
Name = request.getParameter("Name");
ans1 =request.getParameter("group1");
if(ans1.equals("True"))
a1=5;
else
a1=0;
ans2 = request.getParameter("group2");
if(ans2.equals("True"))
a2=0;
else
a2=5;
ans3 = request.getParameter("group3");
if(ans3.equals("True"))
a3=0;
```

```
else
a3=5;
ans4 = request.getParameter("group4");
if(ans4.equals("True"))
a4=5;
else
a4=0;
ans5 = request.getParameter("group5");
if(ans5.equals("True"))
a5=0;
else
a5=5;
int Total=a1+a2+a3+a4+a5;
stmt = connect.createStatement();
String query = "INSERT INTO StudentTable (" + "Seat_no,Name,Marks" + ")
VALUES ('" +SeatNum + "', '" + Name + "', '"+Total+ "')";
int result = stmt.executeUpdate(query);

stmt.close();
stmt = connect.createStatement();
query = "SELECT * FROM StudentTable WHERE Name="+""+Name+"";
rs = stmt.executeQuery(query);
%>
<html><head><title>Student Mark List</title></head>
<body bgcolor=khaki>
<center>
<h2>Students Marksheet</h2>
<h3>Name of the College : JCE College of Engineering</h3>
<table border="1" cellspacing="0" cellpadding="0">
<tr>
<td><b>Seat_No</b></td>
<td><b>Name</b></td>
<td><b>Marks</b></td>
</tr>
<%
while(rs.next())
{
%>
<tr>
<td><%=rs.getInt(1)%></td>
<td> <%=rs.getString(2)%></td>
<td> <%=rs.getString(3)%></td>
</tr>
<%
}
rs.close();
stmt.close();
connect.close();
%>
</table>
</center>
<br/> <br/><br/>
<table>
```

```
<tr><td><b>Date:<%=new java.util.Date().toString() %></td></tr>
<tr><td><b>Signature: X.Y.Z. <b></td></tr>
</table>
<div>
Click here to go back
</body>
</html>
<%}else{%>
<html>
<head><title>Online Examination</title>
<script language="javascript">
 function validation(Form_obj)
{
if(Form_obj.Seat_no.value.length==0)
{
alert("Please,fill up the Seat Number");
Form_obj.Seat_no.focus();
return false;
}
if(Form_obj.Name.value.length==0)
{
alert("Please,fill up the Name");
Form_obj.Name.focus();
return false;
}
return true;
}
</script>
</head>
<body bgcolor=lightgreen>
<center>
<h1>Online Examination</h1>
</center>
<form action="OnlineExam.jsp" method="post"
name="entry" onSubmit="return validation(this)">
<input type="hidden" value="list" name="action">
<hr/>
<table>
<tr>
<td><h3>Seat Number : </h3></td>
<td><input type="text" name="Seat_no"></td>
</tr>
<tr>
<td><h3>Name : </h3></td>
<td><input type="text" name="Name" size="50"></td>
</tr>
<tr>
<td><b>Total Marks:5*5=25 </b></td>
<td></td><td></td><td></td><td><b>Time: 15 Min.</b></td>
</tr>
</table>
<hr/>
<b>1. XML enables you to collect information once and reuse it in a
```

```
variety of ways.</b><br/>
<input type="radio" name="group1" value="True">True
<input type="radio" name="group1" value="False">False<br>
<br/>

<b>2. In Modern PC there is no cache memory.</b><br/>
<input type="radio" name="group2" value="True">True
<input type="radio" name="group2" value="False">False<br>
<br/>
<b>3. JavaScript functions cannot be used to create script fragments
that can be used over and over again</b><br/>
<input type="radio" name="group3" value="True">True
<input type="radio" name="group3" value="False">False<br>
<br/>
<b>4.The DriverManager class is used to open a connection to a
database via
a JDBC driver.</b><br/>
<input type="radio" name="group4" value="True">True
<input type="radio" name="group4" value="False">False<br>
<br/>
<b>5. The JDBC and ODBC does not share a common parent</b><br/>
<input type="radio" name="group5" value="True">True
<input type="radio" name="group5" value="False">False<br>
<hr/>
<center>
<input type = "submit" value="Submit">
<input type = "reset" value="Clear"><br><br>
</center>
</form>
<%}%>
```

15.6 PRE LAB QUESTIONS
1. What is database?
2. How to create database?
3. What is the purpose if executeQuery()
4. What is meant by Statement interface
5. What is return type of executeUpdate?

15.7 LAB ASSIGNMENT
1. Write a simple HTML Program.
2. Write a Simple JSP program.
3. Write a simple program to import java packages.

15.8 POST LAB QUESTIONS
1. What is use of rs.next?
2. What is the return type oe rs.next()?
3. What pakage we use to sql queries ?

15.9 INPUT & OUTPUT:

The students have to login to website and write online tests.

After writing the test, the marks should be displayed on the screen

15.9 INPUT & OUTPUT:

EXPERIMENT- 16

16.1 OBJECTIVE:
Write a java servlet program to display the book information using JDBC..

16.2 RESOURCE:
Tomcat server,servletAPI

16.3 PROGRAM LOGIC:
1. Connect to the Database
2.Get the Details like book name ,Author and price from the database
3.Display the details

16.4 PROCEDURE:
1.Run the WebApplication
2.Enter the URL on Explorer

16.5 PROGRAM:
```java
import java.io.*;
import java.util.Enumeration;
import javax.servlet.*;
import javax.servlet.http.*;
import java.sql.*;
import java.net.*;
public class BookInfo extends HttpServlet{
   Connection theConnection;
   private ServletConfig config;

public void init(ServletConfig config)
 throws ServletException{
  this.config=config;
  }

public void service (HttpServletRequest req, HttpServletResponse res)
throws ServletException, IOException {

  HttpSession session = req.getSession(true);

  res.setContentType("text/html");

  PrintWriter out = res.getWriter();

  out.println("<HTML><HEAD><TITLE>Bok Details.</TITLE>");
try{


  //Loading Sun's JDBC ODBC Driver
  Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");


  //Connect to emaildb Data source
  theConnection = DriverManager.getConnection("jdbc:odbc:emaildb", "admin", "");
```

```
    Statement theStatement=theConnection.createStatement();

    ResultSet theResult=theStatement.executeQuery("select * from emaillists"); //Select all
records from emaillists table.

  //Fetch all the records and print in table
  while(theResult.next()){

  out.println();

  out.println("<TR>");

  out.println("<TD>" + theResult.getString(1) + "</TD>");

  out.println("<TD>" + theResult.getString(2) + "</TD>");
  out.println("<TD>" + theResult.getString(3) + "</TD>");
  out.println("<TD>" + theResult.getString(4) + "</TD>");

  out.println("</TR>");

 }
 theResult.close();//Close the result set

 theStatement.close();//Close statement

 theConnection.close(); //Close database Connection

 }catch(Exception e){

  out.println(e.getMessage());//Print trapped error.

 }

 out.println("</TABLE></P>");

 out.println("<P> </P></FONT></BODY></HTML>");

}

 public void destroy(){

}
}
```

16.6 PRE LAB QUESTIONS
1. What is the query for SELECT statement in database
2. How to retrieve the data from the database
3. What is the purpose of resultset()
4. What is the purpose of rs.getString()
5. What is purpose of close() in database

16.7 LAB ASSIGNMENT
1. Write a simple Database connectivity program.
2. Write a simple servlet program.

16.8 POST LAB QUESTIONS
1. What is the use of statement?
2. What is the use of hasMore method?
3. What is the use of getNumber()?

16.9 INPUT & OUTPUT:

S.NO	Book name	Author	price
1	java	o.Relly	400
2	c	Herbert shiled	450

EXPERIMENT- 17

17.1 OBJECTIVE:
Write a java servlet program to create a session and display the various informations
like(Last Accessed time,Modified time,Expiration)

17.2 RESOURCE:
Tomcat server,servletAPI

17.3 PROGRAM LOGIC:
1. Create a session
2. Display the informationss last Accessed time and modified time.

17.4 PROCEDURE:
1.Run the WebApplication
2.Enter the URL on Explorer

17.5 PROGRAM:
```java
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.net.*;
import java.util.*;
import javax.servlet.ServletConfig;
import javax.servlet.ServletException;
import javax.servlet.ServletOutputStream;
import javax.servlet.http.HttpSession;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

public class HttpSessionDisplay extends HttpServlet {
  String head;
  public void doGet(HttpServletRequest request,
  HttpServletResponse response)
  throws ServletException, IOException {
  HttpSession session = request.getSession(true);
  response.setContentType("text/html");
  PrintWriter out = response.getWriter();
  Integer count = new Integer(0);
  if (session.isNew()) {
  head = "New Session Value";
  } else {
  head = "Old Session value";
  Integer oldcount =(Integer)session.getValue("count");
  if (oldcount != null) {
  count = new Integer(oldcount.intValue() + 1);
  }
  }
session.putValue("count", count);
out.println("<HTML><BODY BGCOLOR=\"pink\">\n" +
 "<H2 ALIGN=\"CENTER\">" + head + "</H2>\n" +
 "<H3 ALIGN=\"CENTER\">Description about Session:</H3>\n" +
```

```
"<TABLE BORDER=1 ALIGN=CENTER>\n" +
"<TR BGCOLOR=\"voilet\">\n" +
"<TH>Information Type<TH>Session Value\n"+
"<TR>\n" + "<TD>ID\n" +"<TD>" +
 session.getId() + "\n" +"<TR>\n" +
 " <TD>Session Creation Time\n" +" <TD>" +
 new Date(session.getCreationTime()) + "\n" +
"<TR>\n" +"  <TD>Last Session Access Time\n" +"  <TD>" +
 new Date(session.getLastAccessedTime()) + "\n" +
"<TR>\n" +"  <TD>Number of Previous Session Accesses\n" +
"<TD>" + count + "\n" +"</TABLE>\n" +"</BODY></HTML>");
 }
 public void doPost(HttpServletRequest request,
 HttpServletResponse response)throws ServletException,
 IOException {
 doGet(request, response);
 }
}
```

Here is the mapping of class file in web.xml.

```
<servlet>
  <servlet-name>HttpSessionDisplay</servlet-name>
  <servlet-class>HttpSessionDisplay</servlet-class>
</servlet>
<servlet-mapping>
  <servlet-name>HttpSessionDisplay</servlet-name>
  <url-pattern>/HttpSessionDisplay</url-pattern>
</servlet-mapping>
```

17.6 PRE LAB QUESTIONS
   1. What is purpose of sessions?
   2. How to use sessions in webpage
   3. What is the purpose of session.getValue()
   4. What is the purpose of session.putValue
   5. What is purpose of session.getCreationTime()

17.7 LAB ASSIGNMENT
1. Write a Simple HTML program.
2. Write a Simple Servlet program.

17.8 POST LAB QUESTIONS
1. What is difference between htm and html?
2. How to enable the session in webpage?
3. Between cookie and session which one is better and why?

17.9 INPUT & OUTPUT:

New Session Value

Description about Session:

Information Type	Session Value
ID	39B14C30ABB7E2E376180FFEA2C56BA9
Session Creation Time	Wed Jun 25 17:34:03 GMT+05:30 2008
Last Session Access Time	Wed Jun 25 17:34:03 GMT+05:30 2008
Number of Previous Session Accesses	0

EXPERIMENT- 18

18.1 OBJECTIVE:
Write a jsp program to display the number of visitors visited the page

18.2 RESOURCE:
Tomcat server,servletAPI

18.3 PROGRAM LOGIC:
1. create a scriplet with jsp
2. From the implicit variable application find the number of visitors visited the page

18.4 PROCEDURE:
1.Run the WebApplication
2.Enter the URL on Explorer

18.5 PROGRAM:

```
<%@ page import="java.io.*,java.util.*" %>

<html>
<head>
<title>Applcation object in JSP</title>
</head>
<body>
<%
   Integer hitsCount =
    (Integer)application.getAttribute("hitCounter");
   if( hitsCount ==null || hitsCount == 0 ){
     /* First visit */
     out.println("Welcome to my website!");
     hitsCount = 1;
   }else{
     /* return visit */
     out.println("Welcome back to my website!");
     hitsCount += 1;
   }
   application.setAttribute("hitCounter", hitsCount);
%>
<center>
<p>Total number of visits: <%= hitsCount%></p>
</center>
</body>
</html>
```

18.6 PRE LAB QUESTIONS
1. What is jsp?
2. What is the diference between servlets and jsp
3. What is meant by implicit objects
4. What is difference between application and session
5. How many implicit objects avalible in JSP?

18.7 LAB ASSIGNMENT
1. Write a simple JSP program.
2. Write a simple HTML Program.

18.8 POST LAB QUESTIONS
1. What is the use of scriptlets in jsp?
2. How we use of static web page?
3. How we use of dynamic web page?

18.9 INPUT & OUTPUT:

Welcome back to my website!

Total number of visits: 12

EXPERIMENT- 19

19.1 OBJECTIVE:

Write a jsp program to implement the Book Information using JDBC

19.2 RESOURCE:
Tomcat server,servletAPI

19.3 PROGRAM LOGIC:
1. Connect to the database
2. Cet the details from the database
3.Display the details

19.4 PROCEDURE:
1.Run the WebApplication
2.Enter the URL on Explorer

19.5 PROGRAM:

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

<% Class.forName("sun.jdbc.odbc.JdbcOdbcDriver"); %>

<HTML>

  <HEAD>

    <TITLE>The tableName Database Table </TITLE>

  </HEAD>

  <BODY>

    <H1>The tableName Database Table </H1>

    <%

      Connection connection = DriverManager.getConnection(

         "jdbc:odbc:data", "Steve", "password");

      Statement statement = connection.createStatement() ;

      ResultSet resultset =
```

```
        statement.executeQuery("select * from tableName") ;

    %>

    <TABLE BORDER="1">

      <TR>

        <TH>ID</TH>

        <TH>BookName</TH>

        <TH>Author</TH>

        <TH>Publisher</TH>

        <TH>Country</TH>

      </TR>

      <% while(resultset.next()){ %>

      <TR>

        <TD> <%= resultset.getString(1) %></td>

        <TD> <%= resultset.getString(2) %></TD>

        <TD> <%= resultset.getString(3) %></TD>

        <TD> <%= resultset.getString(4) %></TD>

      </TR>

      <% } %>

    </TABLE>

  </BODY>
```

</HTML>

19.6 PRE LAB QUESTIONS
1. What is meant by dynamic webpage
2. What is the diference between html and jsp
3. What is meant by scriptlet?
4. How to import package in jsp
5. Where we have to save jsp file

19.7 LAB ASSIGNMENT
1. Write a simple HTML Program with Table.
2. Write a simple JSP program.

19.8 POST LAB QUESTIONS
1. How servlet is split in jsp?
2. What is the use of presentation layer in mvc model?
3. What is the use of business logic layer in mvc model?

19.9 INPUT & OUTPUT:

BookName	Author	Publisher	Country
java	H.S	Pearson	India
C	Balaguruswamy	McGrawhill	India

EXPERIMENT- 20

20.1 OBJECTIVE:

Write a jsp program to implement the Telephone Direcory

20.2 RESOURCE:
Tomcat server,servletAPI

20.3 PROGRAM LOGIC:
1. Connect to the database
2.Get the details of Telephone directory
3. Display the Details

20.4 PROCEDURE:
1.Run the WebApplication
2.Enter the URL on Explorer

20.5 PROGRAM:

```html
<html>
   <head>
      <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
      <title>JSP Page</title>
   </head>
   <body><h1>
      <center>Enter Information<br>
      <form action="jdbcjsp1.jsp">
 Enter the name :: <input type="text" name="n" >
         <br><br><input type="submit" value="Submit">
      </form>
   </center></h1>
   </body>
</html>

<html>
   <head>
      <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
      <title>JSP Page</title>
   </head>
   <body>
     <center>
     <h1>Telephone Directory</h1>
     <%@ page language="java" %>
     <%@ page import="java.sql.*" %>
      <%@ page import="java.sql.DriverManager.*" %>

     <%
     String m=null, mn=null;
     String s=request.getParameter("n");
```

```
       PreparedStatement ps=null;
       Connection con= null;
       ResultSet rs= null;
     Class.forName("oracle.jdbc.driver.OracleDriver");

con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","system","root");

      Statement st=con.createStatement();

       rs=st.executeQuery("select * from phone where name='"+ s+"' ");


       while(rs.next())
         {
          m=rs.getString(1);
          mn=rs.getString(2);
        }
        out.println("<br>");

         out.println("<h1>");
         out.println("<pre>");
       out.println("name   =" +m);
      out.println("<br>");
      out.println("ph no. =" +mn);
       out.println("</pre>");
        out.println("</h1>");
     %>
      </center>
    </body>
</html>
```

20.6 PRE LAB QUESTIONS
1. What is the difference between static webpage and dynamic webpage
2. How to seperate presentation logic and business logic
3. What is meant by thindriver?
4. What is query for get the data from the database
5. What are the operations available to connect to the database.

20.7 LAB ASSIGNMENT
1. Write a simple JSP Program.
2. Write a simple HTML Program.

20.8 POST LAB QUESTIONS
1. What is mvc model?
2. What are jsp elements?
3. Why we use import in jsp program?

20.9 INPUT & OUTPUT:

Input:
Create table like this

create table phone(
name varchar2(20),
phone varchar2(15));

NAME	PHONE
Anil	9332667788
Smith	1126678900
Suman	9874653210
Ram	9933002211

For html file output is like this

Enter Information
Enter the name :: Anil

Submit

Data came from Database:

Telephone Directory

    Name=Anil
  Ph no.=9332667788