# Intro to Python

#### Homework 1

### Problem 1

- a. Write a program that displays Welcome to Intro to Python.
- b. Given three numbers, 12, 4, and 9, write a program that prints the following:

The average of 12, 4, and 9 is: 8.333...

# Problem 2

Write a program that computes the following:

$$\frac{9.5 \times 4.5 - 2.5 \times 3}{45.5 - 3.5}$$

The correct answer is 0.839285...

# Problem 3

The number  $\pi$  can be approximated using the Leibniz formula:

$$\frac{\pi}{4} = 1 - \frac{1}{3} + \frac{1}{5} - \frac{1}{7} + \frac{1}{9} - \dots$$

Write a program approximating  $\pi$  to the  $6^{th}$  term in the series  $(\frac{1}{11})$  and the  $8^{th}$   $(\frac{1}{15})$ .

Don't forget to alternate the signs.