

# Challenge - Arithmetic Functions

The object of this challenge is to create functions that can accept arguments and return values.

## Mild 🌶️

Create 2 functions from the following choices:

Function	Input	Output
Addition	2 numbers, <code>a</code> and <code>b</code> .	The sum of <code>a</code> and <code>b</code> .
Subtraction	2 numbers, <code>a</code> and <code>b</code> .	The difference between <code>a</code> and <code>b</code> .
Multiplication	2 numbers, <code>a</code> and <code>b</code> .	The product of <code>a</code> and <code>b</code> .
Division	2 numbers, <code>a</code> and <code>b</code> .	The quotient of <code>a / b</code> .

Then create a program that satisfies the following requirements:

- The user provides input `a` and `b`.
- The program uses your first function to calculate a total.
- The program outputs the total and the operation used to get that total.
- The user provides a second input for `a` and `b`.
- The program uses your second function to calculate the total.
- The program outputs the total and the operation used to get that total.

## Medium 🌶️🌶️

Create the 4 following functions:

Function	Input	Output
Addition	2 numbers, <code>a</code> and <code>b</code> .	The sum of <code>a</code> and <code>b</code> .
Subtraction	2 numbers, <code>a</code> and <code>b</code> .	The difference between <code>a</code> and <code>b</code> .
Multiplication	2 numbers, <code>a</code> and <code>b</code> .	The product of <code>a</code> and <code>b</code> .
Division	2 numbers, <code>a</code> and <code>b</code> .	The quotient of <code>a / b</code> .

Then create a program that satisfies the following requirements:

- For each function you created:
  - The user provides input `a` and `b`.
  - The program uses your first function to calculate a total.
  - The program outputs the total and the operation used to get that total.

## Spicy 🌶️🌶️🌶️

Create the 4 following functions:

Function	Input	Output
Addition	2 numbers, <code>a</code> and <code>b</code> .	The sum of <code>a</code> and <code>b</code> .
Subtraction	2 numbers, <code>a</code> and <code>b</code> .	The difference between <code>a</code> and <code>b</code> .
Multiplication	2 numbers, <code>a</code> and <code>b</code> .	The product of <code>a</code> and <code>b</code> .
Division	2 numbers, <code>a</code> and <code>b</code> .	The quotient of <code>a / b</code> .

For each of your functions create 2 tests using `pytest`:

- Each function must have one test that `asserts` that 2 values are equal.
- Each function must have one test that `asserts` that 2 values are not equal.

Then create a program that satisfies the following requirements:

- For each function you created:
  - The user provides input `a` and `b`.
  - The program uses your first function to calculate a total.
  - The program outputs the total and the operation used to get that total.