# Program – 17

Aim: Write a Java program to show user validation using servlet.

Code:

/usr/share/tomcat8/webapps/MyServletProject/WEB-INF/classes/UserValidationServlet.java

```java
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;

@WebServlet("/UserValidationServlet")
public class UserValidationServlet extends HttpServlet {
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();

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

        // Hardcoded validation (replace with database validation in real applications)
        if ("admin".equals(username) && "1234".equals(password)) {
            out.println("<h3>Login Successful!</h3>");
            out.println("<p>Welcome, " + username + "!</p>");
            out.println("<h3>Shubhabas Patra, 13576803122</h3>");
        } else {
            out.println("<h3>Invalid Credentials</h3>");
            out.println("<a href='index.html'>Try Again</a>");
            out.println("<h3>Shubhabas Patra, 13576803122</h3>");
        }

        out.close();
    }
}
```
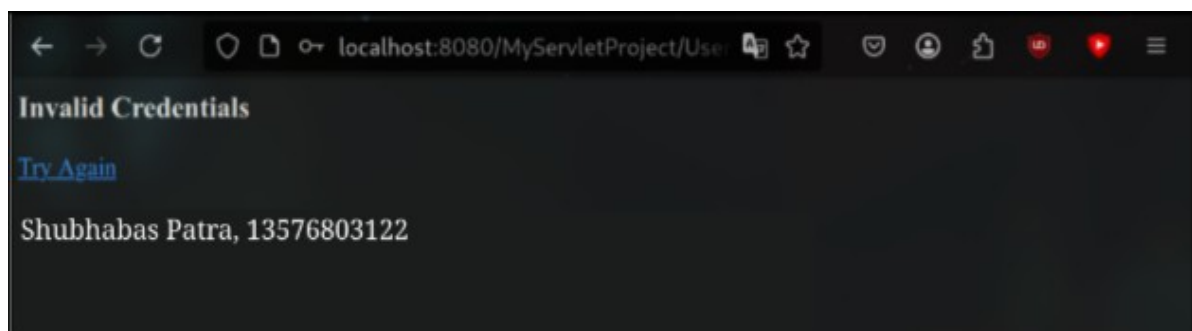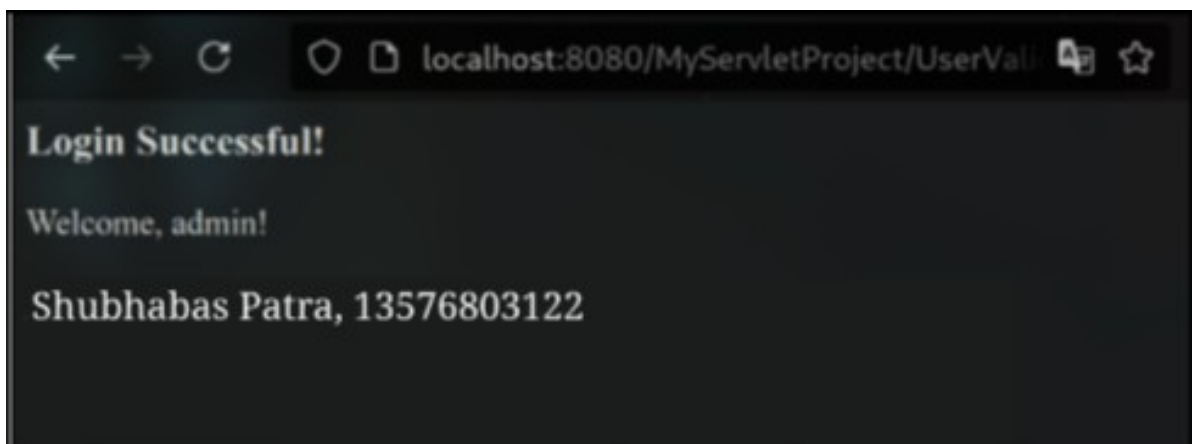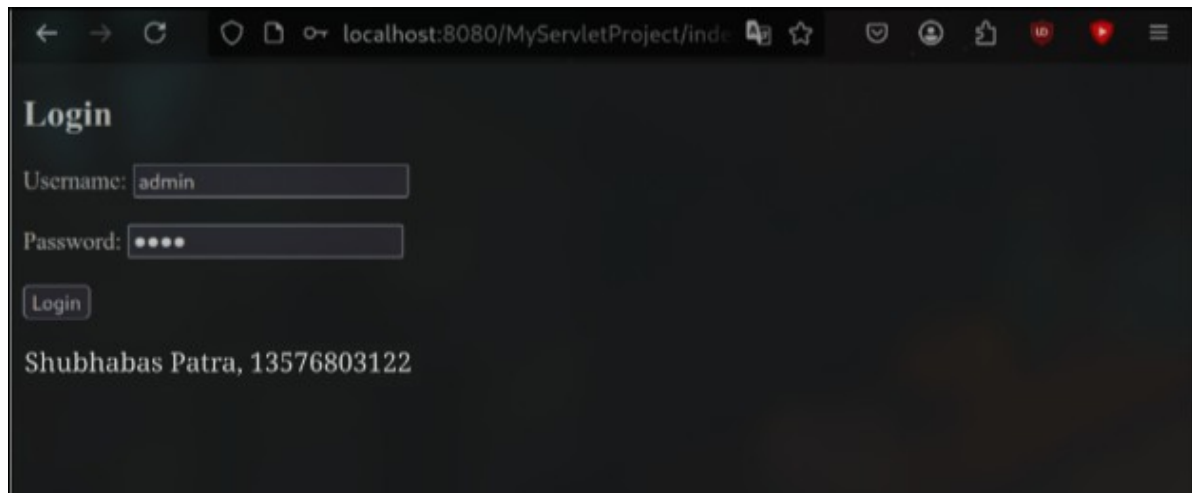
/usr/share/tomcat8/webapps/MyServletProject/index.html

```html
<!DOCTYPE html>
<html>
<head>
    <title>Login Page</title>
</head>
<body>
    <h2>Login</h2>
    <form action="UserValidationServlet" method="post">
        <label>Username:</label>
```

```
        <input type="text" name="username" required><br><br>
        <label>Password:</label>
        <input type="password" name="password" required><br><br>
        <input type="submit" value="Login">
    </form>
<h3>Shubhabas Patra, 13576803122</h3>
</body>
</html>
```

Output:

# Program – 18

Aim:  Write a Java program to set cookie Information using servlet.

Code:

/usr/share/tomcat8/webapps/CookieExample/WEB-INF/classes/SetCookieServlet.java

```java
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

@WebServlet("/SetCookieServlet")
public class SetCookieServlet extends HttpServlet {
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
      response.setContentType("text/html");
      PrintWriter out = response.getWriter();

      Cookie userCookie = new Cookie("username", "AdminUser");
      userCookie.setMaxAge(60 * 60 * 24); // 1 day

      response.addCookie(userCookie);

      out.println("<h3>Cookie 'username' has been set!</h3>");
      out.println("<a href='GetCookieServlet'>Click here to retrieve the cookie</a>");
      out.println("<h3>Shubhabas Patra, 13576803122</h3>");
    }
}
```

/usr/share/tomcat8/webapps/CookieExample/WEB-INF/classes/GetCookieServlet.java

```java
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

@WebServlet("/GetCookieServlet")
public class GetCookieServlet extends HttpServlet {
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
      response.setContentType("text/html");
      PrintWriter out = response.getWriter();
```
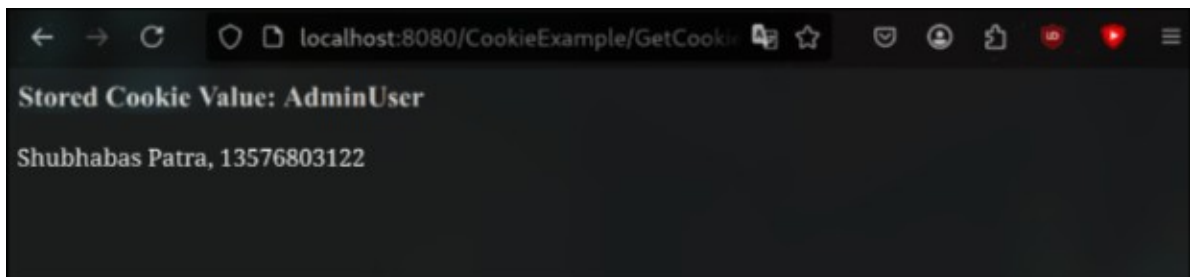
```
        Cookie[] cookies = request.getCookies();
        if (cookies != null) {
            for (Cookie cookie : cookies) {
                if (cookie.getName().equals("username")) {
                    out.println("<h3>Stored Cookie Value: " + cookie.getValue() + "</h3>");
                    out.println("<h3>Shubhabas Patra, 13576803122</h3>");
                }
            }
        } else {
            out.println("<h3>No cookies found!</h3>");
        }
    }
}
```

Output:

# Program – 19

Aim: Write a Java program to insert data into a table using JSP.

Code:

//index.jsp

```
<html>
<head><title>User Form</title></head>
<body>
<h2>User Registration Form</h2>
<form action="submit.jsp" method="post">
   Name: <input type="text" name="name" required><br><br>
   Email: <input type="email" name="email" required><br><br>
   <input type="submit" value="Submit">
</form>
<h3>Shubhabas Patra, 13576803122</h3>
</body>
</html>
```
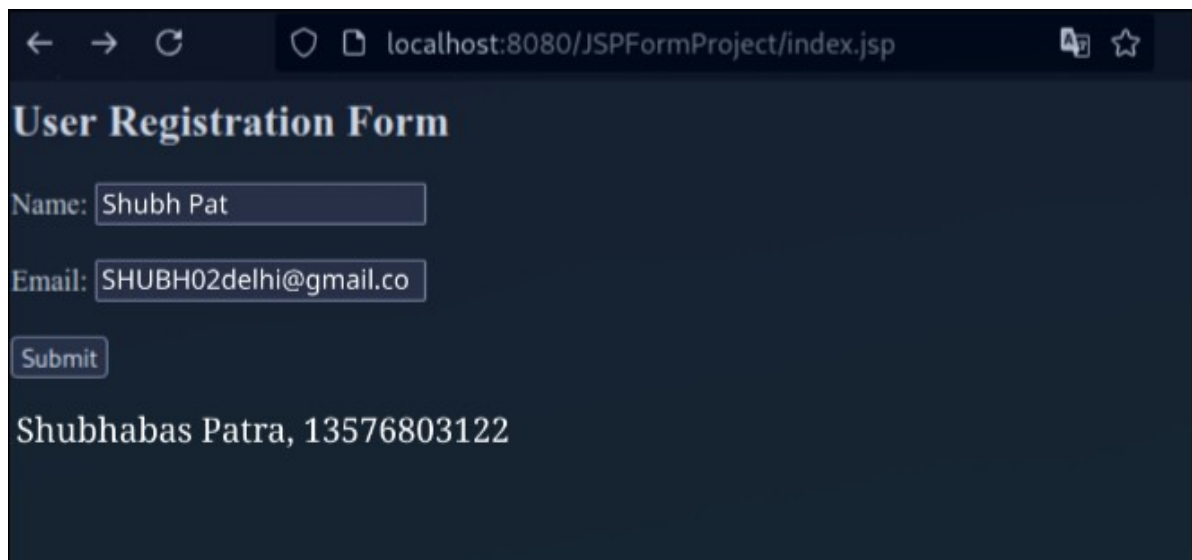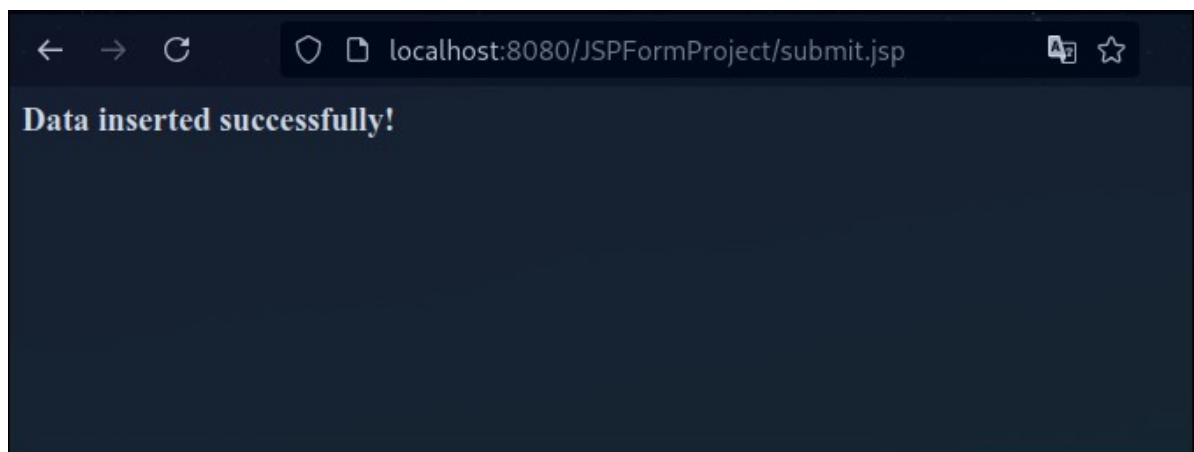
//submit.jsp

```
<%@ page import="java.sql.*" %>
<%
   String name = request.getParameter("name");
   String email = request.getParameter("email");

   // Simple validation
   if (name == null || name.trim().isEmpty() || email == null || !email.contains("@")) {
%>
      <h3>Invalid data. Please go back and try again.</h3>
<h3>Shubhabas Patra, 13576803122</h3>
<%
   } else {
     try {
        Class.forName("com.mysql.cj.jdbc.Driver");
        Connection con = DriverManager.getConnection(
           "jdbc:mysql://localhost:3306/jsp_db", "root", "your_password");

        PreparedStatement ps = con.prepareStatement("INSERT INTO users(name, email)
VALUES (?, ?)");
        ps.setString(1, name);
        ps.setString(2, email);
        int i = ps.executeUpdate();

        if(i > 0){
%>
           <h3>Data inserted successfully!</h3>
<h3>Shubhabas Patra, 13576803122</h3>
<%
        } else {
```

```
%>
        <h3>Insertion failed.</h3>
<%
    }

    con.close();
} catch(Exception e){
%>
        <h3>Error: <%= e.getMessage() %></h3>
<%
    }
 }
%>
```

Output:



Shubhabas Patra, 13576803122

```
MariaDB [jsp_db]> SELECT * FROM users;
+----+-----------+-------------------------+
| id | name      | email                   |
+----+-----------+-------------------------+
|  1 | Shubh Pat | SHUBH02delhi@gmail.com  |
+----+-----------+-------------------------+
1 row in set (0.000 sec)

MariaDB [jsp_db]> Shubhabas Patra, 13576803122
```

# Program – 20

Aim:  Write JSP program to implement form data validation. complete steps in arch linux

Code:

//form.jsp

```
<%@ page language="java" contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
    <title>Form Validation</title>
</head>
<body>
    <h2>User Form</h2>
    <form action="submit.jsp" method="post">
        Name: <input type="text" name="name" required><br><br>
        Email: <input type="email" name="email" required><br><br>
        <input type="submit" value="Submit">
    </form>
<h3>Shubhabas Patra, 13576803122</h3>
</body>
</html>
```
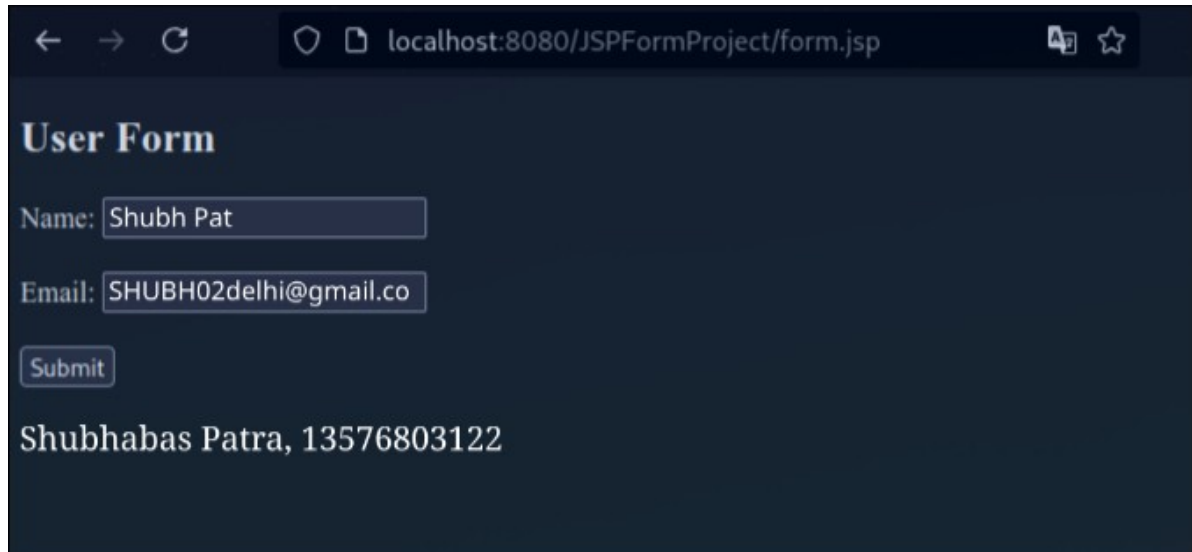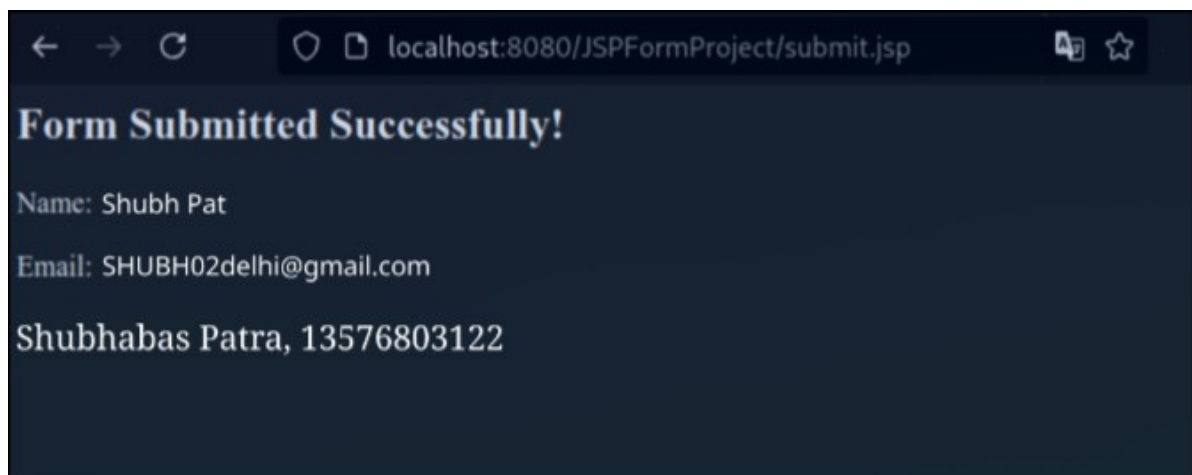
//submit.jsp

```
<%@ page language="java" contentType="text/html; charset=UTF-8"%>
<%
    String name = request.getParameter("name");
    String email = request.getParameter("email");
    boolean valid = true;

    if(name == null || name.trim().equals("")) {
        out.println("Name is required.<br>");
        valid = false;
    }

    if(email == null || !email.matches("^[\\w.-]+@[\\w.-]+\\.[a-zA-Z]{2,6}$")) {
        out.println("Invalid email format.<br>");
        valid = false;
    }

    if(valid) {
%>
        <h2>Form Submitted Successfully!</h2>
        <p>Name: <%= name %></p>
        <p>Email: <%= email %></p>
<h3>Shubhabas Patra, 13576803122</h3>
<%
    }
%>
```

//WEB-INF/web.xml

```xml
<web-app>
   <welcome-file-list>
      <welcome-file>form.jsp</welcome-file>
   </welcome-file-list>
</web-app>
```

Output: