CSC108 Lab 1: Introduction

September 8^{th} – 12^{th} 2025

Welcome to your first CSC108 lab! :)

Labs will be your opportunity to practice the course material with your friends and TAs, so you can get assistance when you have a question. Don't hesitate to ask questions – of each other or of the TAs. However, do not share code with your peers. You are submitting this code to MarkUs, and we will be checking for plagiarism. You may show your code to your TA in a breakout room or a private Piazza post.

NOTE: MarkUs will be available later this week!

1 Installing Python

For many of you, this will be the first time that you have programmed, which is exciting, but may also be a bit overwhelming. Don't hesitate to ask your TA for help. You may also refer to your lecture notes or PCRS videos.

In order to run the files which you will need for this course, you need to install Python 3.11 and PyCharm. To install Python, go to https://www.python.org/downloads/release/python-3119/ and download either the Windows or macOS installation file. Run the installer, using default options where prompted.

Next download PyCharm, again, making sure to download the correct one for your machine.

See a video of the complete installation process and setup walk-through for Windows 10 or macOS on PCRS. Note that because these walkthroughs were recorded in earlier semesters, you should be installing the python version noted above instead.

2 Lab Tasks

Please only start this section when you have **FINISHED** the above installation portion.

First, run `startup.py` and make sure that you can run it successfully. If you managed to run it properly, it should display a message confirming that your Python installation is working and also indicate your Python version to you. For the purposes of this course, we recommend 3.11.9.

Once you have `startup.py` running and working properly, open up `lab1.py` and follow the instructions in the file. This lab is an easy one, as the main point of this lab is for you to get your machine set up to be able to run the code for this course. There are some simple exercises in the `lab1.py` file, follow the TODO comments and do all of the parts. The questions are relatively easy, but note that you must submit something original for part 3.

After you have completed all the TODO's, make sure to submit **lab1.py** on MarkUs! If you have more time, feel free to stay in the lab to work on PCRS exercises for the end of the week or ask any questions that you may have to the TAs or on Piazza.

3 Running tests on Markus

After you have submitted your lab, click on the `Automated Testing` tab on Markus and click `Run tests`.

This will run a small set of automated tests which will tell you if you are roughly on the right track for the lab. Keep in mind that these tests are just small sanity checks and passing these tests **do not** mean you will get full marks for the lab, we will run additional tests on your final submission which will be more comprehensive than the automated tests you are able to run.

See you next week! ☺