

Lab 0: CS 153 / 453
Install Python and Run Your First Python Program
Deliverable: triangle.py

1. Install Anaconda <https://www.anaconda.com/download/>
 - At the top of the screen, click the button for the operating system that you have (Windows, Mac, or Linux).
 - On the left side is the section for the Python 3.7 version. You can click the green Download button if you have a 64-bit computer. If you have a 32-bit computer, click the link for 32-bit Graphical Installer.

Anaconda includes the Python compiler and an IDE (Interactive Development Environment) called Spyder.

Note: If you've already installed Python and another IDE, that's fine as long as you have Python 3 (not Python 2). I will be using Spyder in class.

2. After Anaconda is installed, open Anaconda Navigator. Spyder is one of the options you will see. Click Launch to start Spyder.
3. In Spyder, create and save the following program as triangle.py.

```
import math

#input the two legs of a right triangle
side1 = float(input("Enter the length of side 1: "))
side2 = float(input("Enter the length of side 2: "))

#calculate the length of the hypotenuse
hyp = math.sqrt(side1 * side1 + side2 * side2)

#display the hypotenuse
print("The hypotenuse is", hyp)
```

Spyder checks for syntax errors as you type. Fix any syntax errors, then run the program.

Test the program with side 1 = 3 and side 2 = 4. Check the output. It should say "The hypotenuse is 5.0. " If it doesn't, fix your error and run it again. Repeat (edit, run, edit, run) until it works correctly.

Close the program.

Submit triangle.py on Canvas Lab 0.