

CSCA20 - Lab 0

Introduction to Python

Learning Objectives

This lab will ensure that everyone is able to get basic code up and running and is familiar with the software we will be using in this course. It's also a chance to meet your TA and your fellow classmates, and get a sense of how this course is going to run.

Prelab

If you are planning on running python on your desktop or laptop computer, you may want to try installing Python and Wing before the lab (there are step-by-step guides uploaded to Quercus). Also, if you intend to use a web-based IDE, you can sign up for an account at <https://replit.com>, but be aware that you will need to use Wing101 for quizzes and tests.

If you can't get these things done ahead of time, don't worry, your TAs will help you out during the tutorial session.

Demonstration

This lab does not require any demonstration, and thus you will not have the opportunity to demonstrate proficiency/mastery in any of the course components. But don't worry, you'll get your chance starting with Lab 1.

Quiz

Normally, you will be tested on the skills demonstrated in this lab at the start of the following week's tutorial. But since this lab didn't demonstrate any skills, there will be no quiz next week.

How Labs Work

Before arriving for your tutorial, you should have completed the work outlined in the ‘pre-lab’ section of the handout. If you can’t get it done, get help on Piazza. If you’re still stuck, just do your best. You won’t be penalized, but you may struggle to get your lab completed by the end of the tutorial session.

Tutorials will normally start with a short quiz based on the previous lab’s material. You should make sure to arrive on time and be ready to modify the code you produced the previous week (Since you didn’t have a previous week’s lab, no quiz this week). Your TA will ask all students to make some small addition or change to the code in order to demonstrate that you have understood and mastered the key components. These quizzes will be done in such a way that they are trivial if you completed and understood the code yourself, but we want to check that you can do it live. If you can’t successfully demonstrate the skills, don’t worry, you’ll have more opportunities later in the term.

Once the quiz is over, you will group yourselves, or be grouped by your TA into small working groups (2-3 students is optimal), and your responsibility will be to get your code working together. If your code is working, you still have the responsibility to help your partners get theirs working. Furthermore, all group members must be able to demonstrate and explain their code, so simply telling people what to write isn’t sufficient, you must ensure they understand WHY the code works. The TAs will offer assistance and help anyone who needs it, but it will generally be faster and more efficient (and more fun) for you to work with your group members. By the end of the two hours, you need to be able to demonstrate working code to one of your TAs.

This week’s lab: Download, Run & Play with Code

We have uploaded some starter code that you can use to get yourself started. You will likely want to copy & paste the code into your python file. Once everyone is able to get the code running, complete the missing code, and add at least one more question & answer. Demonstrate your working code to your TA to complete the lab.

That’s it?

Yup... that’s all there is to it this week. We wanted to make sure that everyone has their software installed and set up, and give the TAs plenty of time to get to know you and to help people with software issues. Not all labs will be this fast, but if you’re done early... enjoy yourself. If it’s a nice day, take a walk in the valley. If it’s not a nice day... take a walk anyway (a little rain never hurt anyone¹). You’ve been given some free bonus time... enjoy it.

¹A lot of rain has hurt many people... please don’t go take a walk outside if there is a torrential downpour