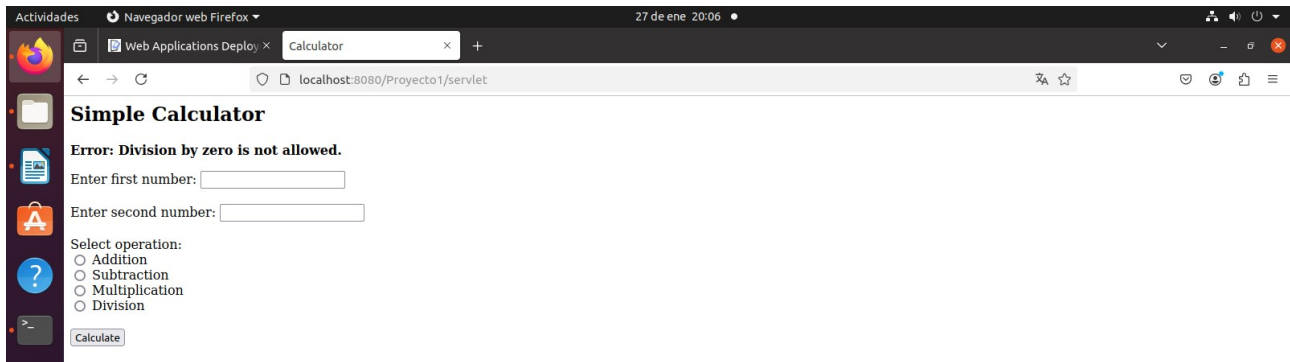# Calculator

My code:

import java.io.*;

import javax.servlet.*;

import javax.servlet.http.*;

public class MiServlet extends HttpServlet {

  @Override

  public void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

    showCalculatorForm(response, "");

  }

  @Override

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

    response.setContentType("text/html");

    PrintWriter out = response.getWriter();

    String num1Str = request.getParameter("num1");

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String num2Str = request.getParameter("num2");

String operation = request.getParameter("operation");

String resultMessage = "";


try {

   double num1 = Double.parseDouble(num1Str);

   double num2 = Double.parseDouble(num2Str);


   switch (operation) {

     case "add":

        resultMessage = "Result: " + (num1 + num2);

        break;

     case "subtract":

        resultMessage = "Result: " + (num1 - num2);

        break;

     case "multiply":

        resultMessage = "Result: " + (num1 * num2);

        break;

     case "divide":

        if (num2 == 0) {

           resultMessage = "Error: Division by zero is not allowed.";

        } else {

           resultMessage = "Result: " + (num1 / num2);

        }

        break;

     default:

        resultMessage = "Error: Invalid operation.";

   }

} catch (NumberFormatException e) {
```

```java
        resultMessage = "Error: Please enter valid numbers.";
    }

    showCalculatorForm(response, resultMessage);
}


private void showCalculatorForm(HttpServletResponse response, String resultMessage) throws IOException {
    PrintWriter out = response.getWriter();
    response.setContentType("text/html");

    out.println("<html>");
    out.println("<head><title>Calculator</title></head>");
    out.println("<body>");
    out.println("<h2>Simple Calculator</h2>");

    if (!resultMessage.isEmpty()) {
        out.println("<p><strong>" + resultMessage + "</strong></p>");
    }

    out.println("<form method='post' action=''>");
    out.println("<label for='num1'>Enter first number:</label>");
    out.println("<input type='text' id='num1' name='num1' required><br><br>");

    out.println("<label for='num2'>Enter second number:</label>");
    out.println("<input type='text' id='num2' name='num2' required><br><br>");

    out.println("<label>Select operation:</label><br>");
    out.println("<input type='radio' id='add' name='operation' value='add' required> <label for='add'>Addition</label><br>");
```

```
    out.println("<input type='radio' id='subtract' name='operation' value='subtract'> <label for='subtract'>Subtraction</label><br>");

    out.println("<input type='radio' id='multiply' name='operation' value='multiply'> <label for='multiply'>Multiplication</label><br>");

    out.println("<input type='radio' id='divide' name='operation' value='divide'> <label for='divide'>Division</label><br><br>");


    out.println("<button type='submit'>Calculate</button>");

    out.println("</form>");

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

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