

## **Problem One**

This problem was designed to get you acquainted with the format of the following problems. I think this one should be cake for you!

### **Things to note:**

- Always keep the challenge file together with the test file (by that I mean in the same folder).
- When you feel like you've completed any section of a problem, feel free to test your work! You can do this by going to the test file I created (in this case: test\_firstchallenge.py) and then running it. My tester should take care of the rest!
- If for any reason you feel like something isn't working like it should, let me know. I would be ecstatic to fix it for you. Same goes for any questions you have.

Alright, on to the problem:

- a. Prompting the user**
- b. Addition**
- c. Subtraction**
- d. Multiplication**
- e. Division**
- f. Modulus**

### **A. Prompting the user**

For this problem, fill in the function named "prompt\_user()"

Follow the instructions provided in the practice file. Once you are done writing the code for this segment, go into the tester file and run it. The tester file should alert you as to whether there may be an error in your code. Good luck!

### **B. Addition**

For this problem, fill in the function named "add()"

Once again, follow the notes provided to you in the IDE. The goal of this problem is to simply add together the two given numbers and return the answer.

Remember to test your functions using the test file provided as you go! Otherwise the things you wrote might not work as you expect them to...

### **C. Subtraction**

Guess what? This is almost the same problem as before, just with a different operator! The same can be said with parts **D.** and **E.** Neat!

### **F. Modulus**

Here's a little more challenging of a problem. Some people can't tell if a certain number is even or odd... But you can! And more importantly, a computer can!

Consider that the "modulus" of a number is essentially the remainder of a number.

For example:

**5 mod 2 = 1.** This is because 5 divided by 2 leaves a remainder of one.

**6 mod 2 = 0.** This is because 6 divided by 2 leaves no remainder.

**7 mod 2 = 1.** Once again, 7 divided by 2 leaves a remainder of one.

You may have started to notice a pattern. Any number modulus two will return **0** if it is even, and **1** if it is odd. Neat!

The symbol for modulus in python is **%**.

The previous examples could be represented as:

**5 % 2 , 6 % 2 , 7 % 2.**

Remember, the **%** symbol is just another symbol like **\***, **/**, **-**, and **+**.

So for this problem instead of returning an integer you will be returning a **Boolean value**! I hope all of these big words aren't scaring you! Remember that Boolean just means either **True** or **False**!

**Once you've finished all of these exercises your program should be fully functioning! Try it out!**