EXP.NO: 4	Create a web form that accepts a user's name and age. Write a Servlet to process the form data and display it back on the browser.
DATE:26/02/2025	

AIM:

To create a simple web application that includes a form to accept a user's name and age, and then use a Servlet to process the submitted data. The Servlet will retrieve the form data, process it, and display the values back on the browser.

ALGORITHM:

1. Input:

- The user fills out a web form with their **name** and **age** and submits it.

2. Form Handling and Servlet Processing:

1. **Create the Web Form:**
    - Create an HTML form with **two input fields**: one for the user's **name** and one for the user's **age**.
    - Add a **submit button** to the form.
    - Set the form's action attribute to the URL of the **Servlet** and the method to POST (or GET).
2. **Create the Servlet Class:**
    - Write a Servlet that processes the **form data** submitted by the user.
    - The Servlet will override the doPost() (or doGet() depending on the form method) to handle form submissions.
    - The Servlet will **retrieve the name and age** parameters from the request object using request.getParameter("name") and request.getParameter("age").
3. **Process the Data in the Servlet:**
    - Extract the name and age values submitted from the form.
    - **Validate the input** (e.g., check if the age is a valid number).

- Prepare a **response** that will display the user's **name** and **age** back on the browser.

4. **Send Response to the Browser:**
   - The Servlet will send a **response** to the browser containing a message like:
     - "Hello, [name]! You are [age] years old."
   - The response will be displayed to the user in the browser.
5. **Deploy the Servlet:**
   - Compile the Servlet and deploy it to a **Servlet container** (like **Apache Tomcat**).
   - Ensure the web.xml file or Servlet annotations are used to map the Servlet to the URL defined in the form's action attribute.
6. **Test the Application:**
   - Open the web browser, fill in the form with the name and age, and submit it.
   - The Servlet will process the data and display the message back to the user in the browser.

Program :

Index.html :

```
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>User Form</title>
<style>
body {
  font-family: Arial;
```

```
    background: linear-gradient(to right, #4facfe, #00f2fe);
    text-align: center;
    padding-top: 100px;
}
form {
    background: white;
    padding: 30px;
    border-radius: 10px;
    display: inline-block;
}
input {
    margin: 10px;
    padding: 8px;
}
button {
    background: #4facfe;
    color: white;
    padding: 8px 15px;
    border: none;
}
</style>
</head>
<body>
```

<h2>Enter Your Details</h2>

<form action="UserServlet" method="post">
Name: <input type="text" name="username">
Age: <input type="number" name="age">
<button type="submit">Submit</button>
</form>

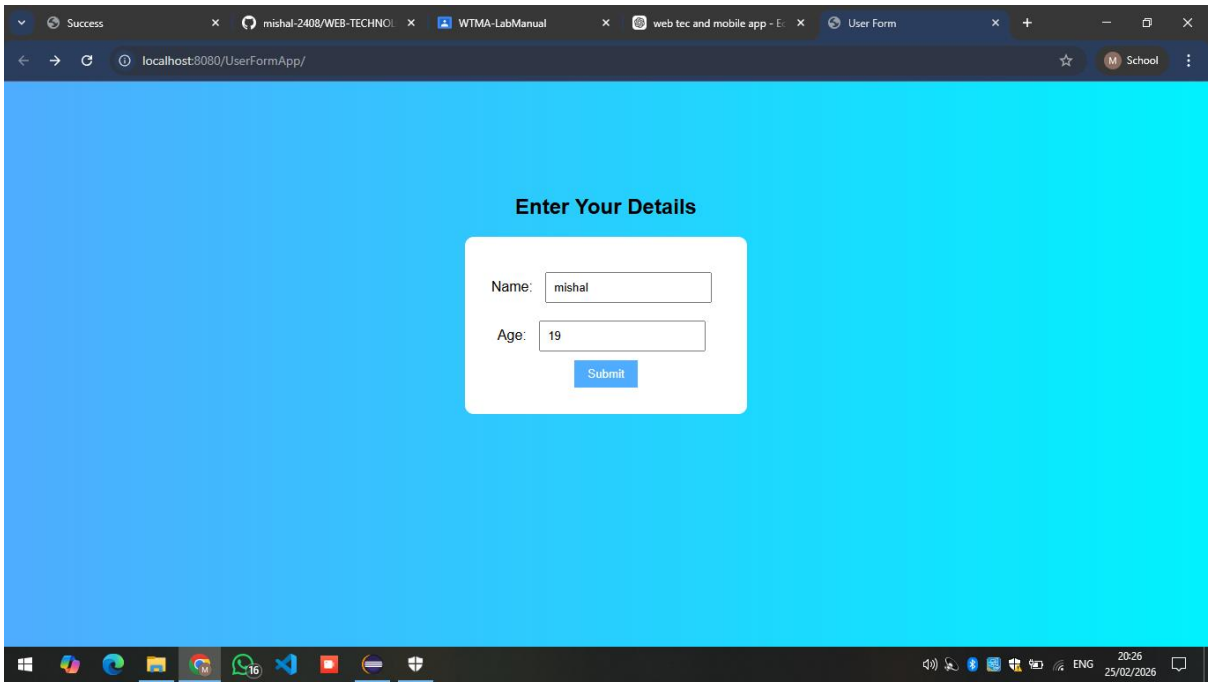
</body>
</html>

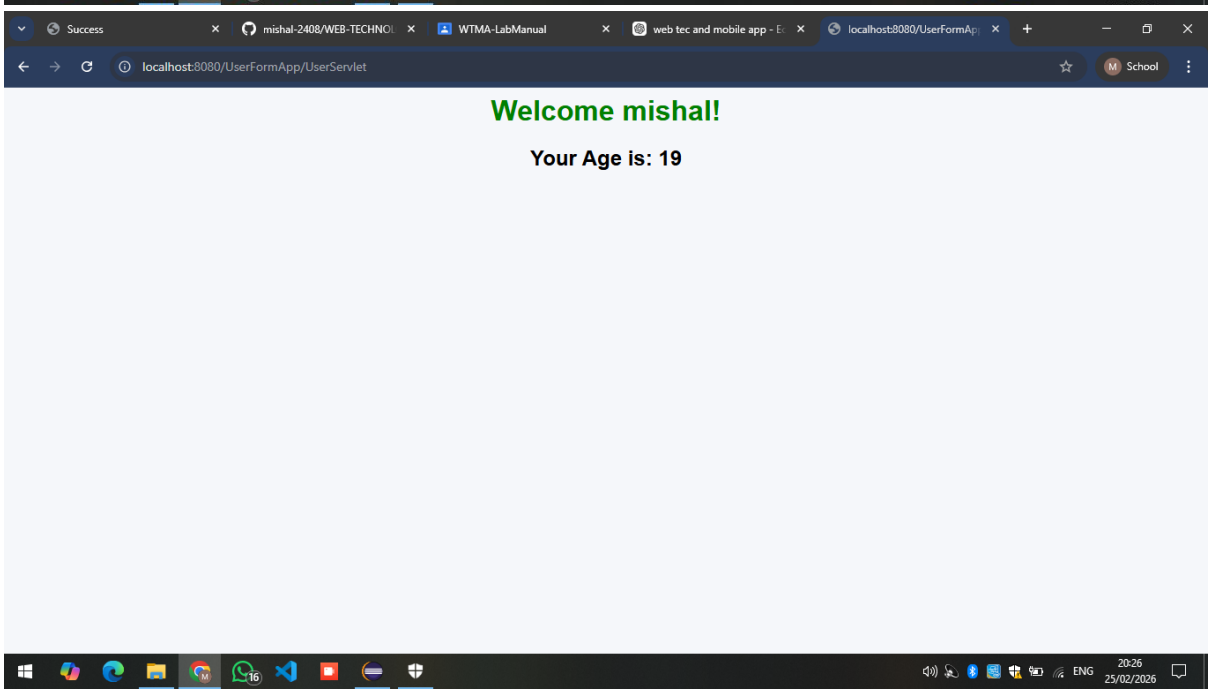
Servlet program:

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

@WebServlet("/UserServlet")
public class UserServlet extends HttpServlet {

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

      String name = request.getParameter("username");
```

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

        response.setContentType("text/html");
        PrintWriter out = response.getWriter();

        out.println("<html><body style='font-family:Arial;text-
align:center;background:#f5f7fa;'>");
        out.println("<h1 style='color:green;'>Welcome " + name + "!</h1>");
        out.println("<h2>Your Age is: " + age + "</h2>");
        out.println("</body></html>");
    }
}
```

Output:


Success
mishal-2408/WEB-TECHNOL
WTMA-LabManual
web tec and mobile app - E
User Form
localhost:8080/UserFormApp/
School
Enter Your Details
Name:
mishal
Age:
19
Submit
ENG
20:26
25/02/2026


Success
mishal-2408/WEB-TECHNOL
WTMA-LabManual
web tec and mobile app - E
localhost:8080/UserFormAp
localhost:8080/UserFormApp/UserServlet
School
Welcome mishal!
Your Age is: 19
ENG
20:26
25/02/2026

RESULT:

A Servlet is created to process the HTML form data and display it back on the browser.