WTMA

EXP 1: HTML & CSS

**AIM:**

a) Create a web page to embed a map along with hot spot, frames & links.

b)Create a web page using an embedded, external and inline CSS file.

**HTML FILE:**

<!DOCTYPE html>

<html>

<head>

<title>Hotspot</title>

<!-- Link to the external CSS file -->

<link rel=*"stylesheet"* type=*"text/css"* href=*"hotspot.css"*>

<style>

**h1** {

text-align: *center*;

color: *#333*;

margin-top: *20px*;

}

</style>

</head>

<body>

<h1>Interactive Map of India</h1>

<img src=*"https://www.mapsofindia.com/images2/india-map-2019.jpg"* usemap=*"#indiamap"* width=*"900"* height=*"720"* alt=*"Map of India"*>

<map name=*"indiamap"*>

<area shape=*"rect"* coords=*"324,578,407,535"* alt=*"Tamil Nadu"* href=*"https://en.wikipedia.org/wiki/Tamil\_Nadu"*>

<area shape=*"rect"* coords=*"343,655,398,599"* alt=*"Tamil Nadu"* href=*"https://en.wikipedia.org/wiki/Tamil\_Nadu"*>

<area shape=*"rect"* coords=*"407,538,395,602"* alt=*"Tamil Nadu"* href=*"https://en.wikipedia.org/wiki/Tamil\_Nadu"*>

<area shape=*"rect"* coords=*"346,653,397,605"* alt=*"Tamil Nadu"* href=*"https://en.wikipedia.org/wiki/Tamil\_Nadu"*>

<area shape=*"rect"* coords=*"406,537,324,579"* alt=*"Tamil Nadu"* href=*"https://en.wikipedia.org/wiki/Tamil\_Nadu"*>

</map>

</body>

</html>



**CSS FILE:**

@charset *"ISO-8859-1"*;

**body** {

font-family: *Arial,* *sans-serif*;

margin: *0*;

padding: *0*;

background-color: *#f4f4f4*;

}

**img** {

display: *block*;

margin: *0* *auto*;

border-radius: *8px*;

box-shadow: *0* *4px* *6px* *rgba(0,* *0,* *0,* *0.1)*;

}

/\* Styling for the map areas \*/

**area** {

outline: *none*;

border: *none*;

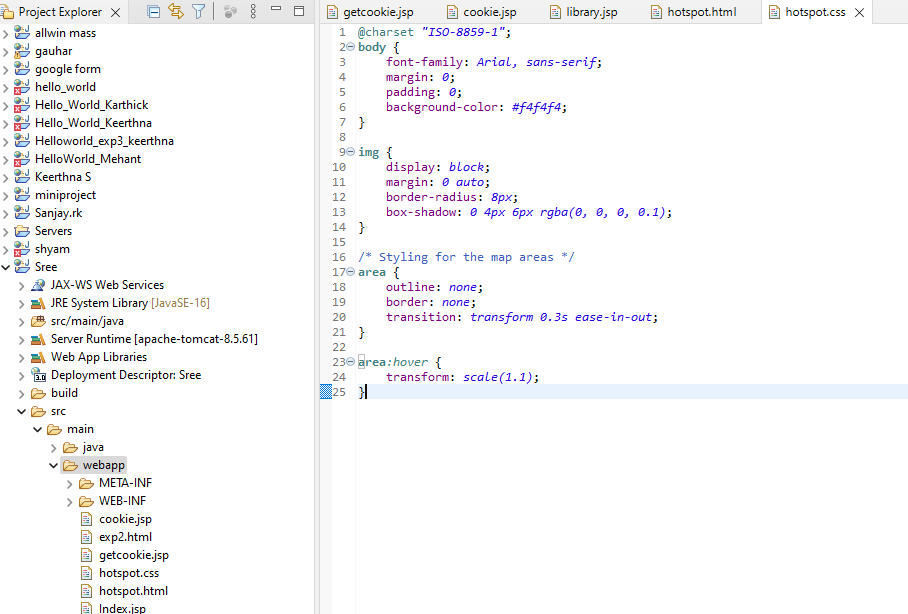
transition: *transform* *0.3s* *ease-in-out*;

}

**area***:hover* {

transform: *scale(1.1)*;

}



**OUPUT:**



RESULT:

Thus the program for HTML and CSS executed successfully.

EXP 2 : Write JavaScript to validate the following fields of the Registration page.

**AIM:**

a) First Name (Name should contains alphabets and the length Should not be less than 6 characters).

b) Password (Password should not be less than 6 characters length).

c) E-mail id (should not contain any invalid and must follow the standard pattern name@domain.com)

d) Mobile Number (Phone number should contain 10 digits only).

e) Last Name and Address (should not be Empty)

**PROGRAM:**

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

<form onsubmit="return validateForm()">

<label for=*"firstName"*>First Name:</label>

<input type=*"text"* id=*"firstName"* name=*"firstName"* required><br>

<label for=*"lastName"*>Last Name:</label>

<input type=*"text"* id=*"lastName"* name=*"lastName"* required><br>

<label for=*"password"*>Password:</label>

<input type=*"password"* id=*"password"* name=*"password"* required><br>

<label for=*"email"*>Email:</label>

<input type=*"email"* id=*"email"* name=*"email"* required><br>

<label for=*"mobileNumber"*>Mobile Number:</label>

<input type=*"text"* id=*"mobileNumber"* name=*"mobileNumber"* required><br>

<label for=*"address"*>Address:</label>

<textarea id=*"address"* name=*"address"* required></textarea><br>

<input type=*"submit"* value=*"Register"*>

</form>

<script type=*"text/javascript"*>

**function** validateForm() {

// Validate First Name

**var** firstName = document.getElementById("firstName").value;

**var** namePattern = /^[A-Za-z]+$/;

**if** (firstName.length < 6 || !namePattern.test(firstName)) {

alert("First Name must contain only alphabets and be at least 6 characters long.");

**return** **false**;

}

// Validate Password

**var** password = document.getElementById("password").value;

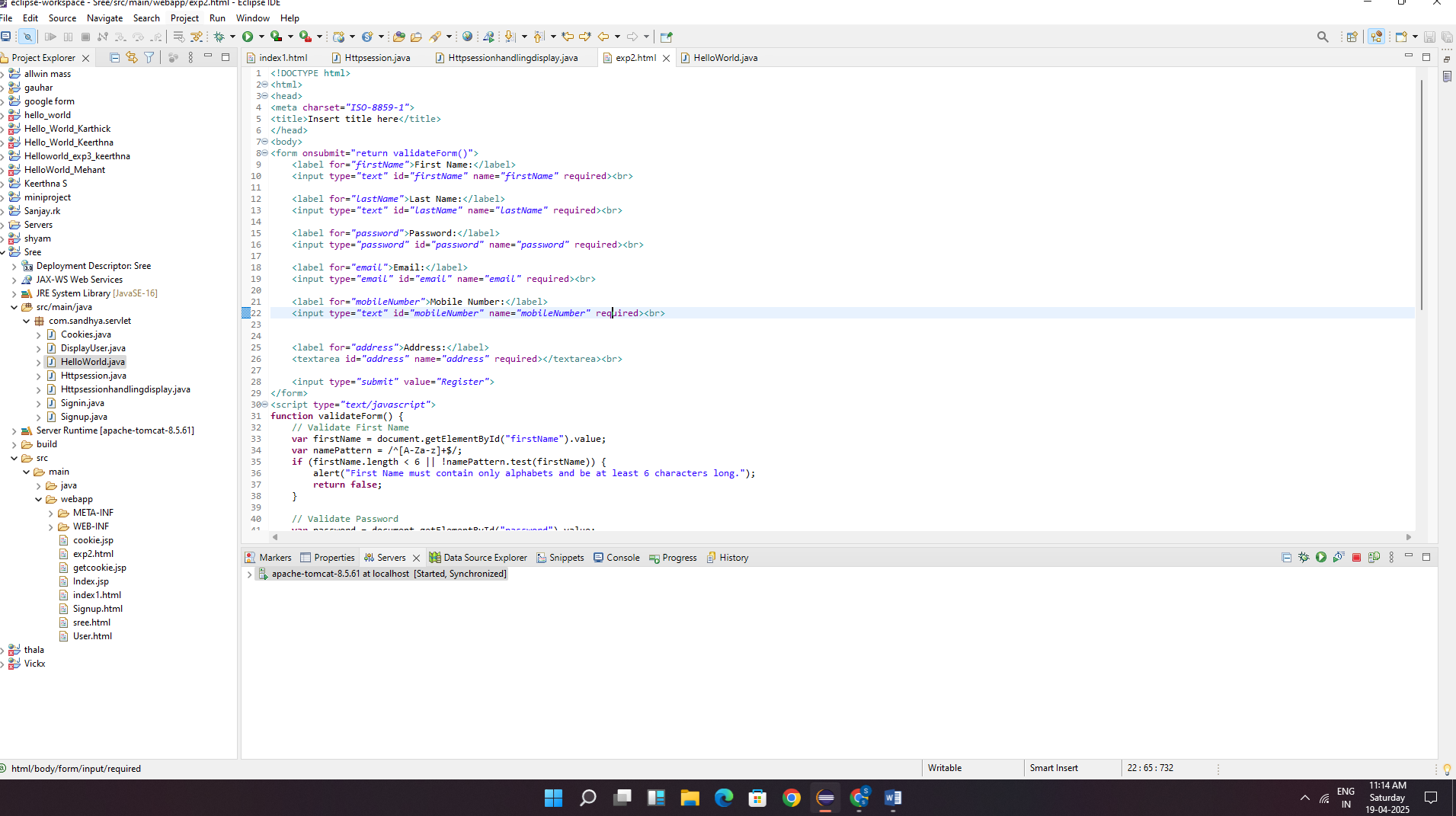
**if** (password.length < 6) {

alert("Password must be at least 6 characters long.");

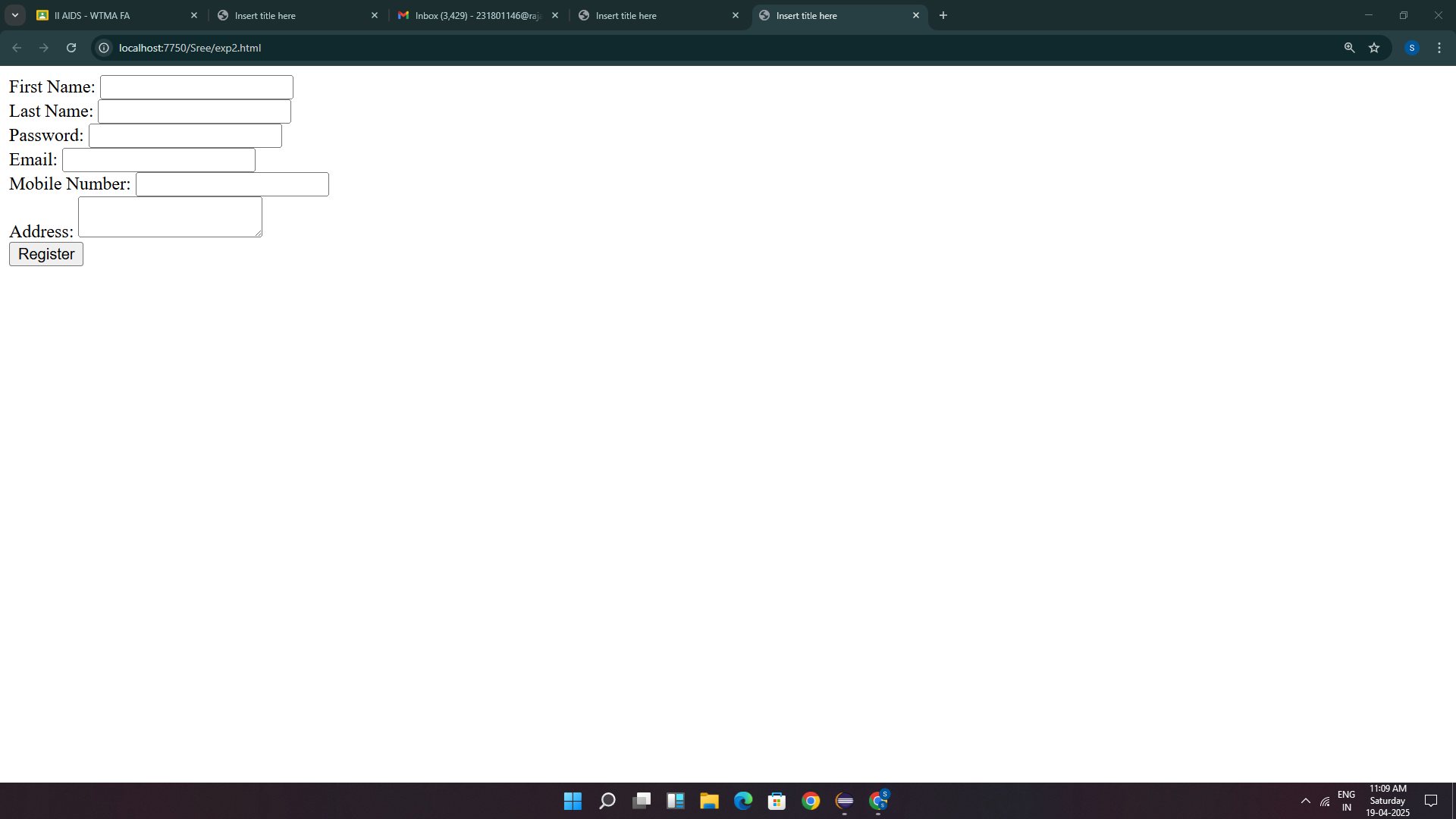
**return** **false**;

}

/



OUTPUT:



**RESULT:**

Thus the program for Registration Page executed successfully using javascript.

EXP 3

PROGRAM:

package com.sandhya.servlet;

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

/\*\*

\* Servlet implementation class HelloWorld

\*/

@WebServlet("/HelloWorld")

public class HelloWorld extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public HelloWorld() {

super();

// TODO Auto-generated constructor stub

}

/\*\*

\* @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)

\*/

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

PrintWriter P= response.getWriter();

P.println("hello world");

}

/\*\*

\* @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)

\*/

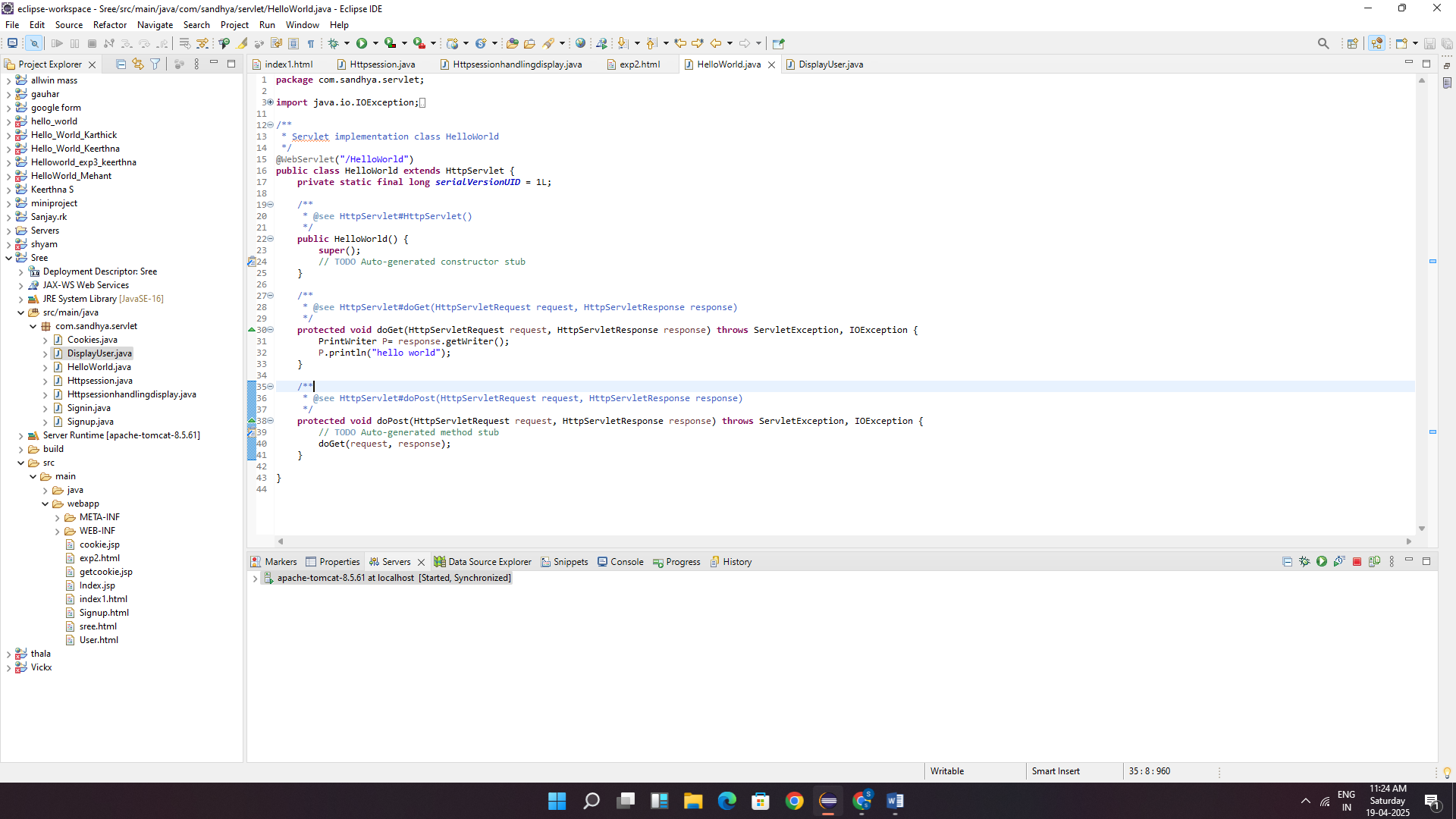
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

// TODO Auto-generated method stub

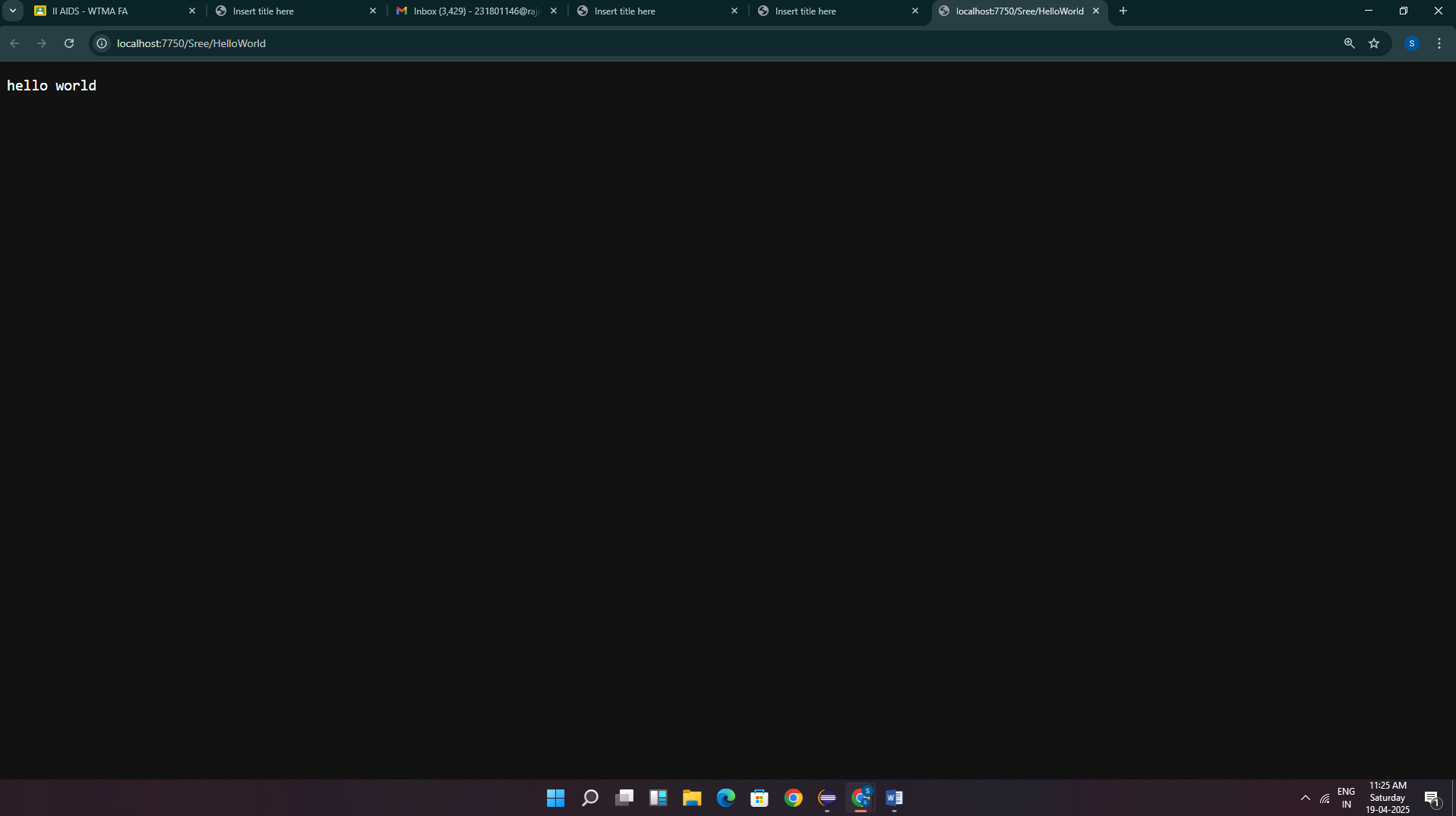
doGet(request, response);

}

}



OUTPUT:



EXP 4

PROGRAM:

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

<form action =*"/Sree/DisplayUser"* method=*"get"* >

<p>

<label for=*"username"*>Username:</label>

<input type=*"text"* id=*"username"* name=*"username"*>

</p>

<p>

<label for=*"age"*>Age:</label>

<input type=*"number"* id=*"age"* name=*"age"*>

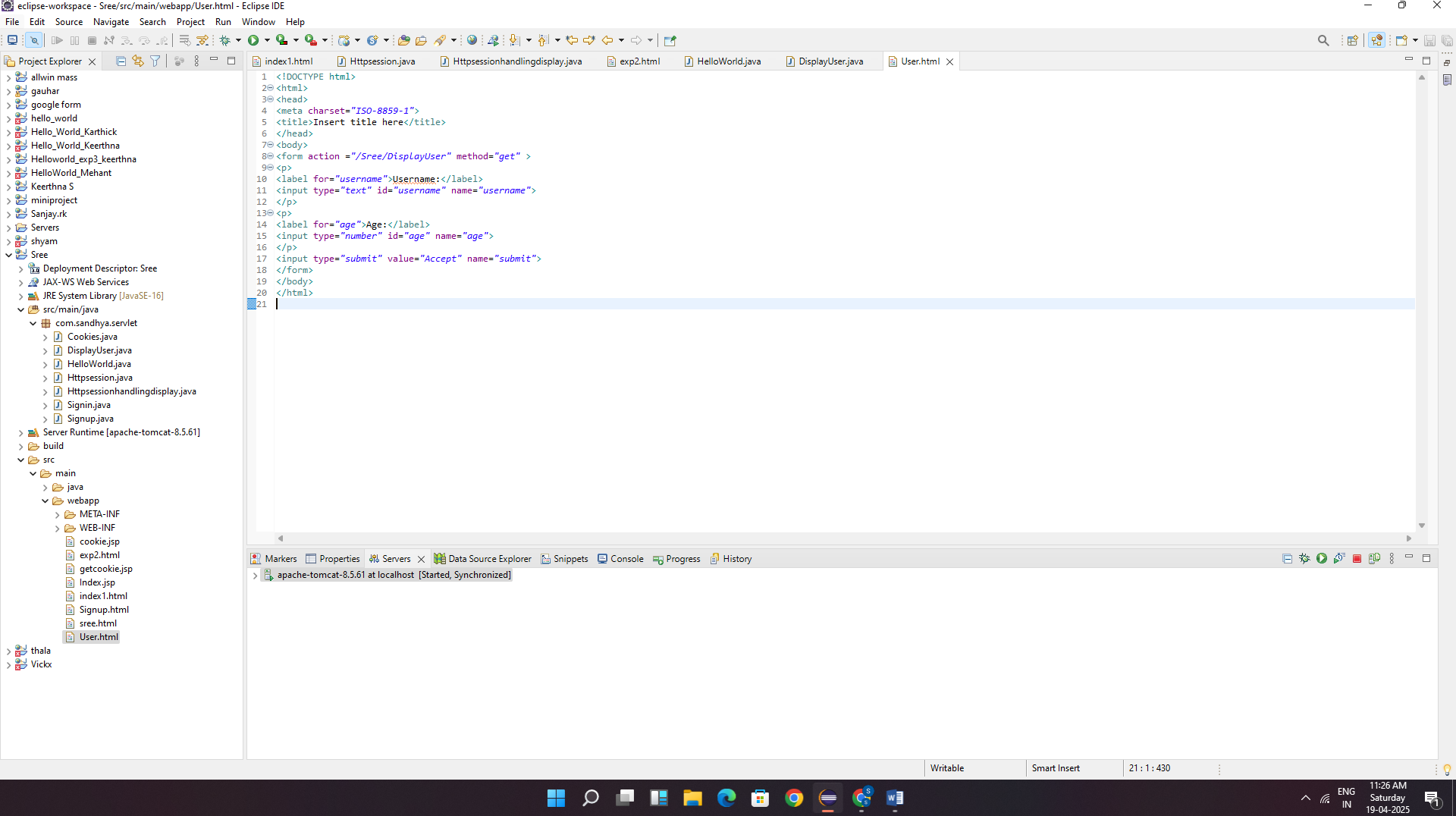
</p>

<input type=*"submit"* value=*"Accept"* name=*"submit"*>

</form>

</body>

</html>



SERVLET

package com.sandhya.servlet;

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

/\*\*

\* Servlet implementation class DisplayUser

\*/

@WebServlet("/DisplayUser")

public class DisplayUser extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public DisplayUser() {

super();

// TODO Auto-generated constructor stub

}

/\*\*

\* @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)

\*/

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

String a= request.getParameter("username");

int b= Integer .parseInt(request.getParameter("age"));

PrintWriter p=response.getWriter();

if(b<=0) {

p.println("Login failed");

}

else {

p.println(a);

p.println(b);

}

}

/\*\*

\* @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)

\*/

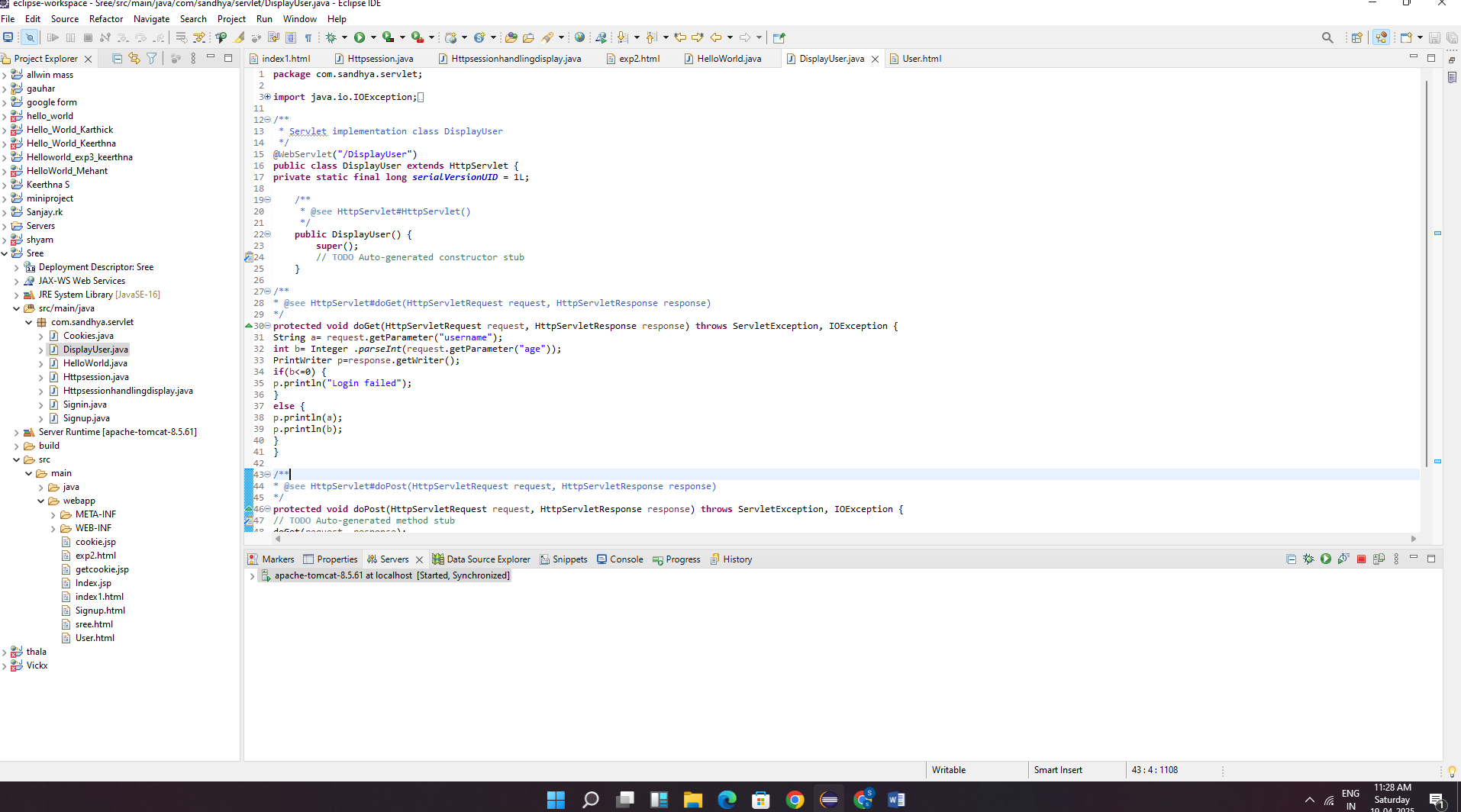
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

// TODO Auto-generated method stub

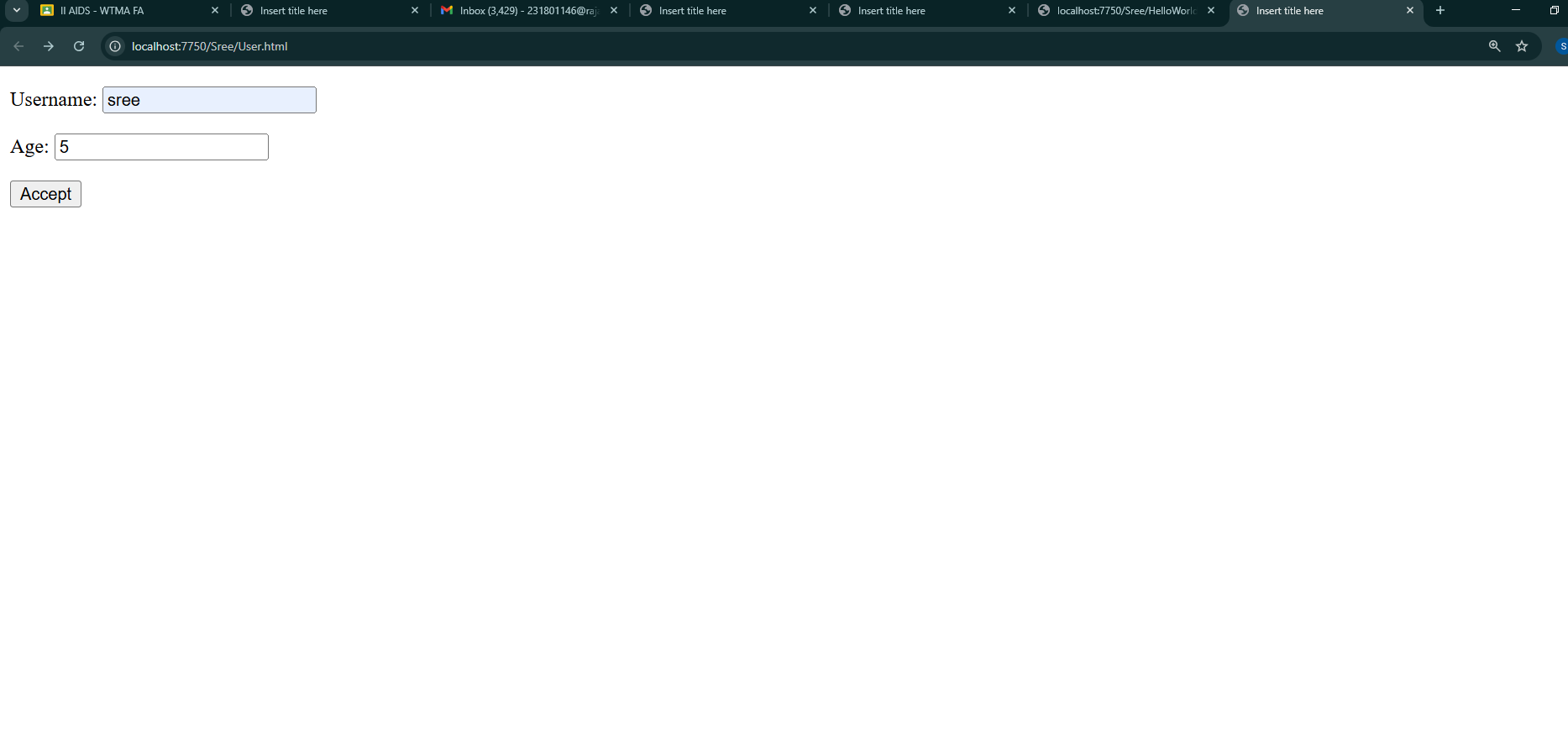
doGet(request, response);

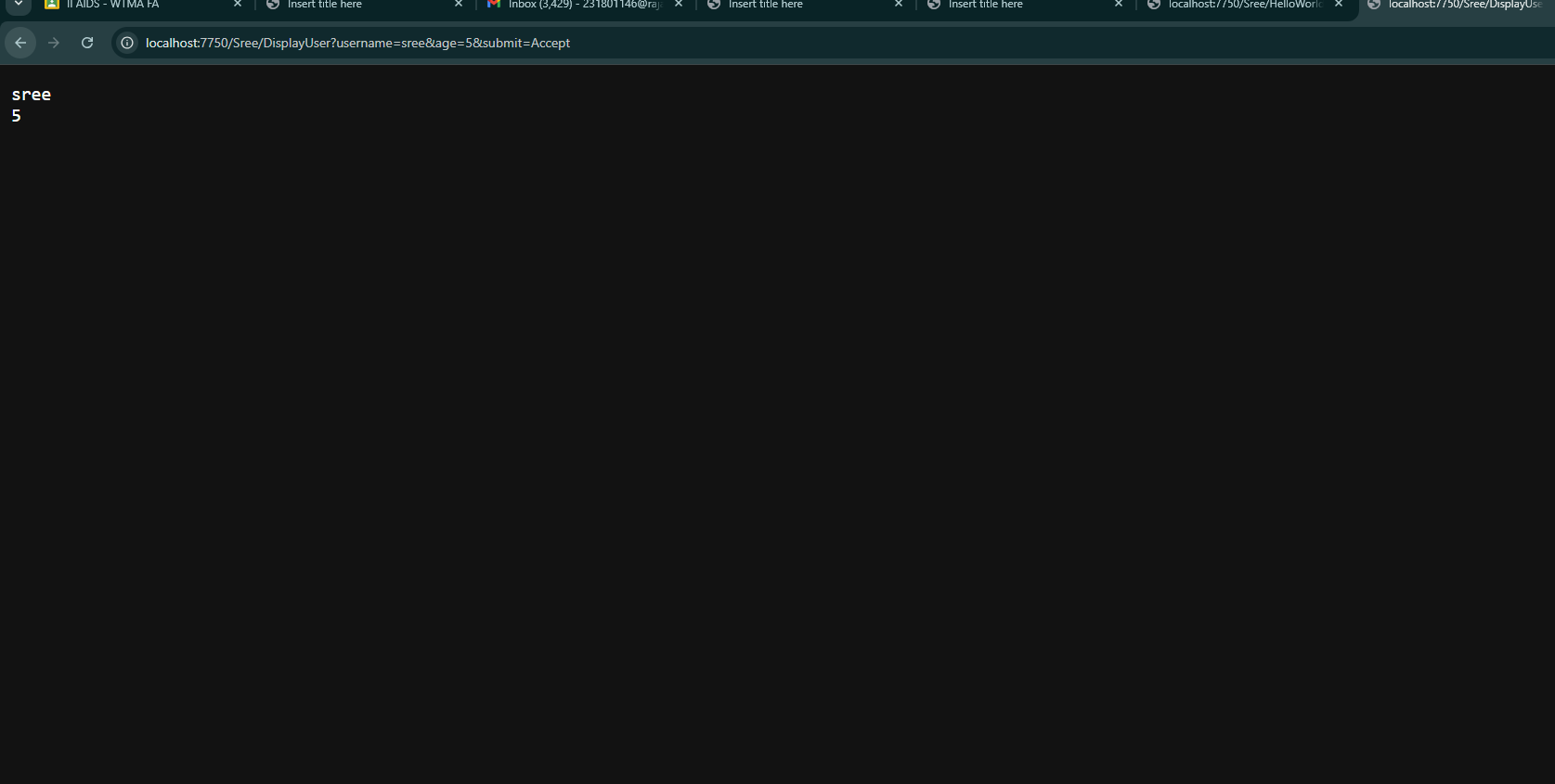
}

}



OUTPUT:





EXP 5

PROGRAM:

HTML

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

<form action=*"/Sree/Signup"* method=*"get"*>

<label for=*"firstName"*>First Name:</label>

<input type=*"text"* id=*"firstName"* name=*"firstName"* required><br><br>

<label for=*"lastName"*>Last Name:</label>

<input type=*"text"* id=*"lastName"* name=*"lastName"* required><br><br>

<label for=*"dob"*>Date of Birth:</label>

<input type=*"date"* id=*"dob"* name=*"dob"* required><br><br>

<label>Gender:</label>

<input type=*"radio"* id=*"male"* name=*"gender"* value=*"Male"* required>

<label for=*"male"*>Male</label>

<input type=*"radio"* id=*"female"* name=*"gender"* value=*"Female"* required>

<label for=*"female"*>Female</label><br><br>

<label for=*"address"*>Address:</label><br>

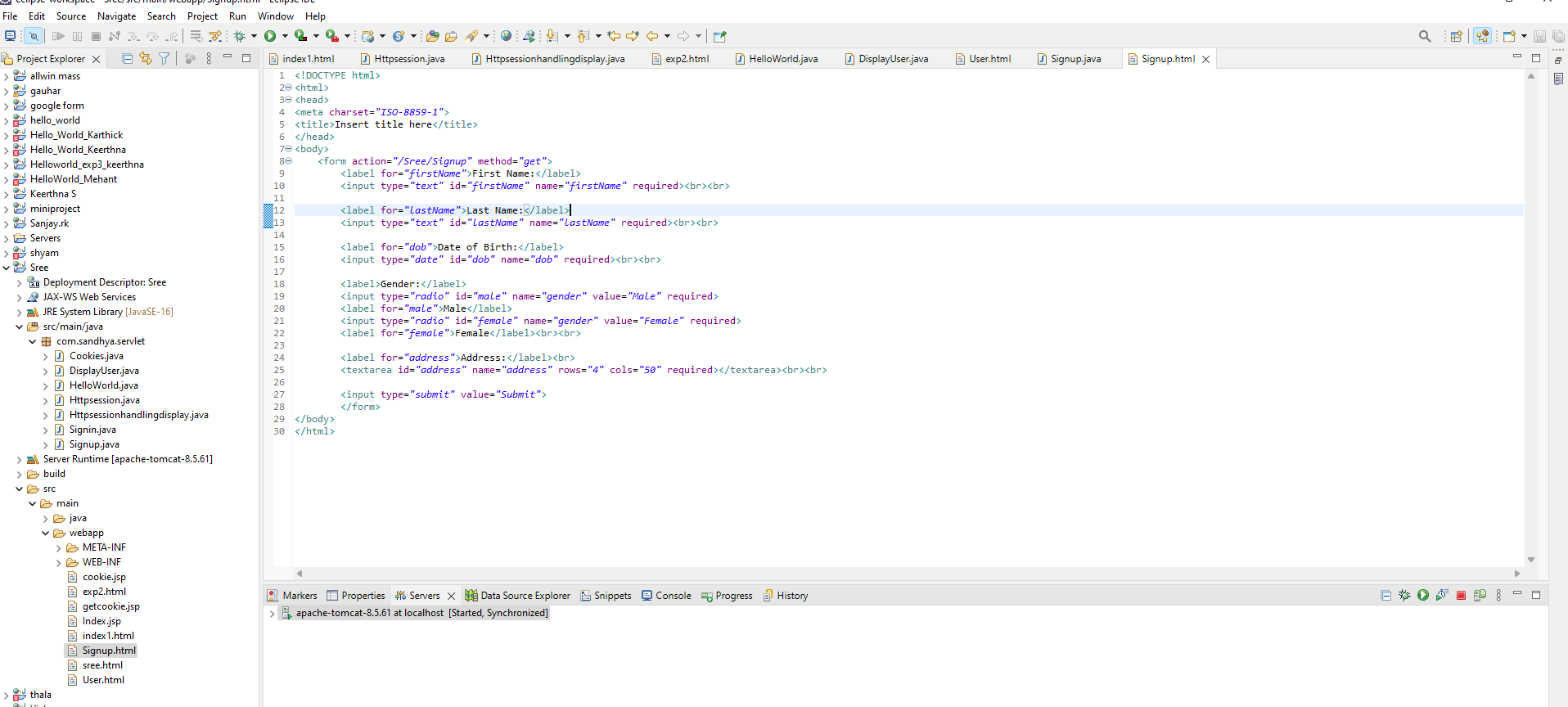
<textarea id=*"address"* name=*"address"* rows=*"4"* cols=*"50"* required></textarea><br><br>

<input type=*"submit"* value=*"Submit"*>

</form>

</body>

</html>



SERVLET

package com.sandhya.servlet;

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

/\*\*

\* Servlet implementation class Signup

\*/

@WebServlet("/Signup")

public class Signup extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public Signup() {

super();

// TODO Auto-generated constructor stub

}

/\*\*

\* @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)

\*/

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

String a=request.getParameter("firstName");

String b=request.getParameter("lastName");

String c=request.getParameter("dob");

String d=request.getParameter("gender");

String e=request.getParameter("address");

PrintWriter p=response.getWriter();

p.println(a);

p.println(b);

p.println(c);

p.println(d);

p.println(e);

}

/\*\*

\* @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)

\*/

protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

String a=request.getParameter("firstName");

String b=request.getParameter("lastName");

String c=request.getParameter("dob");

String d=request.getParameter("gender");

String e=request.getParameter("address");

PrintWriter p=response.getWriter();

p.println(a);

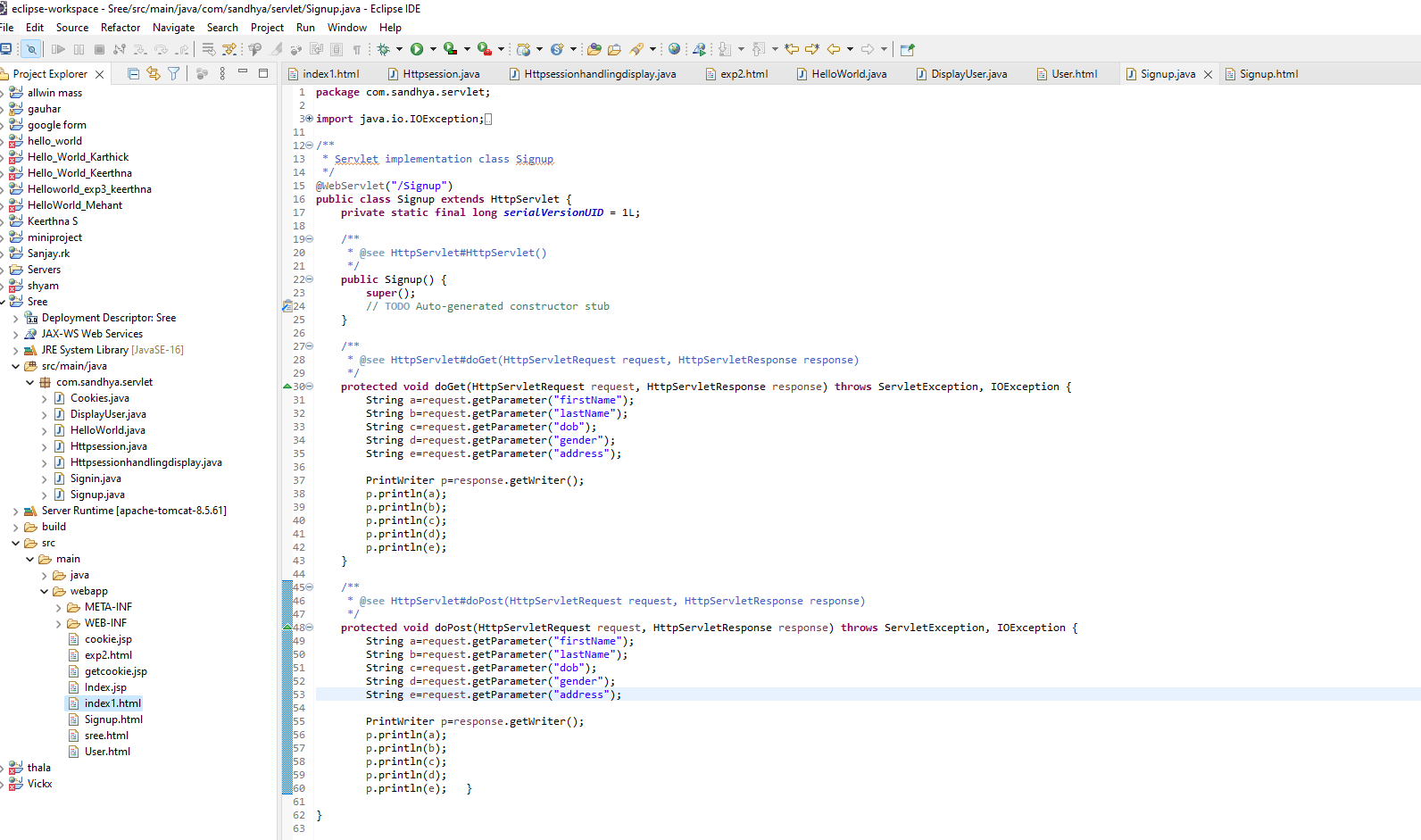
p.println(b);

p.println(c);

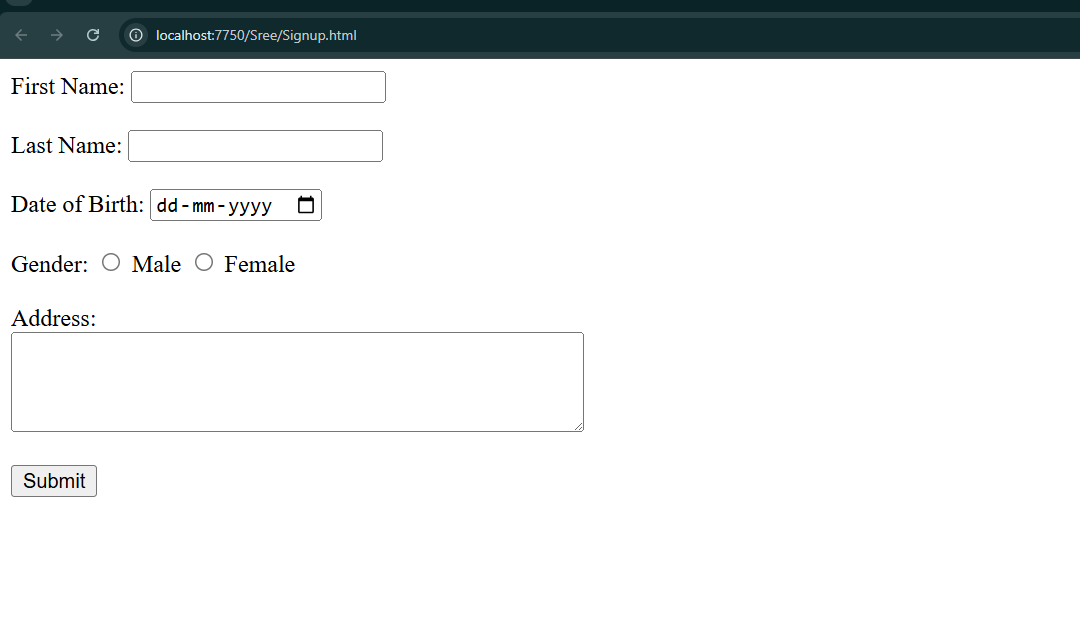
p.println(d);

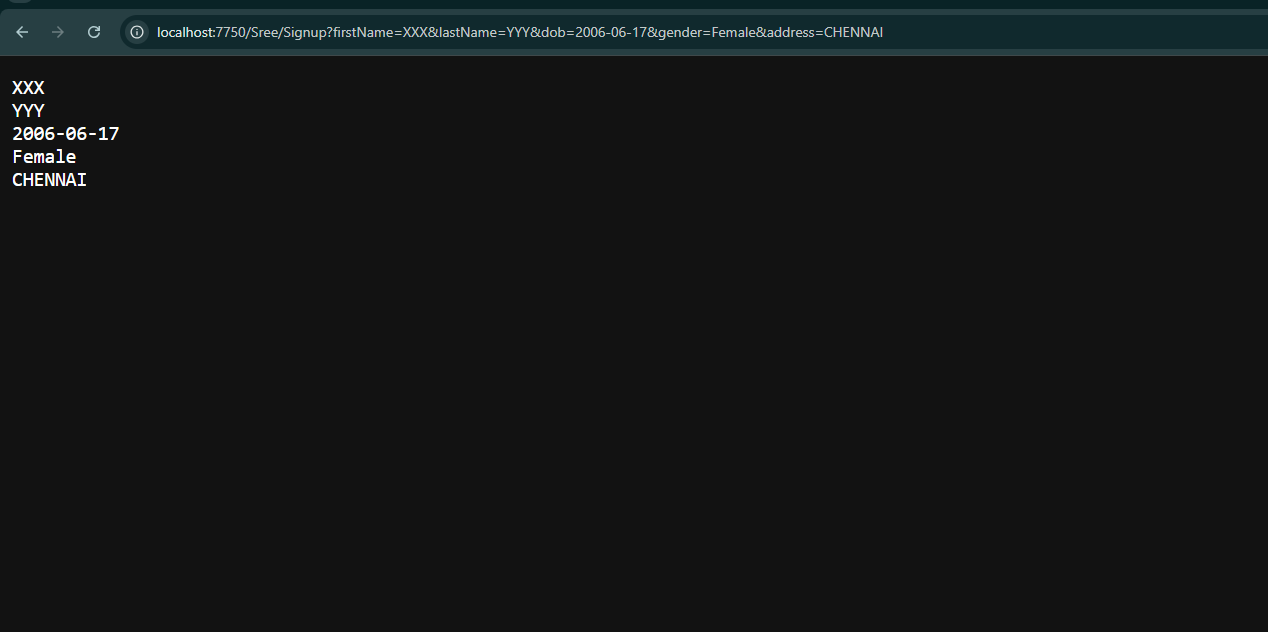
p.println(e); }

}



OUTPUT:





EXP 6

PROGRAM:

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

<h1>Form Handle By HTTP Session</h1>

<form action=*"/Sree/Httpsession"* method=*"POST"* style="margin-left: *50px*">

<label>Username: </label><input type=*"text"* name=*"username"*/><br><br>

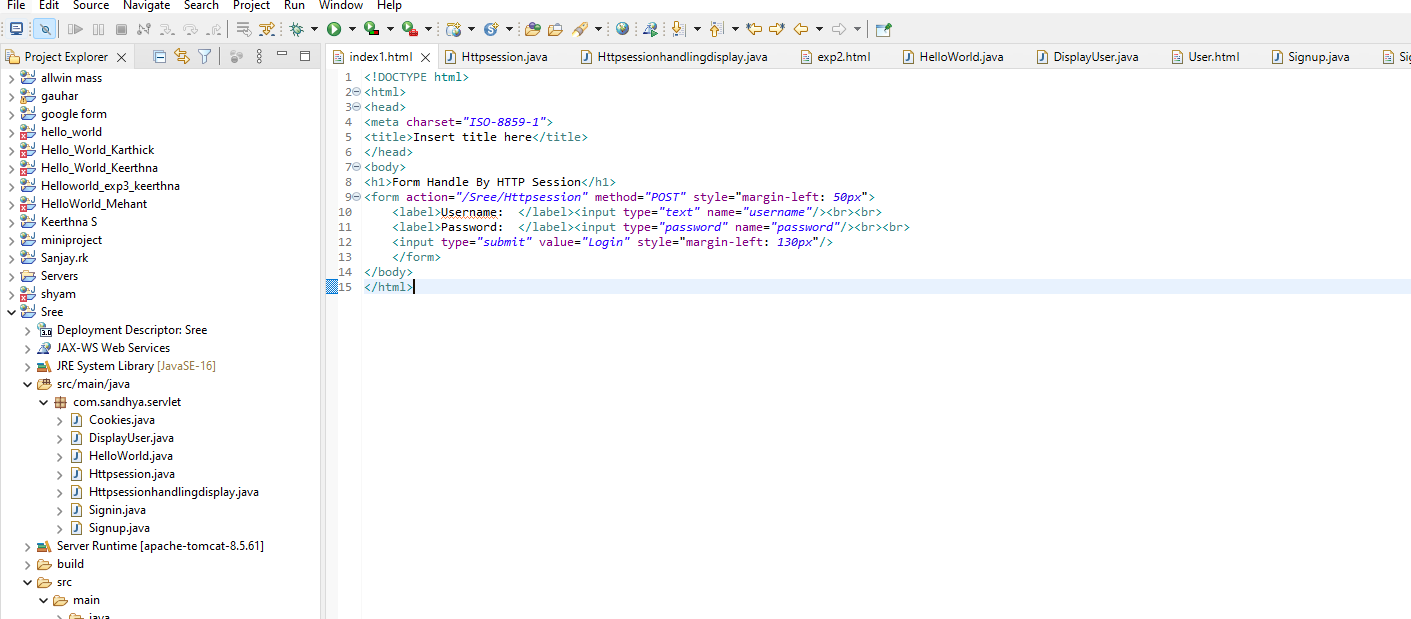
<label>Password: </label><input type=*"password"* name=*"password"*/><br><br>

<input type=*"submit"* value=*"Login"* style="margin-left: *130px*"/>

</form>

</body>

</html>



**package** com.sandhya.servlet;

**import** java.io.IOException;

**import** java.io.PrintWriter;

**import** javax.servlet.ServletException;

**import** javax.servlet.annotation.WebServlet;

**import** javax.servlet.http.HttpServlet;

**import** javax.servlet.http.HttpServletRequest;

**import** javax.servlet.http.HttpServletResponse;

**import** javax.servlet.http.HttpSession;

/\*\*

\* Servlet implementation class HttpSessionHandle

\*/

@WebServlet("/Httpsession")

**public** **class** Httpsession **extends** HttpServlet {

**private** **static** **final** **long** ***serialVersionUID*** = 1L;

@SuppressWarnings("deprecation")

**protected** **void** doPost(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, IOException {

String username = "WTMA";

String password = "WTMA";

PrintWriter p = response.getWriter();

String user = request.getParameter("username");

String pass = request.getParameter("password");

**if**(user.equals(username) && pass.equals(password))

{

HttpSession session = request.getSession(**true**);

session.~~putValue~~("username", user);

response.sendRedirect(request.getContextPath() + "/Httpsessionhandlingdisplay");

}

**else**

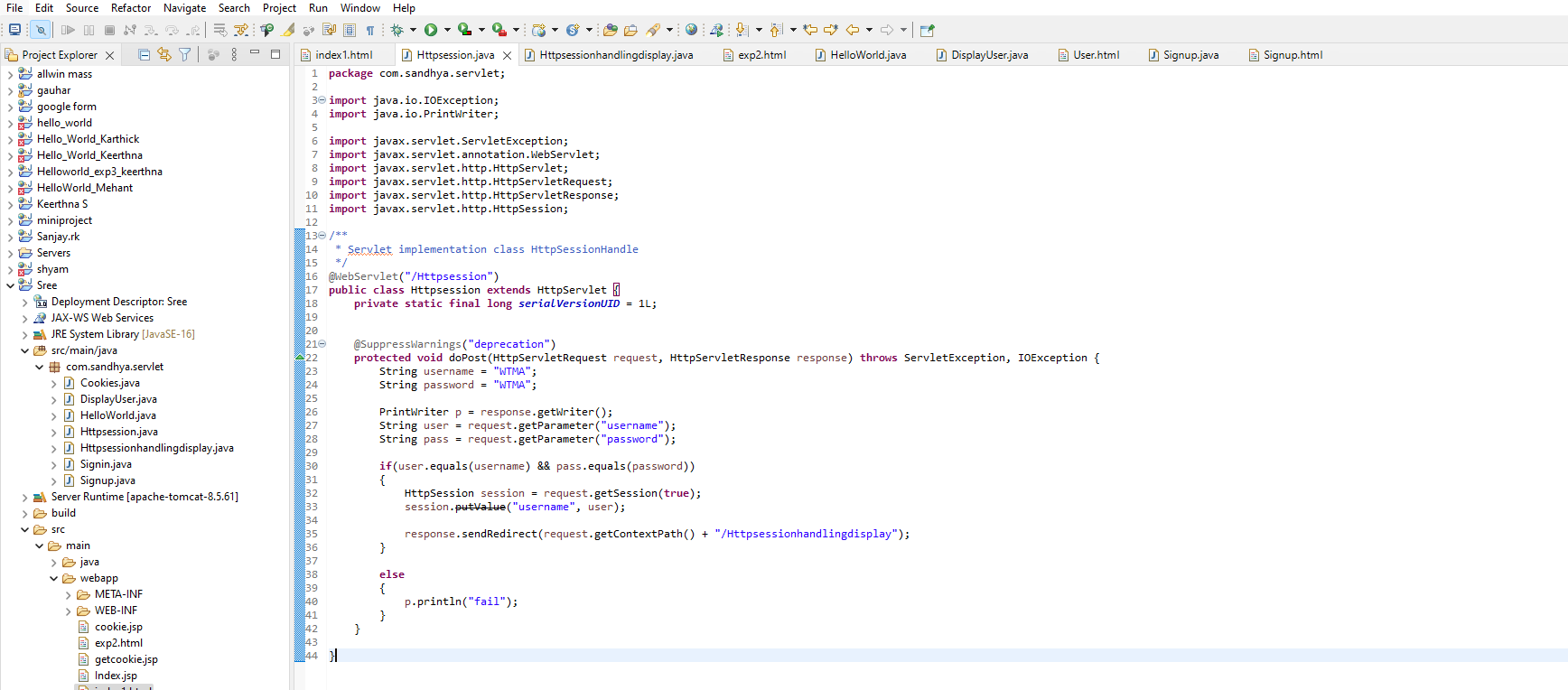
{

p.println("fail");

}

}

}



**package** com.sandhya.servlet;

**import** java.io.IOException;

**import** java.io.PrintWriter;

**import** javax.servlet.ServletException;

**import** javax.servlet.annotation.WebServlet;

**import** javax.servlet.http.HttpServlet;

**import** javax.servlet.http.HttpServletRequest;

**import** javax.servlet.http.HttpServletResponse;

**import** javax.servlet.http.HttpSession;

/\*\*

\* Servlet implementation class HttpSessionHandleDisplay

\*/

@WebServlet("/Httpsessionhandlingdisplay")

**public** **class** Httpsessionhandlingdisplay **extends** HttpServlet {

**private** **static** **final** **long** ***serialVersionUID*** = 1L;

/\*\*

\* **@see** HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)

\*/

**protected** **void** doGet(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, IOException {

PrintWriter p = response.getWriter();

HttpSession session = request.getSession(**true**);

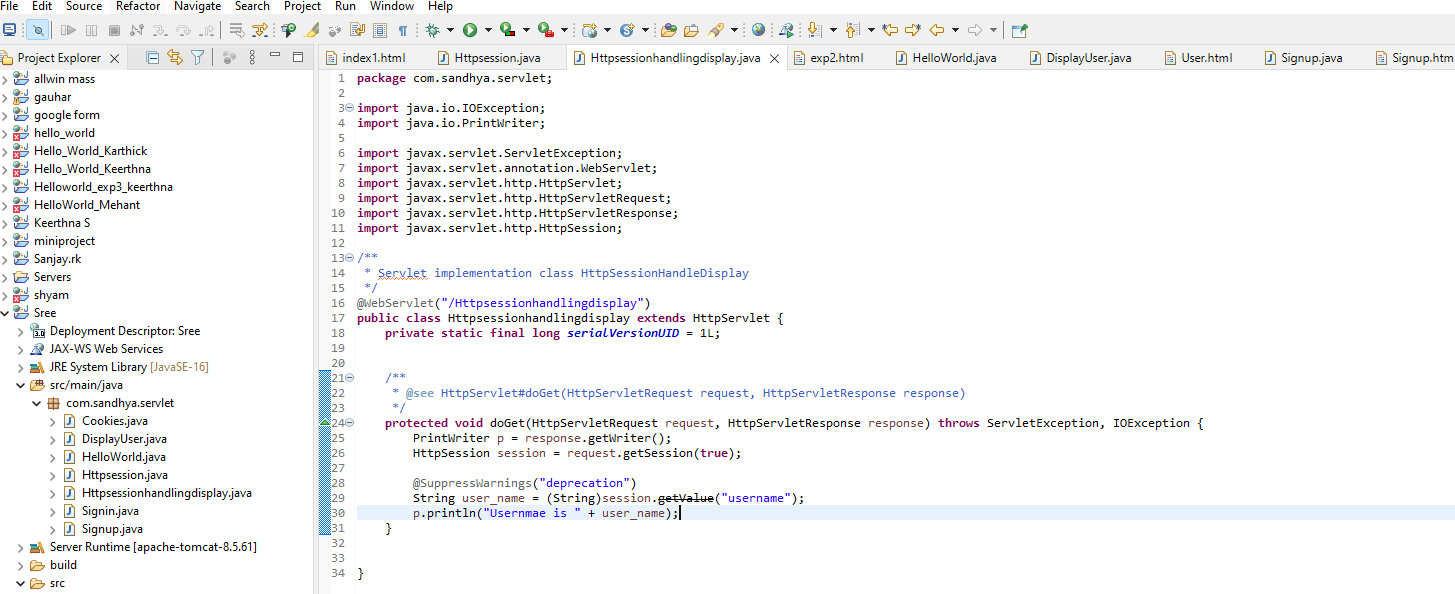
@SuppressWarnings("deprecation")

String user\_name = (String)session.~~getValue~~("username");

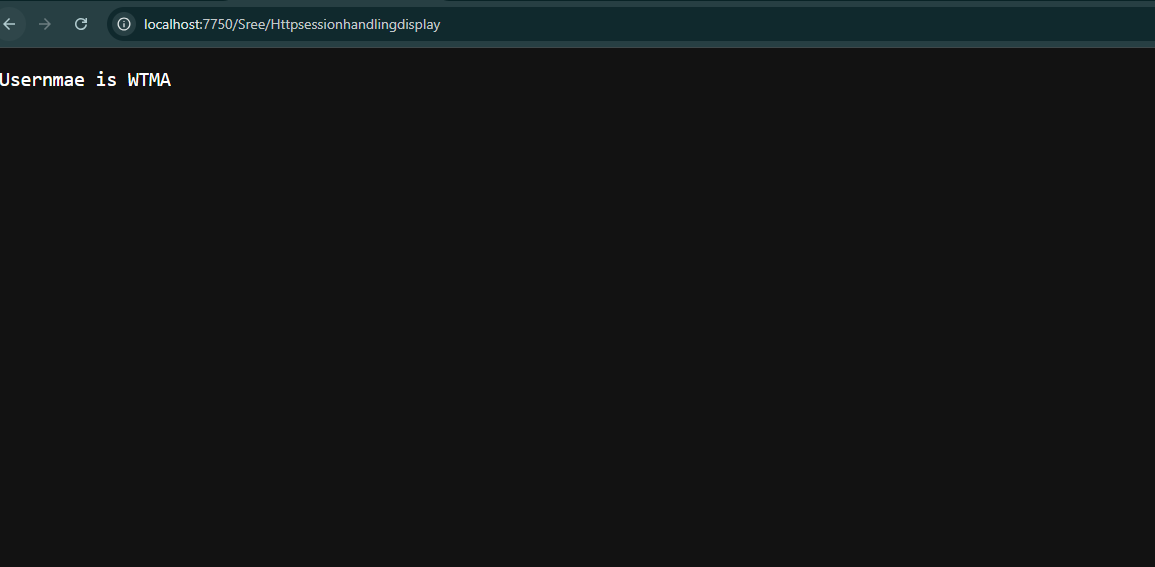
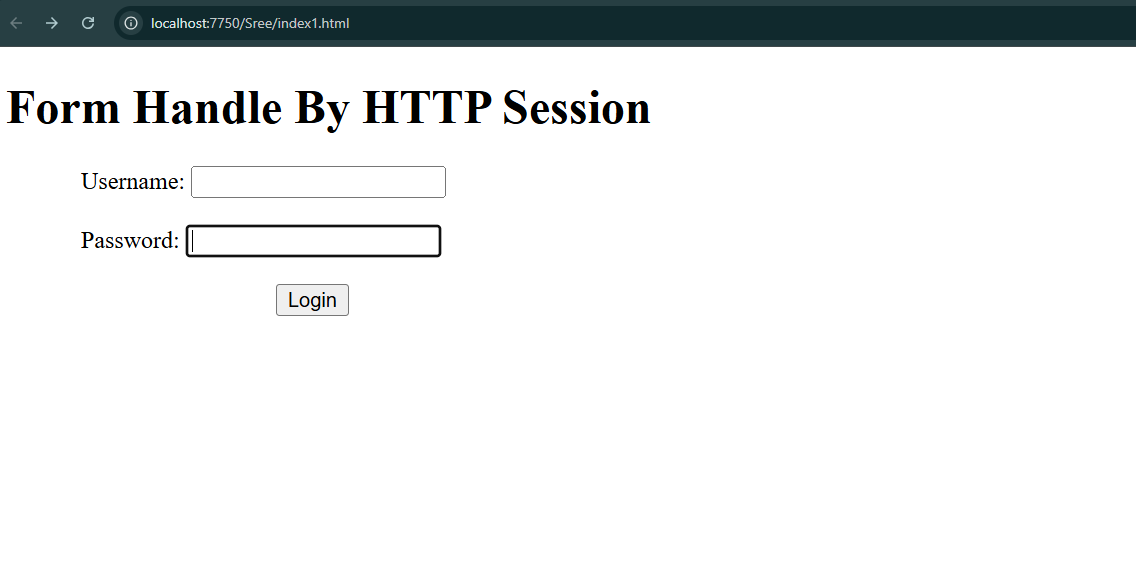
p.println("Usernmae is " + user\_name);

}

}



OUTPUT:



EXP 7

PROGRAM:

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Cookies</title>

</head>

<body>

<form method = *"post"* >

<p>

<label>Username: </label>

<input type=*"text"* name=*"username"*>

</p>

<p>

<label> password: </label>

<input type=*"password"* name = *"password"*>

</p>

<button type=*"submit"*> Submit </button>

</form>

<%

// Request form method == Post

**if** ("POST".equals(request.getMethod())) {

// Get submitted preferences

String user = request.getParameter("username");

String pass = request.getParameter("password");

**if**(user.equals("admin") && pass.equals("admin123") ){

Cookie username = **new** Cookie("username", user);

username.setMaxAge(60\*60);

username.setPath("/");

response.addCookie(username);

response.sendRedirect("getcookie.jsp");

}

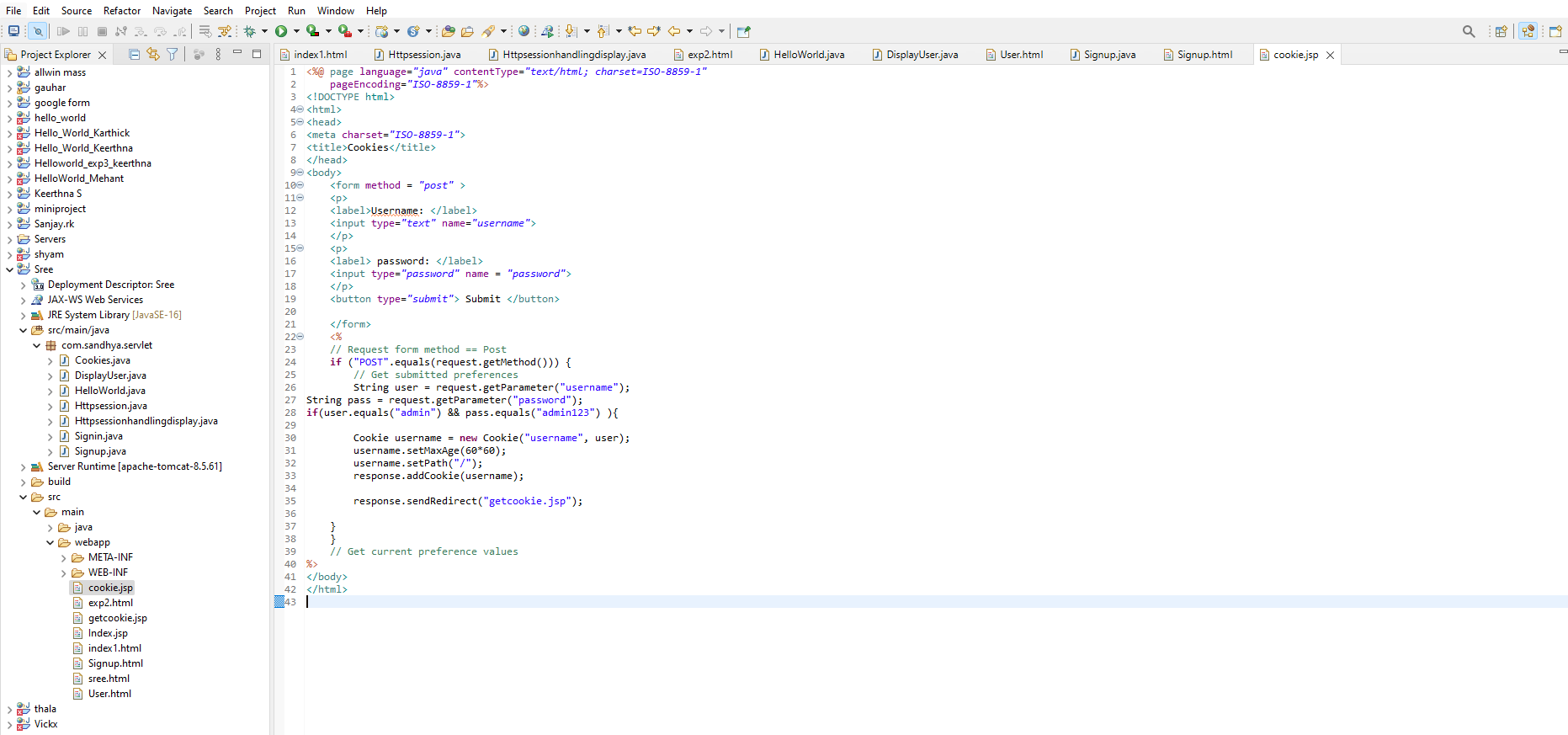
}

// Get current preference values

%>

</body>

</html>



<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Get Cookie</title>

</head>

<body>

<%

Cookie[] cookies = request.getCookies();

String cookieName = "username";

**if** (cookies != **null**) {

**for** (Cookie cookie : cookies) {

**if** (cookieName.equals(cookie.getName())) {

System.out.println("username "+cookie.getName());

out.println(cookie.getValue());

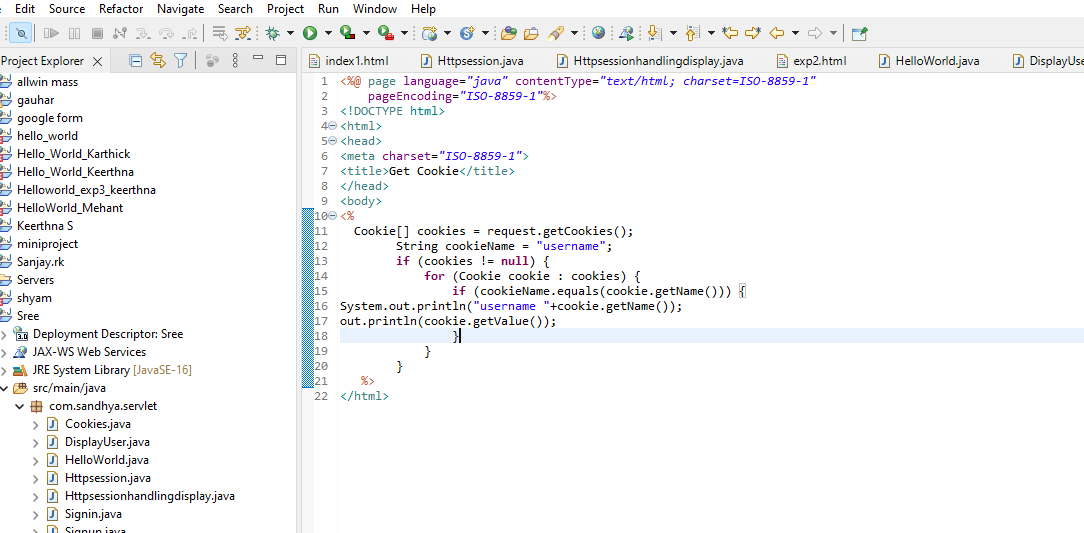
}

}

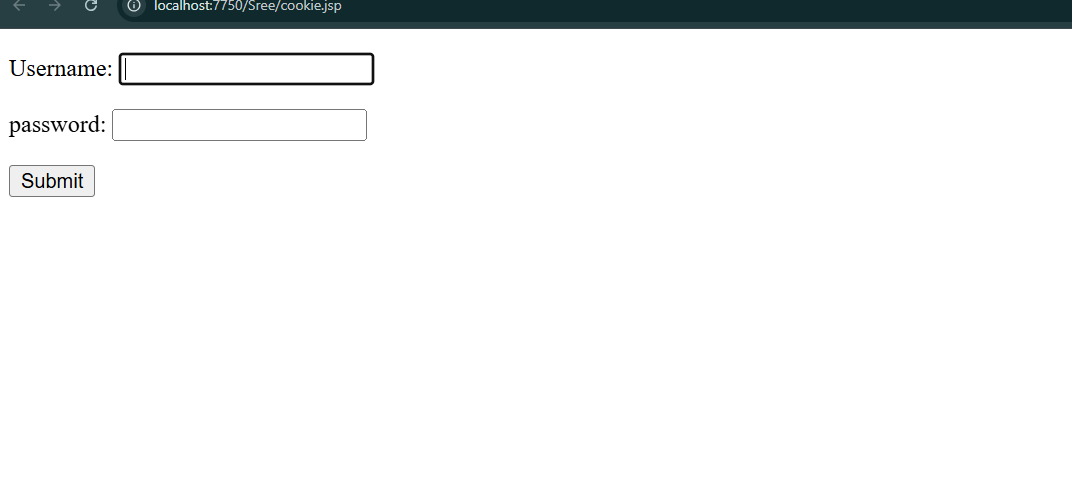
}

%>

</html>



OUTPUT:



EXP 7

PROGRAM:

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Cookies</title>

</head>

<body>

<form method = *"post"* >

<p>

<label>Username: </label>

<input type=*"text"* name=*"username"*>

</p>

<p>

<label> password: </label>

<input type=*"password"* name = *"password"*>

</p>

<button type=*"submit"*> Submit </button>

</form>

<%

// Request form method == Post

**if** ("POST".equals(request.getMethod())) {

// Get submitted preferences

String user = request.getParameter("username");

String pass = request.getParameter("password");

**if**(user.equals("admin") && pass.equals("admin123") ){

Cookie username = **new** Cookie("username", user);

username.setMaxAge(60\*60);

username.setPath("/");

response.addCookie(username);

response.sendRedirect("getcookie.jsp");

}

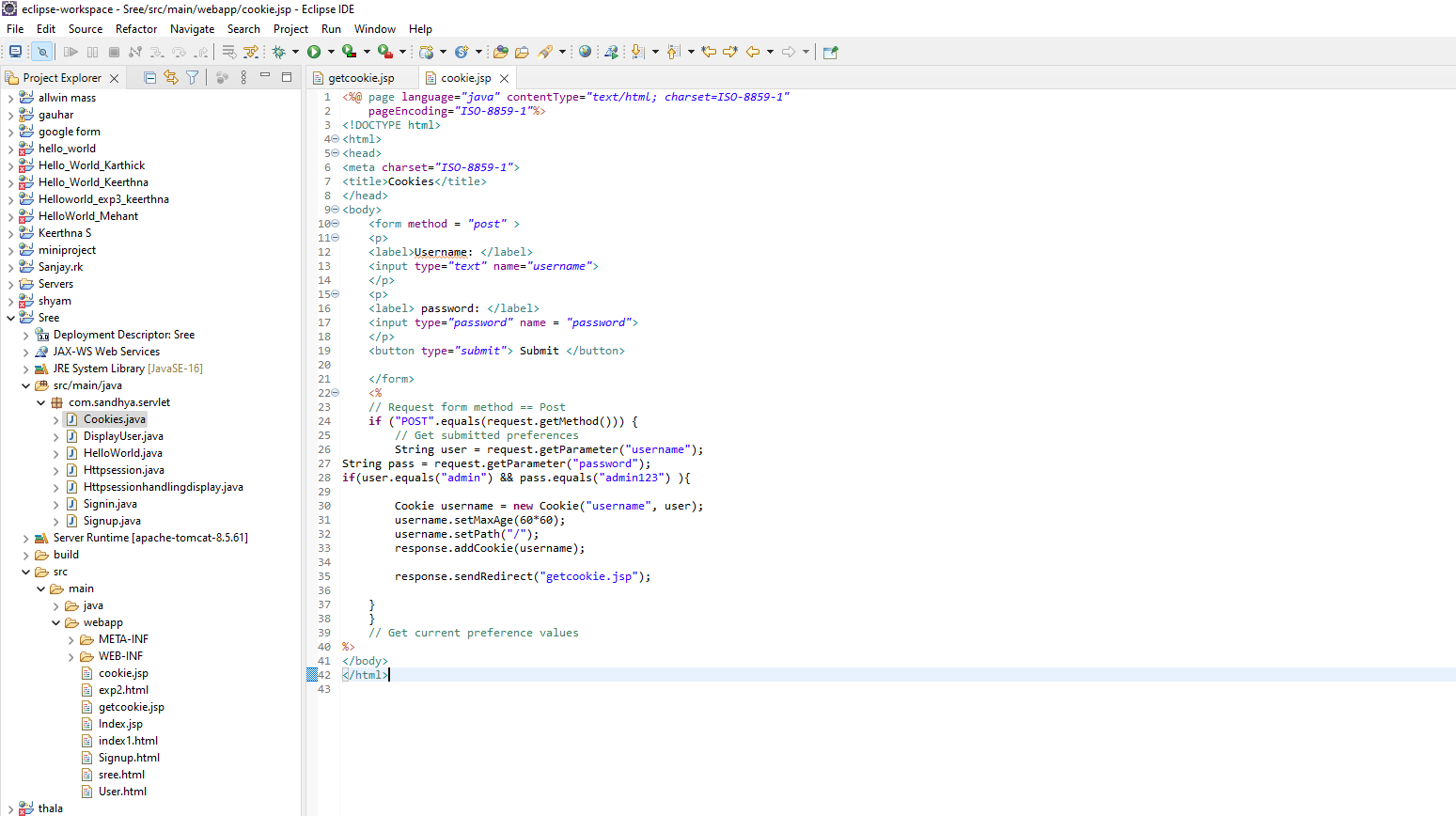
}

// Get current preference values

%>

</body>

</html>



<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Get Cookie</title>

</head>

<body>

<%

Cookie[] cookies = request.getCookies();

String cookieName = "username";

**if** (cookies != **null**) {

**for** (Cookie cookie : cookies) {

**if** (cookieName.equals(cookie.getName())) {

System.out.println("username "+cookie.getName());

out.println(cookie.getValue());

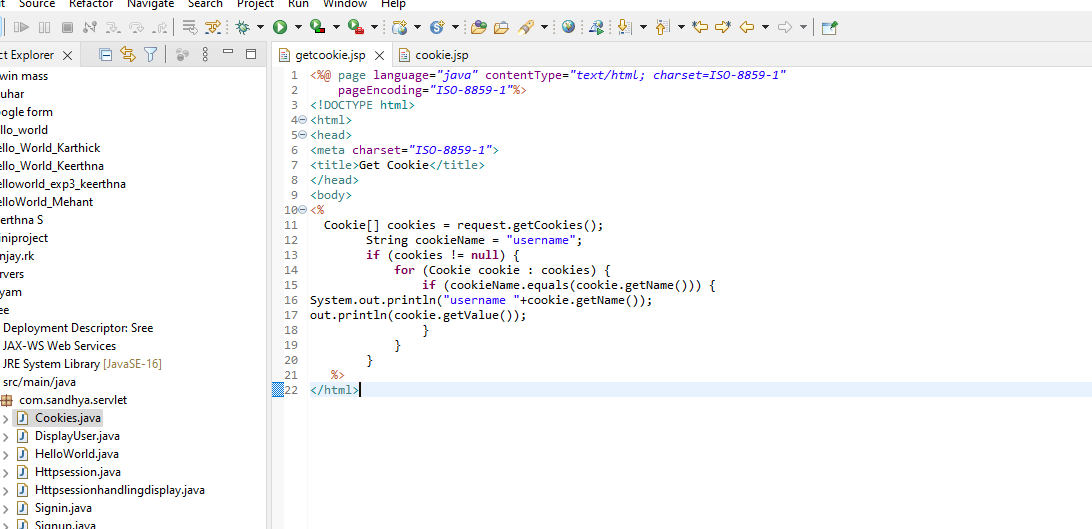
}

}

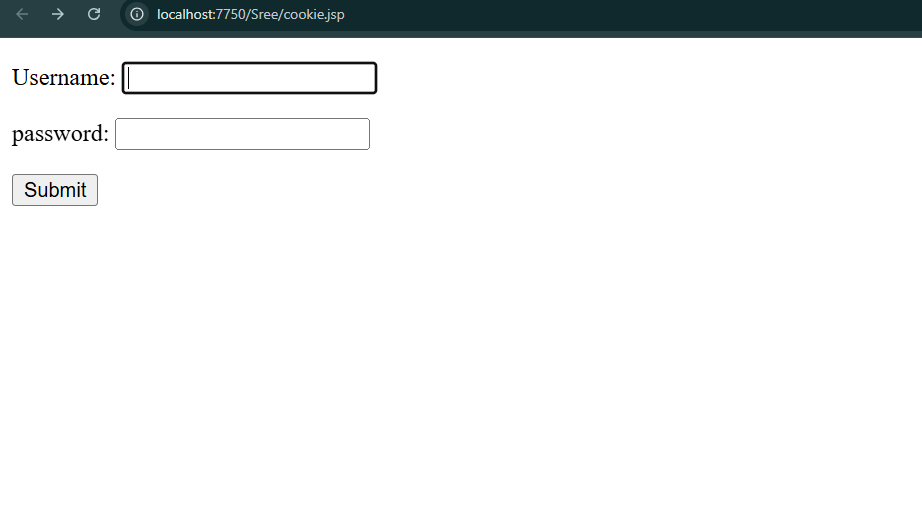
}

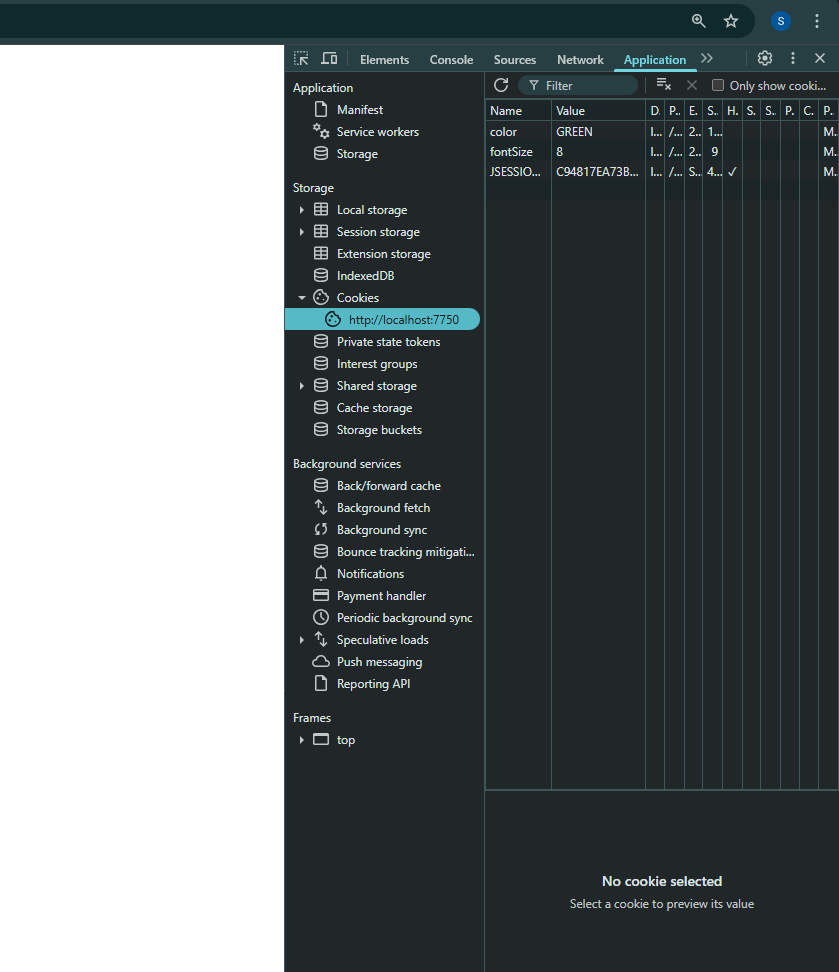
%>

</html>



OUTPUT:





EXP 8: Consider a Library Management System.

**AIM:**

Develop a JavaScript program that will validate the controls in the forms you have created for the application. State the assumptions you make (business logic you are taking into consideration).

**PROGRAM:**

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

<%@ page contentType=*"text/html;charset=UTF-8"* language=*"java"* %>

<html>

<head>

<title>Library Management - Add Book</title>

<style>

**body** {

font-family: *Arial, sans-serif*;

background-color: *#f3f3f3*;

margin: *20px*;

padding: *20px*;

}

**h2** {

color: *#333*;

}

**form** {

background-color: *#fff*;

padding: *20px*;

border-radius: *8px*;

box-shadow: *0 2px 5px rgba(0,0,0,0.1)*;

width: *400px*;

}

**input**[type="text"]**,**

**input**[type="number"]**,**

**select** {

width: *100%*;

padding: *8px*;

margin: *6px 0 12px 0*;

border: *1px solid #ccc*;

border-radius: *4px*;

}

**input**[type="submit"] {

background-color: *#4CAF50*;

color: *white*;

border: *none*;

padding: *10px 16px*;

cursor: *pointer*;

border-radius: *4px*;

}

**input**[type="submit"]*:hover* {

background-color: *#45a049*;

}

**p** {

font-size: *16px*;

}

**a** {

color: *#007BFF*;

text-decoration: *none*;

}

**a***:hover* {

text-decoration: *underline*;

}

</style>

<script>

**function** validateForm() {

**const** bookId = document.getElementById("bookId").value.trim();

**const** title = document.getElementById("title").value.trim();

**const** author = document.getElementById("author").value.trim();

**const** year = document.getElementById("year").value.trim();

**const** category = document.getElementById("category").value;

**const** copies = document.getElementById("copies").value.trim();

**const** currentYear = **new** Date().getFullYear();

**if** (!/^[a-zA-Z0-9]+$/.test(bookId)) {

alert("Book ID must be alphanumeric.");

**return** **false**;

}

**if** (!/^[A-Za-z ]+$/.test(title)) {

alert("Title must contain only letters.");

**return** **false**;

}

**if** (!/^[A-Za-z ]+$/.test(author)) {

alert("Author name must contain only letters.");

**return** **false**;

}

**if** (!/^\d{4}$/.test(year) || parseInt(year) > currentYear) {

alert("Year must be a valid 4-digit year.");

**return** **false**;

}

**if** (category === "") {

alert("Please select a category.");

**return** **false**;

}

**if** (isNaN(copies) || parseInt(copies) <= 0) {

alert("Copies must be a positive number.");

**return** **false**;

}

**return** **true**;

}

</script>

</head>

<body>

<h2>Add Book to Library</h2>

<form method=*"post"* onsubmit="return validateForm()">

Book ID: <input type=*"text"* name=*"bookId"* id=*"bookId"*/><br/>

Title: <input type=*"text"* name=*"title"* id=*"title"*/><br/>

Author: <input type=*"text"* name=*"author"* id=*"author"*/><br/>

Year: <input type=*"text"* name=*"year"* id=*"year"*/><br/>

Category:

<select name=*"category"* id=*"category"*>

<option value=*""*>--Select--</option>

<option value=*"Science"*>Science</option>

<option value=*"Fiction"*>Fiction</option>

<option value=*"History"*>History</option>

</select><br/>

Copies: <input type=*"number"* name=*"copies"* id=*"copies"*/><br/><br/>

<input type=*"submit"* value=*"Add Book"*/>

<p>

<label>Book Details:-</label>

<a href=*"./Display\_books.jsp"*>Click Here</a>

</p>

</form>

<%

// JSP Database logic

// TODO:Change password before run the code

// TODO: CREATE THE TABLE IN MYSQL

/\*\*

CREATE TABLE books (

book\_id VARCHAR(20) PRIMARY KEY,

title VARCHAR(100),

author VARCHAR(100),

year INT,

category VARCHAR(50),

copies INT

);

\*\*/

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

**if** (bookId != **null**) {

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

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

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

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

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

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

**try** {

Class.forName("com.mysql.cj.jdbc.Driver");

Connection conn = DriverManager.getConnection(

"jdbc:mysql://localhost:3306/library\_management\_sandhya", "root", "");

PreparedStatement ps = conn.prepareStatement(

"INSERT INTO books (book\_id, title, author, year, category, copies) VALUES (?, ?, ?, ?, ?, ?)");

ps.setString(1, bookId);

ps.setString(2, title);

ps.setString(3, author);

ps.setInt(4, Integer.parseInt(year));

ps.setString(5, category);

ps.setInt(6, Integer.parseInt(copies));

**int** result = ps.executeUpdate();

**if** (result > 0) {

%>

<script>alert("Book Added Successfully!!")</script>

<%

} **else** {

%>

<script>alert("Failed to add book!!")</script>

<%

out.println("<p style='color:red;'>Failed to add book.</p>");

}

ps.close();

conn.close();

} **catch** (Exception e) {

out.println("<p style='color:red;'>Error: " + e.getMessage() + "</p>");

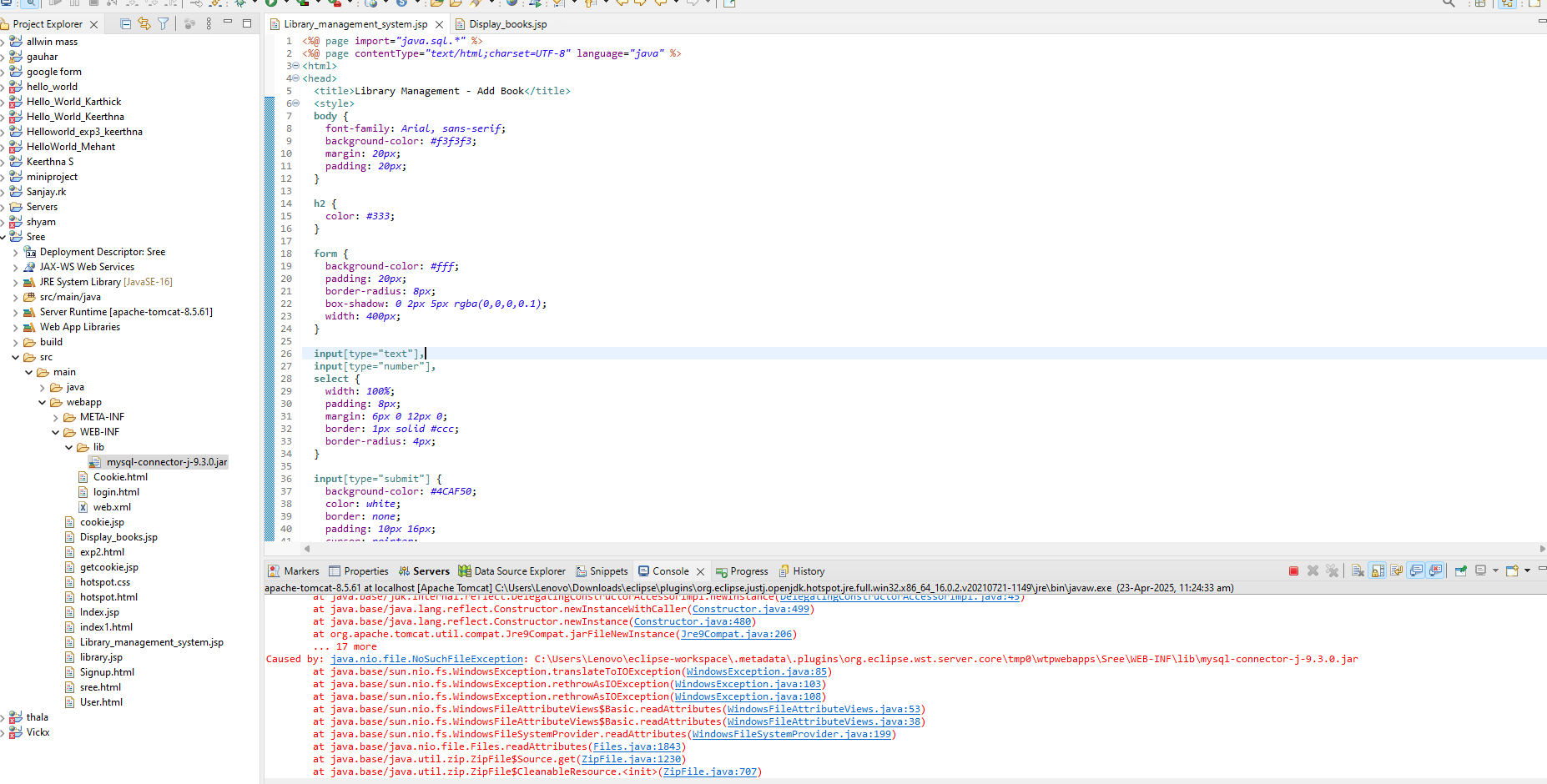
}

}

%>

</body>

</html>



DISPLAY\_BOOKS:

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

<%@ page contentType=*"text/html;charset=UTF-8"* language=*"java"* %>

<html>

<head>

<title>Library Books List</title>

<style>

**table** {

border-collapse: *collapse*;

width: *90%*;

margin: *20px auto*;

}

**th,** **td** {

border: *1px solid #333*;

padding: *10px*;

text-align: *center*;

}

**th** {

background-color: *#f2f2f2*;

}

**h2** {

text-align: *center*;

}

</style>

</head>

<body>

<h2>All Books in Library</h2>

<%

**try** {

Class.forName("com.mysql.cj.jdbc.Driver");

Connection conn = DriverManager.getConnection(

"jdbc:mysql://localhost:3306/library\_management\_sandhya", "root", "");

Statement stmt = conn.createStatement();

ResultSet rs = stmt.executeQuery("SELECT \* FROM books");

out.println("<table>");

out.println("<tr><th>Book ID</th><th>Title</th><th>Author</th><th>Year</th><th>Category</th><th>Copies</th></tr>");

**while** (rs.next()) {

out.println("<tr>");

out.println("<td>" + rs.getString("book\_id") + "</td>");

out.println("<td>" + rs.getString("title") + "</td>");

out.println("<td>" + rs.getString("author") + "</td>");

out.println("<td>" + rs.getInt("year") + "</td>");

out.println("<td>" + rs.getString("category") + "</td>");

out.println("<td>" + rs.getInt("copies") + "</td>");

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

}

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

rs.close();

stmt.close();

conn.close();

} **catch** (Exception e) {

out.println("<p style='color:red;text-align:center;'>Error: " + e.getMessage() + "</p>");

}

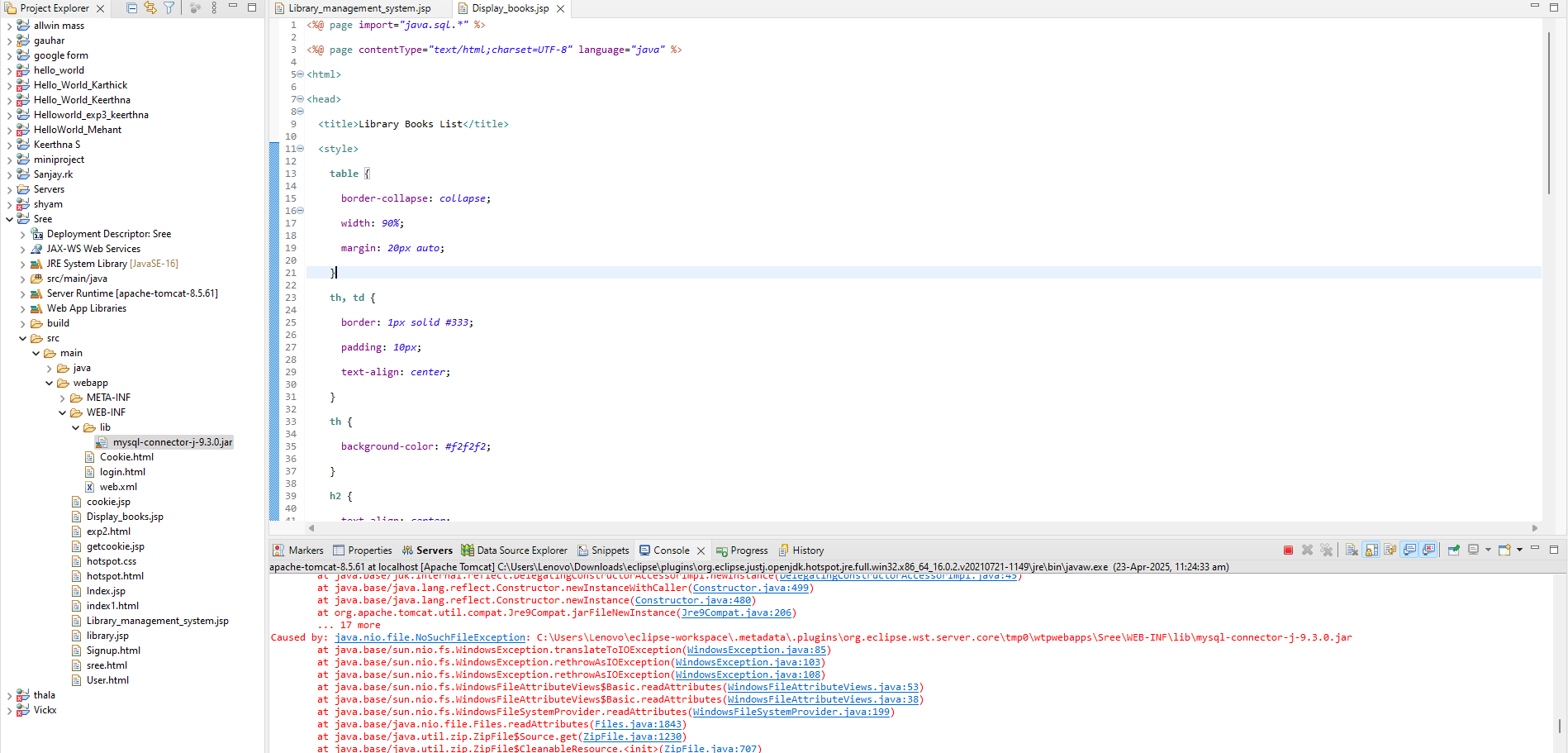
%>

</body>

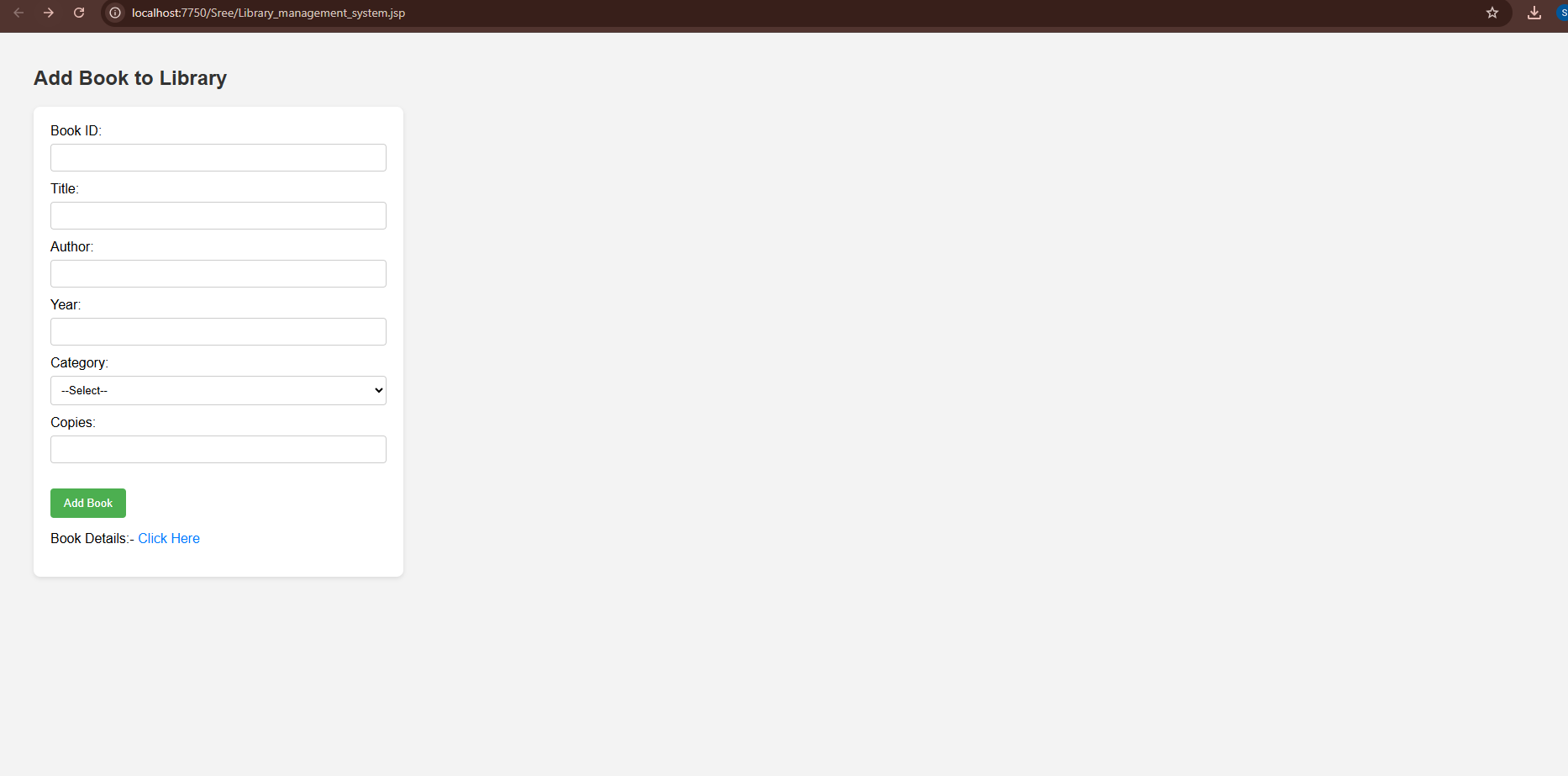
</html>

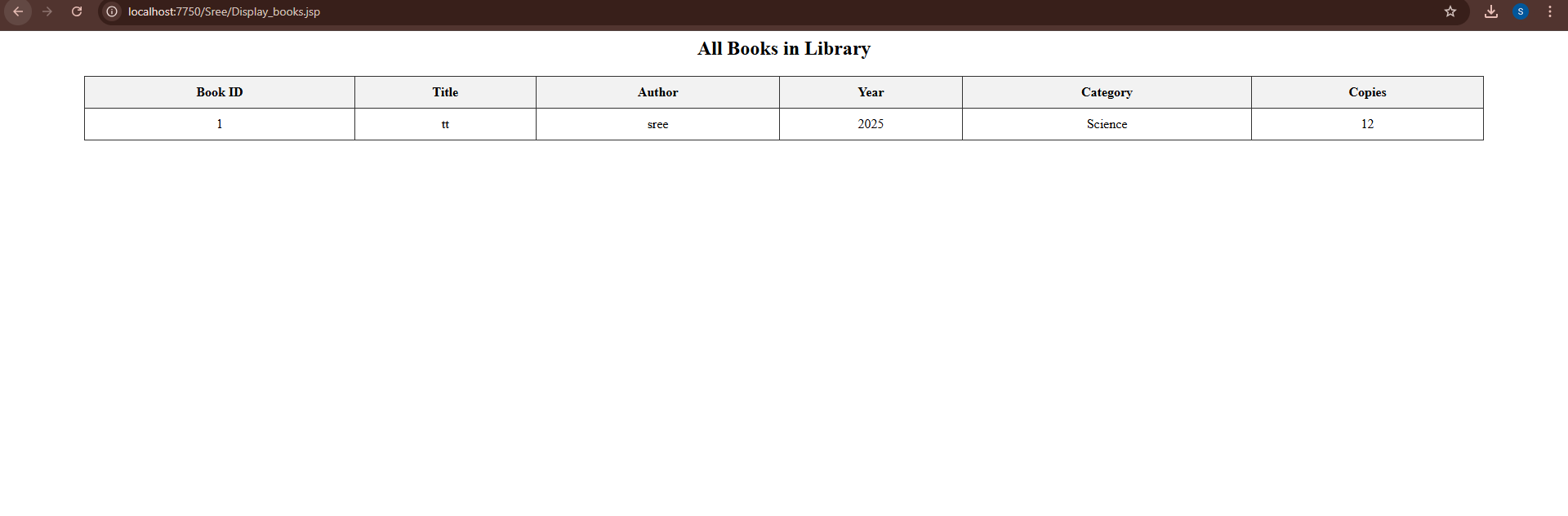
</body>

</html>



OUPUT:





RESULT:

Thus the library management system executed succefully.