Install Python

Option 1 (Recommended)

Follow these instructions to install conda, Jupyter, and PyCharm, using one of the following:

Create a JetBrains account using student email: all apps and their professional versions are free. Then, either:

- Download the JetBrains toolbox, from which the latest version of Pycharm Professional can be installed, **https://www.jetbrains.com/toolbox-app/ (https://www.jetbrains.com/toolbox-app/)** .
- Or, download PyCharm Professional as a standalone, **https://www.jetbrains.com/pycharm/ (https://www.jetbrains.com/pycharm/)**

Finish the setup instruction upon launching PyCharm Professional.

Option 2

To standardize coding requirements for COMP 135, we have prepared a Python (3.8 or higher) environment that can run on any standard OS (Mac, Windows, Linux). Python code submitted for the class should be able to run in that environment, which has been verified to work for the standard Tufts EECS Unix account home directory.

Early in the course, TAs will support installing Python on your computer, but it is up to you to maintain that environment. We recommend installing ASAP to ensure that you have it up and running before any deadlines. No extensions will be given due to installation issues.

1. Install Miniconda: A relatively lightweight version of the Anaconda package manager can install the rest of the environment for COMP 135. This can be installed according to the instructions found at **the conda site (https://conda.io/projects/conda/en/latest/user-guide/install/index.html)** .

Hint for Linux/Mac Users: if asked whether or not to add conda to your .bashrc (or similar) file, say yes.

2. Install the COMP 135 Environment: Once conda is installed and can be called from the console/terminal, it can install the standard Python environment and tools. Download **ml135_env-1.yml (https://canvas.tufts.edu/courses/44718/files/5552934?wrap=1)**

(https://canvas.tufts.edu/courses/44718/files/5552934/download?download_frd=1) (it should be saved to your computer as `ml135_env.yml`). Once downloaded, you can execute the following command from the directory containing that file to install all of the libraries required (this may take a few minutes and takes up about 1.5 GB of space):

```
conda env create -f ml135_env.yml
```

3. Using the Environment: Once the environment has been created, you no longer need the downloaded YML file. To use the environment when coding for the class, you can execute the following command from the console/terminal (you will do this each time you want to code in the standard environment):

```
conda activate ml135_env_sp23
```

Once the environment is active, it will ensure that launching Python or related tools gives you access to the same versions used in testing your submitted code. For instance, to launch a Jupyter Notebook, once you have activated the environment via the prior command, you would use the following console/terminal command:

```
jupyter notebook
```

You can shut down the environment when done coding with the following console/terminal command:

```
conda deactivate
```