```
HTML page: (9.html) (file name)
<html>
<body>
<h1>Demonstration of PHP Regular Expressions </h1>
<form action=9n.php method=POST>
Enter String <input type=text name=t1</pre>
size=70><br> <input type=submit name=sub
value=Find> </form>
</body>
</html>
PHP Code: (9n.php) (file name)
<?php
$states=$_POST['t1'];
echo "<h3>Given sentence is $states </h3><br>";
$list=array();
$keywords=preg_split("/\s+/",$states);
foreach ($keywords as $word)
{
if(preg_match('/xas$/', $word))
{
echo "Word $word ends in xas <br>";
$list[0]=$word;
}
foreach ($keywords as $word)
{
```

```
if(preg_match('/^k.*s$/i', $word))
{
echo "Word $word begins with k and ends s
<br>"; $list[1]=$word;
}
}
foreach ($keywords as $word)
{
if(preg_match('/^M.*s$/', $word))
echo "Word $word begins with M and ends s
<br>";
$list[2]=$word;
}
}
foreach ($keywords as $word)
{
if(preg_match('/a$/', $word))
{
echo "Word $word ends with a <br>";
$list[3]=$word;
}
}
echo "<h3>List contents: ". implode(', ',$list );
?>
```

EX:NO: 6

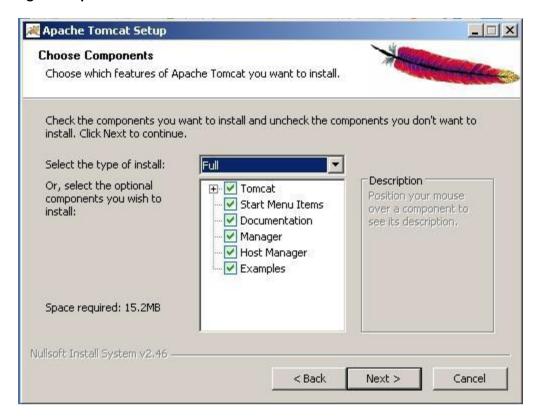
Install TOMCAT web server. Convert the static webpages of assignments 2 into dynamic webpages using servlets and cookies. Hint: Users information (user id, password, credit card number) would be stored in web.xml. Each user should have a separate Shopping Cart.

PROCEDURE:

Double click the exe file and follow the steps by clicking next.

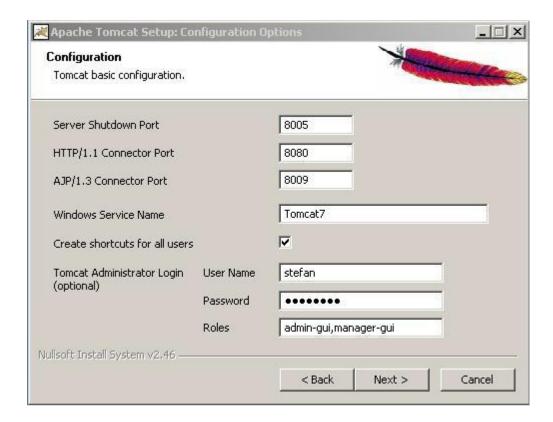
- □ The easiest way is to simply download and run the 32-bit/64-bit Windows Service Installer of the latest version on Apache Tomcat. In my case the latest version of Apache Tomcat is 7 and the download link is :
- □ http://mirrors.hostingromania.ro/apache.org/tomcat/tomcat-7/v7.0.26/bin/apache-tomcat-7.0.26.exe □ Run this file if you agree with the license terms and switch to the Full type of install so all the optional components are checked in the following screen:

Figure 1-Apache Tomcat Installation - choose full install



If you now click on **Next** you get the following screen:

Figure 2-Apache Tomcat installation: provide username and password

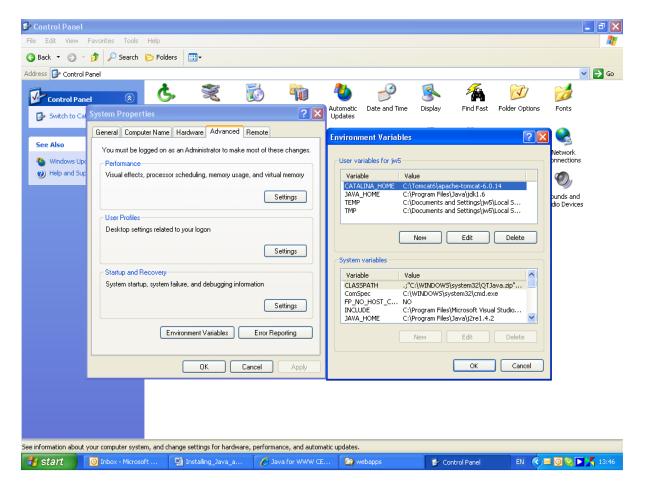


The only think you have to do here is to fill a "User Name", provide a "Password" for it and eventually tick on the checkbox for "Create shortcuts for all users". Leave everything as is. Normally you don't need to change anything. Click on **Next**.

- 2.Tomcat uses an environment variable named JAVA_HOME to indicate the location of the JAVA directory.
- 3. Additionally it uses another environment variable named CATALINA_HOME to indicate the location of Tomcat's Jakarta level directory.
- 4. In Windows XP (or equivalent) go to:

Control Panel→System→Advanced→Environment Variables

Click on the New button to add the following as seen with the screen grab attached



Just these two need to be added to what ever you have already.

CATALINA_HOME c:\tomcat6\apache-tomcat-6.0.20

JAVA HOME c:\program files\java\jdk1.6

- 5. Save the modifications and re-boot your computer to apply the new environment variable settings.
- 6. This can be tested from the command prompt (Start→Run and type cmd<Enter>) by typing ECHO followed by a space and then the variable enclosed inside a pair of % characters (e.g. ECHO % JAVA_HOME%).
- 7. Starting and Stopping the server:

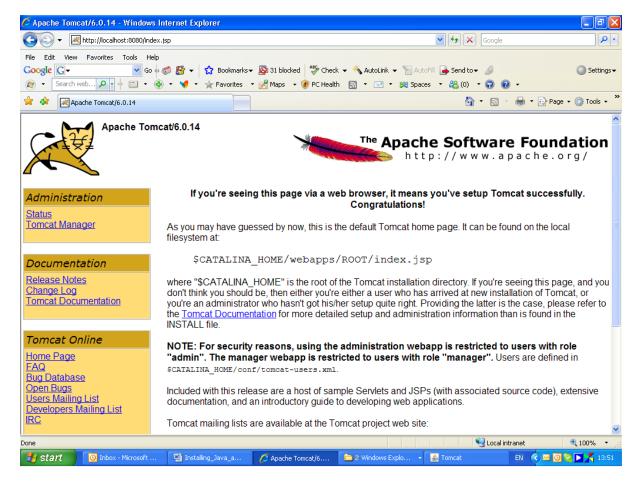
This is done via two batch files – startup and shutdown

They can be found in the Tomcat bin folder. It is recommended you create a shortcut for each and place on your desktop.

Start the server by running the startup batch file – you should get a display like this:

- 8. Next test that the server can run a JSP page.
- ☐ In the webapps\ROOT\ folder you will find an index.jsp file.
- ☐ The ROOT folder is where the JSP pages need to live.
- ☐ Open your web browser and in offline mode type the following in the url text box:
- ☐ http://localhost:8080/index.jsp

If the following page appears then you have successfully installed Tomcat:



- 9. If the page does not appear then there is a problem and you should check all the steps you have made
- 10. Finally, shut down the server when not in use by simply running the shut down batch file.

Program:

Web.xml

```
<?xml version="1.0" encoding="iso-8859-1"?>
```

<!DOCTYPE web-app

PUBLIC "-//Sun Microsystems, Inc.//DTD Web Application 2.3//EN"

"http://java.sun.com/dtd/web-app_2_3.dtd">

- <web-app>
- <display-name>Servlet 2.4 Examples</display-name>
- <description>

Servlet 2.4 Examples.

- </description>
- <servlet>
- <servlet-name>reg</servlet-name>
- <servlet-class>reg</servlet-class>
- </servlet>
- <servlet>
- <servlet-name>login</servlet-name>
- <servlet-class>login</servlet-class>
- </servlet>
- <servlet>

```
<servlet-name>profile</servlet-name>
<servlet-class>profile/servlet-class>
</servlet>
<servlet>
<servlet-name>catalog</servlet-name>
<servlet-class>catalog</servlet-class>
<servlet-mapping>
<servlet-name>order</servlet-name>
<url-p</servlet>
<servlet>
<servlet-name>order</servlet-name>
<servlet-class>order</servlet-class>
</servlet>
attern>order</url-pattern>
</servlet-mapping>
<servlet-mapping>
<servlet-name>catalog</servlet-name>
<url-pattern>catalog</url-pattern>
</servlet-mapping>
<servlet-mapping>
<servlet-name>profile</servlet-name>
<url-pattern>profile</url-pattern>
</servlet-mapping>
<servlet-mapping>
<servlet-name>login</servlet-name>
<url-pattern>login</url-pattern>
</servlet-mapping>
<servlet-mapping>
<servlet-name>reg</servlet-name>
<url>pattern>reg</url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern></url-pattern>
</servlet-mapping>
</web-app>
Main.html
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<body bgcolor="pink">
<h1 align="center"><U>ONLINE BOOK STORAGE</U></h1><br /><br />
<h2 align="center">
<b>Welcome to online book storage.
Press LOGIN if you are having id
```

otherwise press REGISTRATION

```
</b></h2>
<br /><br />
<div align="center"><a href="/tr/login.html">LOGIN</a> <a href="/tr/reg.html">
REGISTRATION</a></div>
</body>
</html>
Login.html
<html>
<body bgcolor="pink"><br /><br />
<form name="myform" method="post" action="/tr/login">
<div align="center">
LOGIN ID :<input type="text" name="id" /><br />
PASSWORD :<input type="password" name="pwd" /><br /><br />
</div>
<br /><br />
<div align="center">
<input type="submit" value="ok" onclick="validate()" />
      <a href="reset" value="clear" />
</div>
</form>
</body>
</html>
Reg.html
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<body bgcolor="pink"><br /><br />
<form name="myform" method="post" action="/tr/reg">
<div align="center">
NAME :<input type="text" name="name" /><br />
ADDRESS :<input type="text" name="addr" /><br />
CONTACT NUMBER :<input type="text" name="phno" /><br />
LOGINID :<input type="text" name="id" /><br />
PASSWORD :<input type="password" name="pwd" /><br />
</div>
<br /><br />
<div align="center">
<input type="submit" value="ok" onclick="validate()" />
      <a href="reset" value="clear" />
</div>
</form>
</body>
</html>
Profile.html
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<body bgcolor="pink"><br /><br />
<form name="myform" method="post" action="/tr/profile">
<div align="center">
LOGIN ID :<input type="text" name="id" /><br />
<br /><br />
</div>
```

```
<br /><br />
<div align="center">
<input type="submit" value="ok" onclick="validate()" />
     
</div></form></body></html>
Catalog.html
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<body bgcolor="pink"><br /><br /><br />
<form method="post" action="/tr/catalog">
<div align="center">
BOOK TITLE :<input type="text" name="title" /><br />
<br /><br />
</div>
<br /><br />
<div align="center">
<input type="submit" value="ok" name="button1"/>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
<input type="reset" value="clear" name="button2"/>
</div>
</form>
</body></html>
Order.html
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<body bgcolor="pink"><br /><br />
<form method="post" action="/tr/reg">
<div align="center">
NAME :<input type="text" name="name" /><br />
PASSWORD :<input type="password" name="pwd" />
TITLE :<input type="text" name="title" /><br />
NO. OF BOOKS :<input type="text" name="no" /><br />
DATE :<input type="text" name="date" /><br />
CREDIT CARD NUMBER:<input type="password" name="cno" /><br /><br /><br />
</div>
<br /><br />
<div align="center">
<input type="submit" value="ok" name="button1"/>
        
</div>
</form>
</body>
</html>
Login.java
import java.sql.*;
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class login extends HttpServlet
```

```
public void service(HttpServletRequest req,HttpServletResponse resp)
throws ServletException,IOException
{ PrintWriter pw=resp.getWriter();
pw.println("<html><body bgcolor=\"pink\");</pre>
String id=req.getParamenter("id");
String pwd=req.getParameter("pwd");
{ Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.registerDriver(d);
Connection
con=DriverManager.getConnection("idbc:oracle:thin:@localhost:1521:orcl","scott","tiger")
Statement stmt=con.createStatement();
String sqlstmt="select id,password from login";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0;
while(rs.next())
if(id.equal(rs.getString(1))&&pwd.equals(rs.getString(2)))
flag=1;
if(flag==0)
pw.println("SORRY INVALID ID TRY AGAIN ID<br>>");
pw.println("<a href=\"/tr/login.html\">press LOGIN to RETRY</a>");
else
pw.println("VALID LOGIN ID<br>>");
pw.println("<h3>");
pw.println("<\!li><\!ahref=\\"profile.html\\"><\!fontcolor=\\"black\\">USER
PROFILE</font> </a><br>");
pw.println("<ahref=\"catalog.html\"><fontcolor=\"black\">BOOKS
CATALOG</font></a><br>");
pw.println("<ahref=\"order.html\"><fontcolor=\"black\">ORDER
CONFIRMATION</font> </a><br>");
pw.println("</body></html>");
catch(Exception e)
{ resp.sendError(500,e.toString());
Reg.html
import java.sql.*;
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class login extends HttpServlet
```

```
public void service(HttpServletRequest req,HttpServletResponse resp)
throws ServletException,IOException
PrintWriter pw=resp.getWriter();
pw.println("<html><body bgcolor=\"pink\");</pre>
String name=req.getParamenter("name");
String addr=req.getParameter("addr");
String phno=req.getParameter("phno");
String id=req.getParamenter("id");
String pwd=req.getParameter("pwd");
int no=Integer.parseInt(phno);
try
{
Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.registerDriver(d);
Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger")
Statement stmt=con.createStatement();
String sqlstmt="select id,password from login";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0;
while(rs.next())
if(id.equal(rs.getString(1))&&pwd.equals(rs.getString(2)))
flag=1;
} }
if(flag==1)
pw.println("SORRY INVALID ID ALREADY EXITS TRY AGAIN WITH NEW
ID<br>");
pw.println("<a href=\"/tr/reg.html\">press REGISTER to RETRY</a>");
}
else
{ Statement stmt1=con.createStatement();
stmt1.executeUpdate("insertintologin
values("+names","+addr+","+no+","+id+","+pwd+")");
pw.println("YOUR DETAILS ARE ENTERED<br>>");
pw.println("<a href=\"/tr/login.html\">press LOGIN to login</a>");
pw.println("</body></html>");
catch(Exception e)
{ resp.sendError(500,e.toString());
} }}
Catlog.java
import java.sql.*;
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class login extends HttpServlet
```

```
public void service(HttpServletRequest req,HttpServletResponse resp)
throws ServletException,IOException
PrintWriter pw=resp.getWriter();
pw.println("<html><body bgcolor=\"pink\");</pre>
String title=req.getParameter("title");
try
Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.registerDriver(d);
Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger")
Statement stmt=con.createStatement();
String sqlstmt="select id,password from login";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0;
while(rs.next())
pw.println(",div align=\"center\">");
pw.println("TITLE:"+rs.getString(1)+"<br>");
pw.println("AUTHOR :"+rs.getString(2)+"<br>");
pw.println("VERSION:"+rs.getString(3)+"<br>");
pw.println("PUBLISHER :"+rs.getString(4)+"<br>");
pw.println("COST:"+rs.getString(5)+"<br>");
pw.println("</div");</pre>
flag=1;
}
if(flag==0)
pw.println("SORRY INVALID TITLE TRY AGAIN <br>>");
pw.println("<a href=\"/tr/catalog.html\">press HERE to RETRY</a>");
pw.println("</body></html>");
catch(Exception e)
resp.sendError(500,e.toString());
}
Profile.java
import java.sql.*;
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class login extends HttpServlet
public void service(HttpServletRequest req,HttpServletResponse resp)
throws ServletException,IOException
```

```
PrintWriter pw=resp.getWriter();
pw.println("<html><body bgcolor=\"pink\");</pre>
String id=req.getParamenter("id");
try
Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.registerDriver(d);
Connection con=DriverManager.getConnection("jdbc:oracle:thin:
@localhost:1521:orcl", "scott", "tiger");
Statement stmt=con.createStatement();
String sqlstmt="select * from login where id="+id+"";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0;
pw.println("<br>><br>");
while(rs.next())
pw.println("<div align=\"center\">");
pw.println("NAME :"+rs.getString(1)+"<br>");
pw.println("ADDRESS :"+rs.getString(2)+"<br>");
pw.println("PHONE NO :"+rs.getString(3)+"<br>");
pw.println("</div>");
flag=1;
if(flag==0)
pw.println("SORRY INVALID ID TRY AGAIN ID<br>>");
pw.println("<a href=\"/tr/profile.html\">press HERE to RETRY</a>");
pw.println("</body></html>");
catch(Exception e)
resp.sendError(500,e.toString());
Order.java
import java.sql.*;
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class login extends HttpServlet
public void service(HttpServletRequest req,HttpServletResponse resp)
throws ServletException,IOException
PrintWriter pw=resp.getWriter();
pw.println("<html><body bgcolor=\"pink\");</pre>
String id=req.getParamenter("id");
String pwd=req.getParameter("pwd");
String title=req.getParameter("title");
String count1=req.getParameter("no");
```

```
String date=req.getParameter("date");
String cno=req.getParameter("cno");
int count=Integer.parseInt(count1);
try
Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.registerDriver(d);
Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger")
Statement stmt=con.createStatement();
String sqlstmt="select id,password from login";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0,amount,x;
while(rs.next())
if(id.equals(rs.getString(1))&&pwd.equals(rs.getString(2)))
flag=1;
if(flag==0)
pw.println("SORRY INVALID ID TRY AGAIN ID<br>>");
pw.println("<a href=\\"/tr/order.html\\">press HERE to RETRY</a>");
else
Statement stmt2=con.createStatement();
String s="select cost from book where title="+title+"";
ResultSet rs1=stmt2.executeQuery(s);
int flag1=0;
while(rs1.next())
flag1=1;
x=Integer.parseInt(rs1.getString(1));
amount=count*x;
pw.println("AMOUNT :"+amount+"<br><br><br>");
Statement stmt1=con.createStatement();
stmt1.executeUpdate("insertintodetails
values(""+id+",""+title+""+amount+"",""+cno+"")");
pw.println("YOUR ORDER has taken<br>");
if(flag1==0)
pw.println("SORRY INVALID ID TRY AGAIN ID<br>>");
pw.println("<a href=\\"/tr/order.html\\">press HERE to RETRY</a>");
pw.println("</body></html>");
con.close();
}
catch(Exception e)
```

```
{
resp.sendError(500,e.toString());
}
}
```

EX:NO: 3 THREE TIER ARCHITECTURE USING SERVLETS

AIM:

To write a java servlet program to conduct online examination and to display student mark list available in a database which has been stored in a database server.

ALGORITHM:

Client:

Step 1: In online.html on the client side declare the questions for online exam in which True/False options are

displayed that you like to transfer to the server using html form and input type tags.

Step 2: create a submit button and close all the included tags.

Servlet:

Step 1: Import all necessary packages

Step 2: Define a class that extends servlet

Step 3: In the do Post() method, do the following:

- i) Set the content type of the response to "text/html" by using setContentType
- ii) Create a writer to the response
- iii) Get a parameter from the request
- iv) If its value is equal to right answer then add 5 to mark variable
- v) Similarly repeat step for all parameters
- vi) Display the result in an html format using response.getwriter().

PROGRAM:

```
<html>
<head>
<title> Database test</title>
</head>
<body>
<center>
<form action="http://localhost:8080/exam/exam" method=POST>
<div align="left"><br>
<br/><b>seat number:</b> <input type="text" name="Seat_no">
<div align="right"><br>
<b>Name:</b> <input type="text" name="Name" size="50"><br>
</div>
<br>
<br>
<b>1.Is JAVA a platform independency</b><br/>
<input type="radio" name="group1" value="True">True
<input type="radio" name="group1" value="False">False<br>
<b>2.ASP .NET is a client side programming</b><br/>
```

```
<input type="radio" name="group2" value="True">True
<input type="radio" name="group2" value="False">False<br>
<input type="radio" name="group3" value="True">True
<input type="radio" name="group3" value="False">False<br>
<b>4. You are working in IBM machines</b>
<input type="radio" name="group4" value="True">True
<input type="radio" name="group4" value="False">False<br>
<b>5.C++ is a fully OOP's language</b><br/>
<input type="radio" name="group5" value="True">True
<input type="radio" name="group5" value="False">False<br>
<br><br><br>>
<center>
<input type="submit" value="submit"><br><br>
</center>
</form>
</body>
</html>
Exam.java:
import java.sql.*;
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class exam extends HttpServlet
String message, Seat no, Name, ans 1, ans 2, ans 3, ans 4, ans 5;
int Total=0;
```

```
Connection connect;
Statement stmt =null;
ResultSet rs=null;
public void doPost(HttpServletRequest request,HttpServletResponse response)
throws ServletException,IOException
try
String url="jdbc:odbc:StudentDB2";
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
connect=DriverManager.getConnection(url," "," ");
message="Connection Successful";
catch(ClassNotFoundException cnfex)
cnfex.printStackTrace();
catch(SQLException sqlex)
sqlex.printStackTrace();
catch(Exception excp)
excp.printStackTrace();
Seat_no=request.getParameter("Seat_no");
Name=request.getParameter("Name");
ans1=request.getParameter("group1");
ans2=request.getParameter("group2");
ans3=request.getParameter("group3");
ans4=request.getParameter("group4");
ans5=request.getParameter("group5");
if(ans1.equals("True"))
Total+=2;
if(ans2.equals("False"))
Total+=2;
if(ans3.equals("True"))
Total+=2;
if(ans4.equals("True"))
Total+=2;
if(ans5.equals("False"))
Total+=2;
try
Statement stmt=connect.createStatement();
String query="INSERT into StudentTable VALUES ("+Seat_no+","+Name+"',"+Total+")";
//****"+"Seat no,Name,Marks"+")"+" VALUES("
int result=stmt.executeUpdate(query);
```

```
stmt.close();
catch(SQLException ex)
response.setContentType("text/html");
PrintWriter out=response.getWriter();
out.println("<html>");
out.println("<body bgcolor=yellow>");
out.println("<h1>"+message+"</h1>\n");
out.println("<h3>DataBase Updated");
out.println("<br><br>");
out.println("<b>"+"The Student Database is as follows");
out.println("");
try
{
Statement stmt=connect.createStatement();
String query="SELECT * FROM StudentTable";
rs=stmt.executeQuery(query);
out.println(""+"Seat_no"+"");
out.println(""+"Name"+"");
out.println(""+"Marks"+"");
while(rs.next())
out.println("");
out.println(""+rs.getInt(1)+"");
out.println(""+rs.getString(2)+"");
out.println(""+rs.getInt(3)+"");
out.println("");
out.println("");
catch(SQLException ex)
{}
finally
try
if(rs!=null)
rs.close();
if(stmt!=null)
stmt.close();
if(connect!=null)
connect.close();
catch(SQLException e)
{}
```

```
out.println("<center>");
out.println("<h1>Thanks!</h1>\n");
out.println("</center>");
out.println("</body></html>");
}}
Web.xml:
<web-app xmlns="http://java.sun.com/xml/ns/javaee"</pre>
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-app_3_0.xsd"
version="3.0" metadata-complete="true">
<display-name>Welcome to Tomcat</display-name>
<description>
Welcome to Tomcat
</description>
<servlet>
<servlet-name>exam</servlet-name>
<servlet-class>exam</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>exam</servlet-name>
<url-pattern>/exam</url-pattern>
</servlet-mapping>
</web-app>
```

```
</description>
<servlet>
<servlet-name>reg</servlet-name>
<servlet-class>reg</servlet-class>
</servlet>
<servlet>
<servlet-name>login</servlet-name>
<servlet-class>login</servlet-class>
</servlet>
<servlet>
<servlet-name>profile</servlet-name>
<servlet-class>profile</servlet-class>
</servlet>
<servlet>
<servlet-name>catalog</servlet-name>
<servlet-class>catalog</servlet-class>
<servlet-mapping>
<servlet-name>order</servlet-name>
<url-p</servlet>
<servlet>
<servlet-name>order</servlet-name>
<servlet-class>order</servlet-class>
</servlet>
attern>order</url-pattern>
</servlet-mapping>
<servlet-mapping>
<servlet-name>catalog</servlet-name>
<url-pattern>catalog</url-pattern>
</servlet-mapping>
<servlet-mapping>
<servlet-name>profile</servlet-name>
<url-pattern>profile</url-pattern>
</servlet-mapping>
<servlet-mapping>
<servlet-name>login</servlet-name>
<url-pattern>login</url-pattern>
</servlet-mapping>
<servlet-mapping>
<servlet-name>reg</servlet-name>
<url-pattern>reg</url-pattern>
</servlet-mapping>
</web-app>
Main.html
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<body bgcolor="pink">
<br /><br /><br /><br />
<h1 align="center"><U>ONLINE BOOK STORAGE</U></h1><br /><br />
<h2 align="center">
<b>Welcome to online book storage.
Press LOGIN if you are having id
```

otherwise press REGISTRATION

```
</b></h2>
<br /><br />
<div align="center"><a href="/tr/login.html">LOGIN</a> <a href="/tr/reg.html">
REGISTRATION</a></div>
</body>
</html>
Login.html
<html>
<body bgcolor="pink"><br /><br />
<form name="myform" method="post" action="/tr/login">
<div align="center">
LOGIN ID :<input type="text" name="id" /><br />
PASSWORD :<input type="password" name="pwd" /><br /><br />
</div>
<br /><br />
<div align="center">
<input type="submit" value="ok" onclick="validate()" />
      <a href="reset" value="clear" />
</div>
</form>
</body>
</html>
Reg.html
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<body bgcolor="pink"><br /><br />
<form name="myform" method="post" action="/tr/reg">
<div align="center">
NAME :<input type="text" name="name" /><br />
ADDRESS :<input type="text" name="addr" /><br />
CONTACT NUMBER :<input type="text" name="phno" /><br />
LOGINID :<input type="text" name="id" /><br />
PASSWORD :<input type="password" name="pwd" /><br />
</div>
<br /><br />
<div align="center">
<input type="submit" value="ok" onclick="validate()" />
      <a href="reset" value="clear" />
</div>
</form>
</body>
</html>
Profile.html
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<body bgcolor="pink"><br /><br />
<form name="myform" method="post" action="/tr/profile">
<div align="center">
LOGIN ID :<input type="text" name="id" /><br />
<br /><br />
</div>
```

```
<br /><br />
<div align="center">
<input type="submit" value="ok" onclick="validate()" />
     
</div></form></body></html>
Catalog.html
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<body bgcolor="pink"><br /><br /><br />
<form method="post" action="/tr/catalog">
<div align="center">
BOOK TITLE :<input type="text" name="title" /><br />
<br /><br />
</div>
<br /><br />
<div align="center">
<input type="submit" value="ok" name="button1"/>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
<input type="reset" value="clear" name="button2"/>
</div>
</form>
</body></html>
Order.html
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<body bgcolor="pink"><br /><br />
<form method="post" action="/tr/reg">
<div align="center">
NAME :<input type="text" name="name" /><br />
PASSWORD :<input type="password" name="pwd" />
TITLE :<input type="text" name="title" /><br />
NO. OF BOOKS :<input type="text" name="no" /><br />
DATE :<input type="text" name="date" /><br />
CREDIT CARD NUMBER:<input type="password" name="cno" /><br />/pre><br /><br />
</div>
<br /><br />
<div align="center">
<input type="submit" value="ok" name="button1"/>
        
</div>
</form>
</body>
</html>
Login.java
import java.sql.*;
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class login extends HttpServlet
```

```
public void service(HttpServletRequest req,HttpServletResponse resp)
throws ServletException,IOException
{ PrintWriter pw=resp.getWriter();
pw.println("<html><body bgcolor=\"pink\");</pre>
String id=req.getParamenter("id");
String pwd=req.getParameter("pwd");
{ Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.registerDriver(d);
Connection
con=DriverManager.getConnection("idbc:oracle:thin:@localhost:1521:orcl","scott","tiger")
Statement stmt=con.createStatement();
String sqlstmt="select id,password from login";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0;
while(rs.next())
if(id.equal(rs.getString(1))&&pwd.equals(rs.getString(2)))
flag=1;
if(flag==0)
pw.println("SORRY INVALID ID TRY AGAIN ID<br>>");
pw.println("<a href=\"/tr/login.html\">press LOGIN to RETRY</a>");
else
pw.println("VALID LOGIN ID<br>>");
pw.println("<h3>");
pw.println("<\!li><\!ahref=\\"profile.html\\"><\!fontcolor=\\"black\\">USER
PROFILE</font> </a><br>");
pw.println("<ahref=\"catalog.html\"><fontcolor=\"black\">BOOKS
CATALOG</font></a><br>");
pw.println("<ahref=\"order.html\"><fontcolor=\"black\">ORDER
CONFIRMATION</font> </a><br>");
pw.println("</body></html>");
catch(Exception e)
{ resp.sendError(500,e.toString());
Reg.html
import java.sql.*;
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class login extends HttpServlet
```

```
public void service(HttpServletRequest req,HttpServletResponse resp)
throws ServletException,IOException
PrintWriter pw=resp.getWriter();
pw.println("<html><body bgcolor=\"pink\");</pre>
String name=req.getParamenter("name");
String addr=req.getParameter("addr");
String phno=req.getParameter("phno");
String id=req.getParamenter("id");
String pwd=req.getParameter("pwd");
int no=Integer.parseInt(phno);
try
{
Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.registerDriver(d);
Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger")
Statement stmt=con.createStatement();
String sqlstmt="select id,password from login";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0;
while(rs.next())
if(id.equal(rs.getString(1))&&pwd.equals(rs.getString(2)))
flag=1;
} }
if(flag==1)
pw.println("SORRY INVALID ID ALREADY EXITS TRY AGAIN WITH NEW
ID<br>");
pw.println("<a href=\"/tr/reg.html\">press REGISTER to RETRY</a>");
}
else
{ Statement stmt1=con.createStatement();
stmt1.executeUpdate("insertintologin
values("+names","+addr+","+no+","+id+","+pwd+")");
pw.println("YOUR DETAILS ARE ENTERED<br>>");
pw.println("<a href=\"/tr/login.html\">press LOGIN to login</a>");
pw.println("</body></html>");
catch(Exception e)
{ resp.sendError(500,e.toString());
} }}
Catlog.java
import java.sql.*;
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class login extends HttpServlet
```

```
public void service(HttpServletRequest req,HttpServletResponse resp)
throws ServletException,IOException
PrintWriter pw=resp.getWriter();
pw.println("<html><body bgcolor=\"pink\");</pre>
String title=req.getParameter("title");
try
Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.registerDriver(d);
Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger")
Statement stmt=con.createStatement();
String sqlstmt="select id,password from login";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0;
while(rs.next())
pw.println(",div align=\"center\">");
pw.println("TITLE:"+rs.getString(1)+"<br>");
pw.println("AUTHOR :"+rs.getString(2)+"<br>");
pw.println("VERSION:"+rs.getString(3)+"<br>");
pw.println("PUBLISHER :"+rs.getString(4)+"<br>");
pw.println("COST:"+rs.getString(5)+"<br>");
pw.println("</div");</pre>
flag=1;
}
if(flag==0)
pw.println("SORRY INVALID TITLE TRY AGAIN <br>>");
pw.println("<a href=\"/tr/catalog.html\">press HERE to RETRY</a>");
pw.println("</body></html>");
catch(Exception e)
resp.sendError(500,e.toString());
}
Profile.java
import java.sql.*;
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class login extends HttpServlet
public void service(HttpServletRequest req,HttpServletResponse resp)
throws ServletException,IOException
```

```
PrintWriter pw=resp.getWriter();
pw.println("<html><body bgcolor=\"pink\");</pre>
String id=req.getParamenter("id");
try
Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.registerDriver(d);
Connection con=DriverManager.getConnection("jdbc:oracle:thin:
@localhost:1521:orcl", "scott", "tiger");
Statement stmt=con.createStatement();
String sqlstmt="select * from login where id="+id+"";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0;
pw.println("<br>><br>");
while(rs.next())
pw.println("<div align=\"center\">");
pw.println("NAME :"+rs.getString(1)+"<br>");
pw.println("ADDRESS :"+rs.getString(2)+"<br>");
pw.println("PHONE NO :"+rs.getString(3)+"<br>");
pw.println("</div>");
flag=1;
if(flag==0)
pw.println("SORRY INVALID ID TRY AGAIN ID<br>>");
pw.println("<a href=\"/tr/profile.html\">press HERE to RETRY</a>");
pw.println("</body></html>");
catch(Exception e)
resp.sendError(500,e.toString());
Order.java
import java.sql.*;
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class login extends HttpServlet
public void service(HttpServletRequest req,HttpServletResponse resp)
throws ServletException,IOException
PrintWriter pw=resp.getWriter();
pw.println("<html><body bgcolor=\"pink\");</pre>
String id=req.getParamenter("id");
String pwd=req.getParameter("pwd");
String title=req.getParameter("title");
String count1=req.getParameter("no");
```

```
String date=req.getParameter("date");
String cno=req.getParameter("cno");
int count=Integer.parseInt(count1);
try
Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.registerDriver(d);
Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger")
Statement stmt=con.createStatement();
String sqlstmt="select id,password from login";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0,amount,x;
while(rs.next())
if(id.equals(rs.getString(1))&&pwd.equals(rs.getString(2)))
flag=1;
if(flag==0)
pw.println("SORRY INVALID ID TRY AGAIN ID<br>>");
pw.println("<a href=\\"/tr/order.html\\">press HERE to RETRY</a>");
else
Statement stmt2=con.createStatement();
String s="select cost from book where title="+title+"";
ResultSet rs1=stmt2.executeQuery(s);
int flag1=0;
while(rs1.next())
flag1=1;
x=Integer.parseInt(rs1.getString(1));
amount=count*x;
pw.println("AMOUNT :"+amount+"<br><br><br>");
Statement stmt1=con.createStatement();
stmt1.executeUpdate("insertintodetails
values(""+id+",""+title+""+amount+"",""+cno+"")");
pw.println("YOUR ORDER has taken<br>");
if(flag1==0)
pw.println("SORRY INVALID ID TRY AGAIN ID<br>>");
pw.println("<a href=\\"/tr/order.html\\">press HERE to RETRY</a>");
pw.println("</body></html>");
con.close();
}
catch(Exception e)
```

```
{
resp.sendError(500,e.toString());
}
```