# Tasks

**Task1**

Create a servlet that performs basic arithmetic operations (addition, subtraction, multiplication, and division). The user inputs two numbers and selects an operation, and the servlet returns the result.

**Instructions:**

* Create an HTML form with two number input fields and a dropdown menu for selecting an operation.
* Upon form submission, send the data to the servlet.
* In the servlet, parse the input and perform the selected operation.
* Display the result back on the web page.

**Task 2:**

Create a servlet that converts temperatures between Celsius and Fahrenheit. The user inputs a temperature and selects the conversion type.

**Instructions:**

* Develop a form where the user can enter the temperature and select either "Celsius to Fahrenheit" or "Fahrenheit to Celsius."
* In the servlet, implement the conversion logic.
* Return the converted value back to the user.

**Task 3:**

Build a servlet that checks if a given string is a palindrome. The user enters a word, and the servlet checks whether it reads the same forwards and backwards.

**Instructions:**

* Create a form with a single input field.
* Implement logic in the servlet to check if the input string is a palindrome.
* Display a message indicating whether the input is a palindrome or not.

**Task 4:**

Build a servlet that generates the Fibonacci sequence up to a specified number provided by the user.

**Instructions:**

* Create an HTML form where the user can enter a number.
* In the servlet, calculate the Fibonacci sequence up to that number.
* Display the sequence back to the user in a formatted manner.

**Task 5:**

Create a servlet that counts the frequency of each character in the given string and displays the result.

**Instructions:**

* Design a form where the user can input a string.
* The servlet should process the input and count the occurrences of each character.
* Display the frequency of each character in a table format.