

<b>EXP.NO: 5</b>	<b>Write a Servlet to demonstrate the difference between HTTP GET and POST methods by creating a form and handling requests accordingly.</b>
<b>DATE:05/03/2025</b>	

## **AIM:**

To demonstrate the difference between the HTTP GET and POST methods by creating a form in an HTML page and handling the form submissions using two different HTTP methods in a Java Servlet.

## **ALGORITHM:**

### **1. Input:**

- The user fills out a web form with their **name** and **email**.
- The form will use both **GET** and **POST** methods for data submission.

### **2. Steps for Creating and Handling the HTTP GET and POST Requests:**

#### **1. Create an HTML Form:**

- Design an HTML form with two input fields: one for the **name** and one for the **email**.
- Create two buttons to allow the user to submit the form using **GET** or **POST** methods.
- Use the action attribute to define the **Servlet URL** and specify the form method (either GET or POST).

#### **2. Create the Servlet to Handle GET and POST Requests:**

- Write a Java Servlet class that will handle **both GET and POST requests**.
- The servlet will have two methods:
  - doGet() to handle the GET requests.
  - doPost() to handle the POST requests.
- In both methods, retrieve the form data using request.getParameter().
- In the doGet() method, process and display the data in the URL.

- In the doPost() method, process and display the data in the HTTP request body.

### 3. Handle GET Requests in the Servlet:

- In the doGet() method, use request.getParameter() to retrieve the name and email submitted via GET.
- Output the data as a response, including the **name** and **email** in the URL (visible to the user).

### 4. Handle POST Requests in the Servlet:

- In the doPost() method, use request.getParameter() to retrieve the name and email submitted via POST.
- Output the data as a response, displaying the **name** and **email** without exposing them in the URL (more secure).

### 5. Return the Output:

- The Servlet should return an HTML page displaying the **name** and **email** entered by the user.
- For the **GET method**, the output should be visible in the URL.
- For the **POST method**, the output should be visible in the response body, not the URL.

### 6. Deploy and Test the Servlet:

- Compile the Servlet class and deploy it to a **Servlet container** (like **Apache Tomcat**).
- Test the form using **GET** and **POST** methods to see the difference in data submission.

### 7. Observe and Compare GET and POST Results:

- Test the **GET method**: The form data is sent in the URL.
- Test the **POST method**: The form data is sent in the HTTP request body, not visible in the URL.

## Program :

### Index.html :

```
<form action="MethodServlet" method="get">  
    Enter Name: <input type="text" name="name">  
    <button type="submit">Send via GET</button>  
</form>
```

```
<br>
```

```
<form action="MethodServlet" method="post">  
    Enter Name: <input type="text" name="name">  
    <button type="submit">Send via POST</button>  
</form>
```

### Servlet program:

```
package com.get; // Δ keep your actual package name
```

```
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("/MethodServlet") // 🔥 VERY IMPORTANT

```
public class MethodServlet extends HttpServlet {
```

```
    protected void doGet(HttpServletRequest request, HttpServletResponse  
response)
```

```
        throws ServletException, IOException {
```

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

```
        response.setContentType("text/html");
```

```
        PrintWriter out = response.getWriter();
```

```
        out.println("<html><body                                style='text-align:center;font-  
family:Arial;background:#e3f2fd;'>");
```

```
        out.println("<h1 style='color:blue;'>GET Method Used</h1>");
```

```
        out.println("<h2>Hello " + name + "</h2>");
```

```
        out.println("</body></html>");
```

```
    }
```

```
    protected void doPost(HttpServletRequest request, HttpServletResponse  
response)
```

```
        throws ServletException, IOException {
```

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

```

response.setContentType("text/html");

PrintWriter out = response.getWriter();

out.println("<html><body                                style='text-align:center;font-
family:Arial;background:#ffeb3b;'>");

out.println("<h1 style='color:red;'>POST Method Used</h1>");

out.println("<h2>Hello " + name + "</h2>");

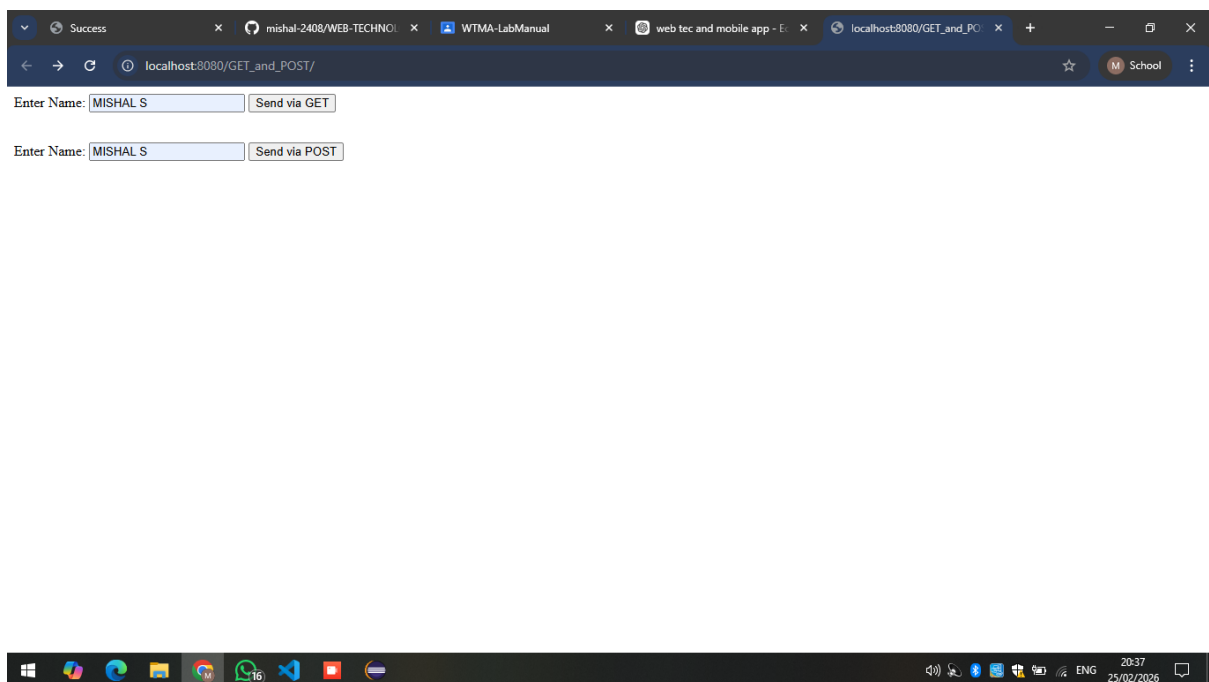
out.println("</body></html>");

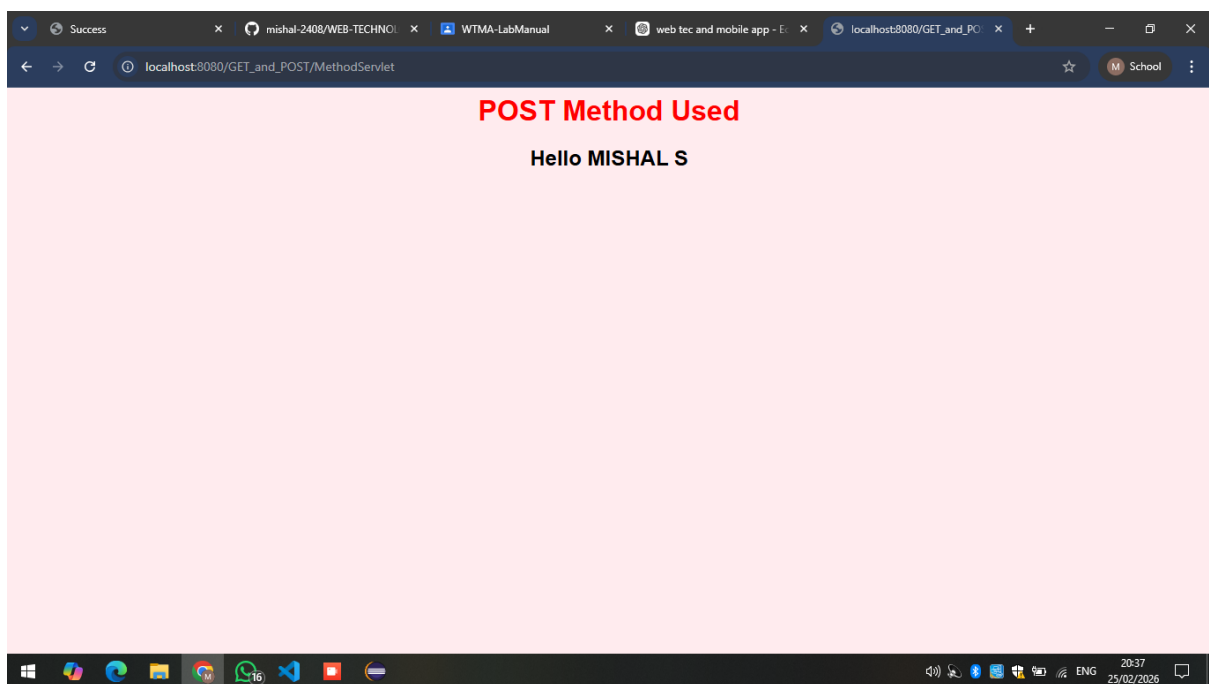
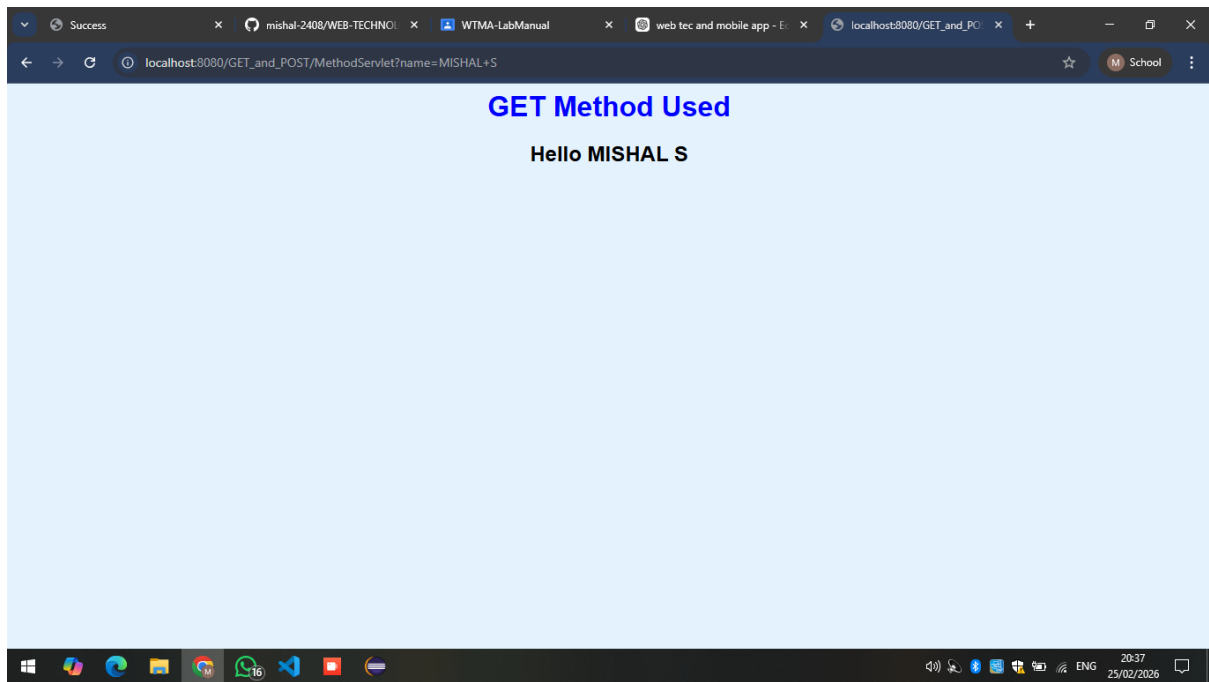
}

}

```

## Output:





**RESULT:**

A Servlet is created to demonstrate the difference between HTTP GET and POST methods by creating a form and handling requests accordingly.