EXP 5   HTTP GET and POST methods

AIM:

To demonstrate the difference between HTTP GET and POST methods using a Java Servlet by creating a form that sends data using both methods.

ALGORITHM:

Step 1: Create an HTML form with GET and POST methods.

Step 2: Develop a Servlet (`GetPostServlet.java`) to handle requests.

Step 3: Implement `doGet()` to handle GET requests.

Step 4: Implement `doPost()` to handle POST requests.

Step 5: Configure `web.xml` to map the Servlet to `/GetPostServlet`.

Step 6: Run the server and observe how GET and POST work differently.

PROGRAM:

index.html (Form Page)

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>GET vs POST Demo</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <div class="container">
```

```html
    <h2>Choose GET or POST Method 🚀</h2>
    <form action="GetPostServlet" method="GET">
      <input type="text" name="username" placeholder="Enter your name" required>
<button type="submit">Submit with GET</button>        </form>


    <form action="GetPostServlet" method="POST">
      <input type="text" name="username" placeholder="Enter your name" required>
<button type="submit">Submit with POST</button>
    </form>
  </div>
</body>
</html>
```

styles.css

```css
body {
    font-family: 'Poppins', sans-serif;
    background: linear-gradient(to right, #36D1DC, #5B86E5);
    text-align: center;
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;
    margin: 0;
}

.container{
    background:  #fff;
    padding:20px;
    border-radius: 15px;
    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.2);
    width: 300px;
}
```

```css
h2 {
    color:#5B86E5;
}

input {
  width: 90%;
  padding: 10px;
  margin: 10px 0;
  border: 1px solid #5B86E5;
  border-radius: 8px;
  text-align: center;
}

button {
  background: #36D1DC;
  color:white;
  border: none;
   padding: 10px 15px;
   border-radius: 8px;
   cursor: pointer;
   transition: 0.3s;
}

button:hover {
   background: #1e6e8c;
}
```

GetPostServlet.java (Servlet to Handle GET & POST) java

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

```java
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

@WebServlet("/GetPostServlet")
public class GetPostServlet extends HttpServlet {
private static final long serialVersionUID = 1L;

    // Handling GET Request
    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();

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

        out.println("<html><body>");
        out.println("<h2>GET Method Received</h2>");
        out.println("<p>Hello, <b>" + name + "</b>! Data sent using GET.</p>");
        out.println("</body></html>");
    }

    // Handling POST Request
    protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();

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

        out.println("<html><body>");
        out.println("<h2>POST Method Received</h2>");
        out.println("<p>Hello, <b>" + name + "</b>! Data sent using POST.</p>");
        out.println("</body></html>");
    } }
```
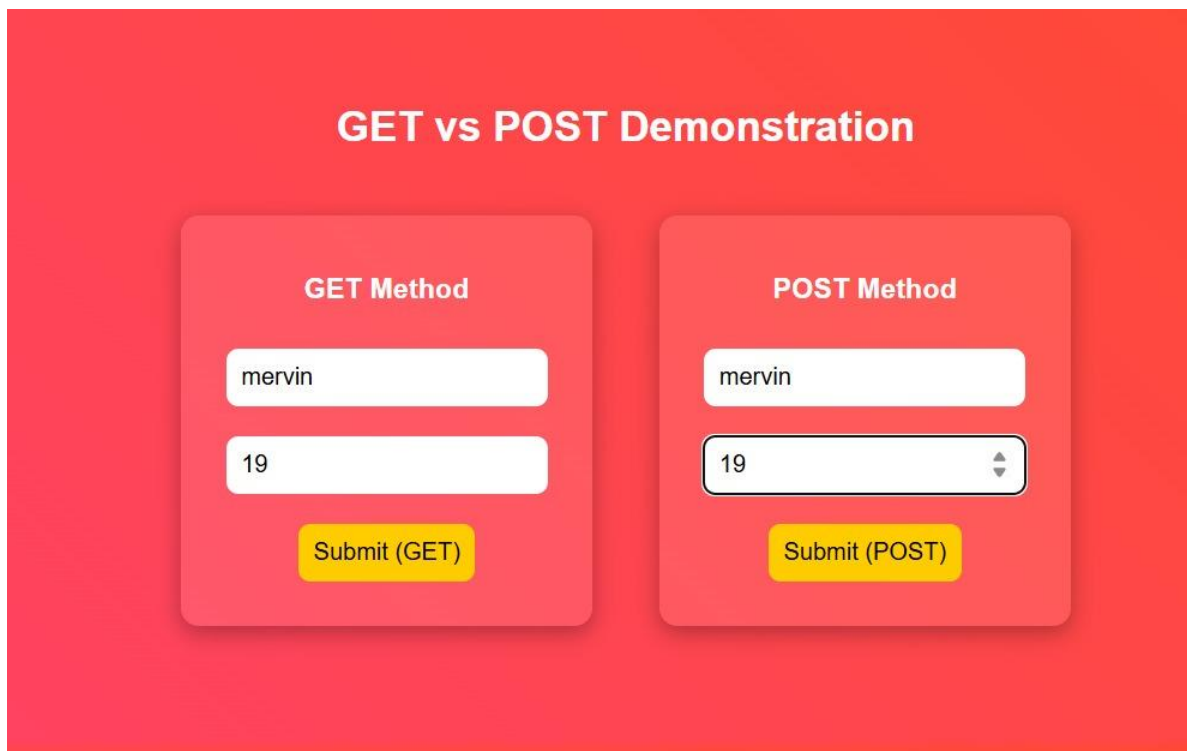
web.xml (Servlet Configuration) xml

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```xml
<web-app xmlns="http://java.sun.com/xml/ns/javaee" version="3.0">
  <servlet>
    <servlet-name>GetPostServlet</servlet-name>
    <servlet-class>GetPostServlet</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>GetPostServlet</servlet-name>
    <url-pattern>/GetPostServlet</url-pattern>
  </servlet-mapping>
</web-app>
```

OUTPUT:

RESULT: The Get and Post methods were executed successfully.