

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

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>
```



```
<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; // ⚠ 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:#ffebee;'>");

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

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

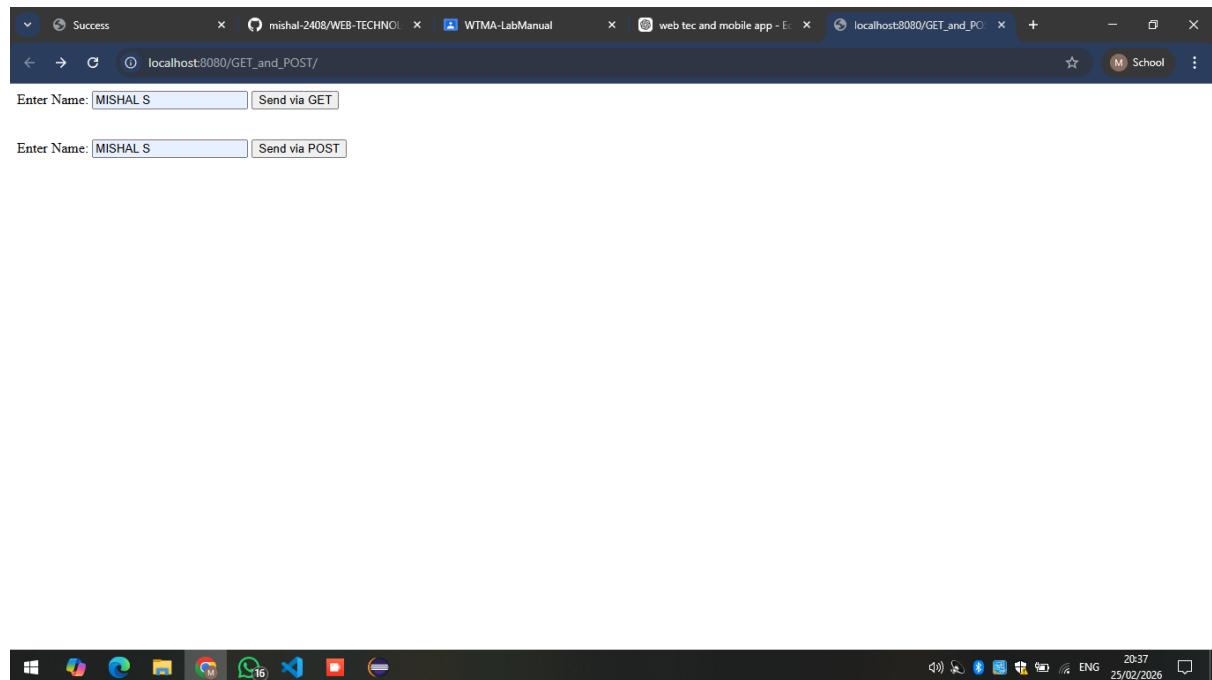
        out.println("</body></html>");

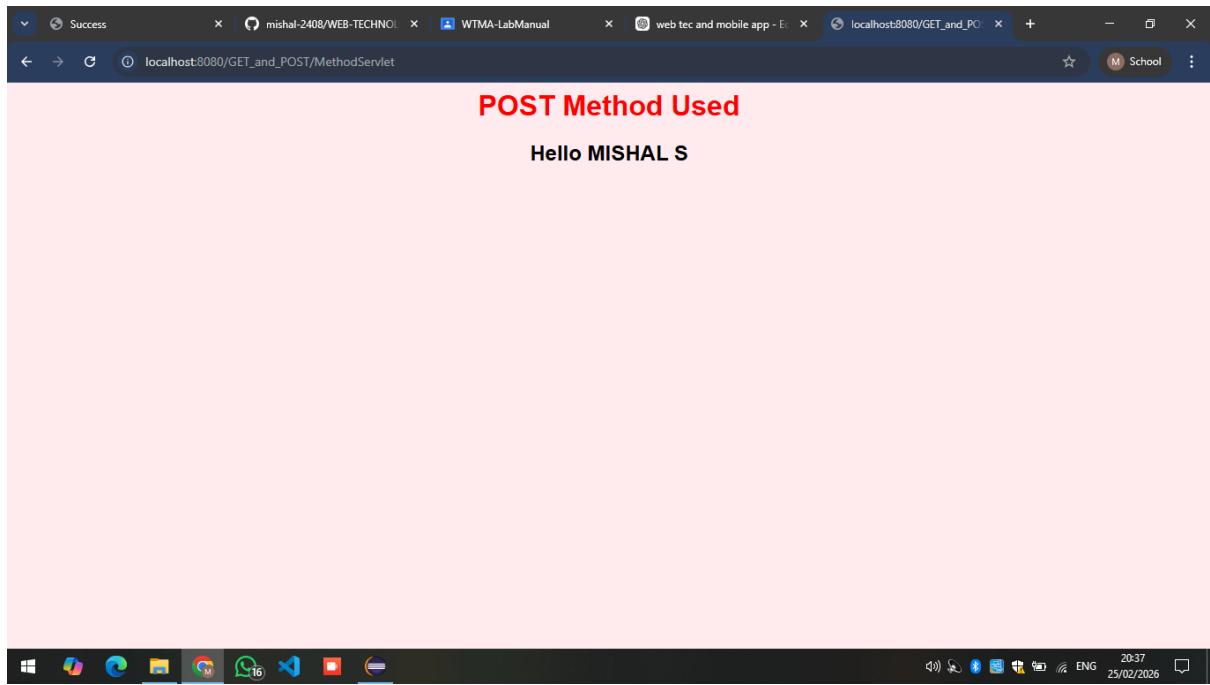
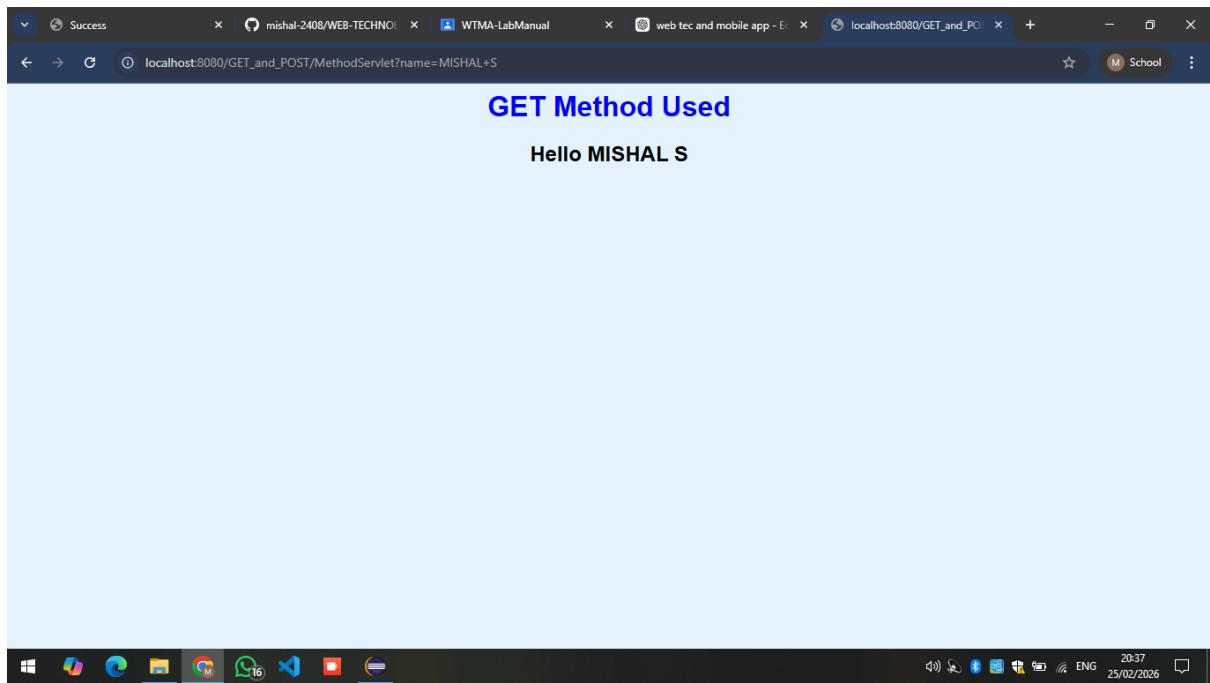
    }

}

```

Output:





RESULT:

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