

SERVLET CALCULATION PROGRAM:

INDEX.HTML:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Simple Calculator</title>
</head>
<body>
  <h1>Simple Calculator</h1>
  <form action="calculate" method="post">
    <input type="number" name="num1" required placeholder="First Number" />
    <input type="number" name="num2" required placeholder="Second Number" />
    <select name="operation">
      <option value="add">Add</option>
      <option value="subtract">Subtract</option>

    </select>
    <input type="submit" value="Calculate" />
  </form>
</body>
</html>
```

SIMPLECALCULATOR.JAVA

```
import java.io.IOException;
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("/calculate")
public class SimpleCalculator extends HttpServlet {
    private static final long serialVersionUID = 1L;
```

```

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    String operation = request.getParameter("operation");
    double num1 = Double.parseDouble(request.getParameter("num1"));
    double num2 = Double.parseDouble(request.getParameter("num2"));
    double result = 0;

    switch (operation) {
        case "add":
            result = num1 + num2;
            break;
        case "subtract":
            result = num1 - num2;
            break;
        default:
            response.getWriter().println("Invalid operation!");
            return;
    }

    response.setContentType("text/html");
    response.getWriter().println("<h1>Result: " + result + "</h1>");
}
}

```

WEB.XML

```

<web-app xmlns="http://xmlns.jcp.org/xml/ns/javaee"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee
        http://xmlns.jcp.org/xml/ns/javaee/web-app_3_1.xsd"
    version="3.1">
    <servlet>
        <servlet-name>SimpleCalculator</servlet-name>
        <servlet-class>SimpleCalculator</servlet-class>
    </servlet>
    <servlet-mapping>
        <servlet-name>SimpleCalculator</servlet-name>
        <url-pattern>/calculate</url-pattern>
    </servlet-mapping>

```

```
</servlet-mapping>  
</web-app>
```

OUTPUT:

