

CSCI 140 Getting Started

The goal of this assignment is to setup the Anaconda Python environment on your personal machine so that you can use the same notebooks that we use in lecture. There is also a small notebook with practice exercises for you to complete once the environment is up and running. Finally, we will recommend and install a text editor that you will use to create .py files and to run your code from the command line.

Install Anaconda:

Begin by visiting <https://www.anaconda.com/products/individual> and downloading the 64-bit Python3-based version of Anaconda specific to your platform (Windows, Mac OS, Linux). You will need to scroll down to the bottom of the page, then **click the option that applies to you** to download:

The screenshot displays the Anaconda download page with three columns for Windows, MacOS, and Linux. Each column lists installation options for Python 3.7 and Python 2.7. The MacOS section has a red dashed circle around the '64-Bit Graphical Installer (442)' option, and a red arrow points to it with the text 'Pick the graphical installer for Mac'.

Platform	Python Version	Installer Type	Size
Windows	Python 3.7	64-Bit Graphical Installer	466 MB
		32-Bit Graphical Installer	423 MB
	Python 2.7	64-Bit Graphical Installer	413 MB
		32-Bit Graphical Installer	356 MB
MacOS	Python 3.7	64-Bit Graphical Installer	442 MB
		64-Bit Command Line Installer	430 MB
	Python 2.7	64-Bit Graphical Installer	637 MB
		64-Bit Command Line Installer	409 MB
Linux	Python 3.7	64-Bit (x86) Installer	522 MB
		64-Bit (Power8 and Power9) Installer	276 MB
	Python 2.7	64-Bit (x86) Installer	477 MB
		64-Bit (Power8 and Power9) Installer	295 MB

You want Python 3.x – do not download any version of Python 2! You may need to check whether you are on 64 bit or 32 bit Windows: <https://www.howtogeek.com/howto/21726/how-do-i-know-if-im-running-32-bit-or-64-bit-windows-answers/>

In most cases, this software is provided in a standard installer executable for your platform. If given the option to install for all users or a single user, most people will select single user.

NOTE: if you are using Windows, you must select the option to modify your path during setup. Otherwise your installation will not work properly.

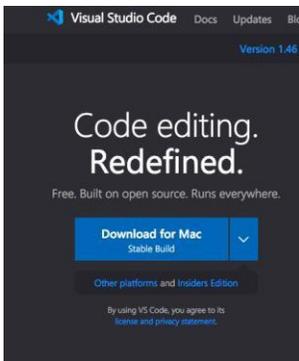
Installing a text editor:

We recommend that you use VSCode, but you may choose to use another text editor such as Atom, TextWrangler (Mac), or Notepad++ (Windows), or an IDE like Spyder. Please be aware that we may not be able to provide support or troubleshooting assistance for these programs.

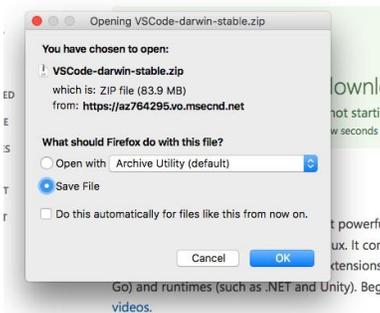
Download VSCode from <https://code.visualstudio.com/> - it should automatically suggest the correct download.

BE AWARE: In this class, we will use VSCode solely as a text editor. We will not run code from inside VSCode. If you choose to do this on your own and have errors, instructors for the course will not be able to assist you.

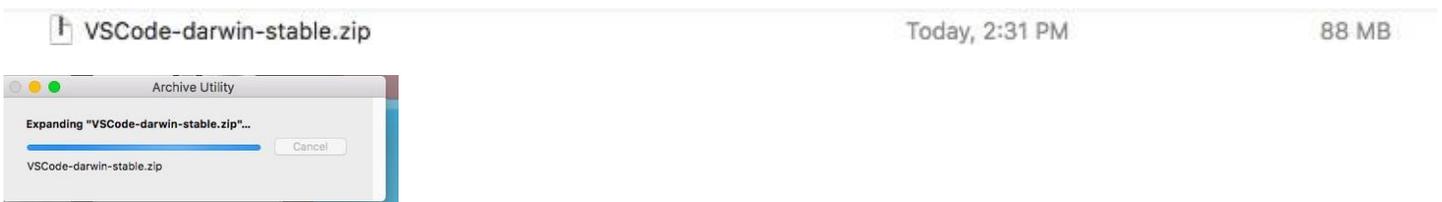
For Mac:



Click on Download for Mac. This should pop up a dialog box that looks something like this:



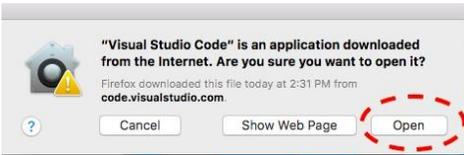
Select Save File and Click OK. This will download the file. Once the download completes, you will see a .zip file in your Downloads folder (use Finder). We strongly suggest moving this zip file to your Desktop or Applications (just drag it and drop it in Finder). Double click the name of the zip file in Finder to expand it:



This will put an icon for VSCode in the same folder the .zip file was in, if you moved it to the Desktop, you'll see this icon on your Desktop:



Double click the icon to launch VSCode, and when the warning dialog appears, click Open:

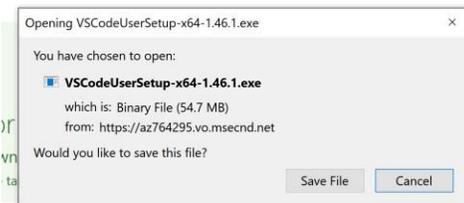


Go to the last section of these instructions entitled **Getting Started with Python in VSCode For Windows:**

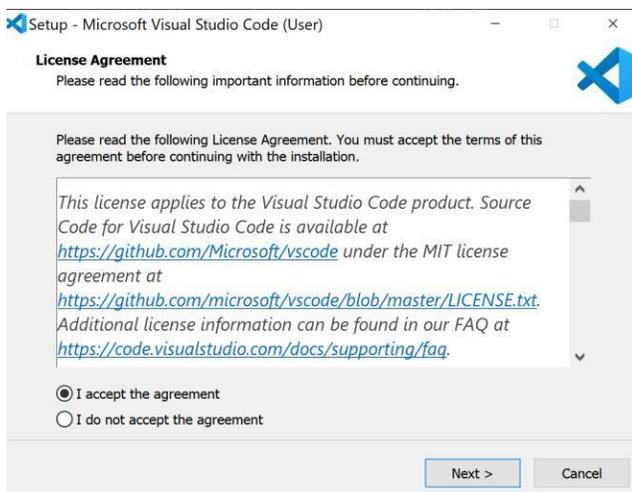


Click on Download for Windows.

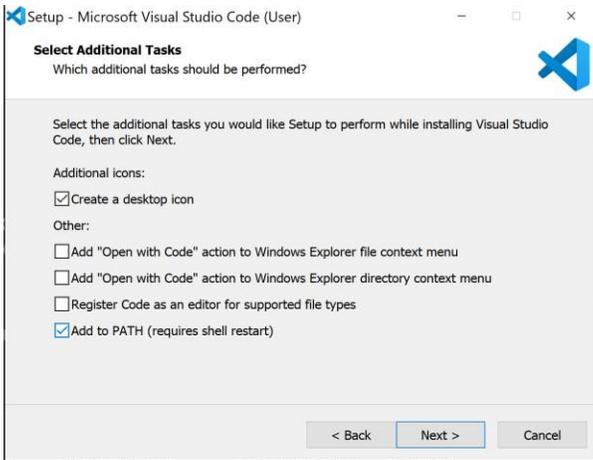
This should pop up a dialog box that looks something like this:



Click Save File. This will save the .exe file in your Downloads folder. Navigate to downloads using Windows Explorer (or File Manager etc.) and double click the .exe file to launch the installer. You will need to accept the license agreement and click Next> :



Click Next> to move through the installer. On this screen, check the first and last check boxes:



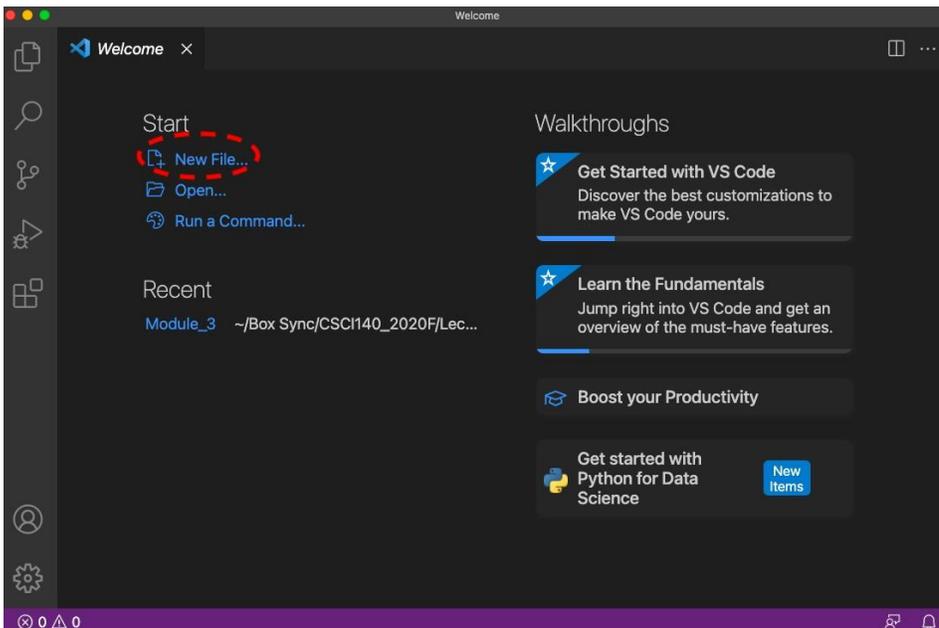
Once the installation is complete, you should see this:



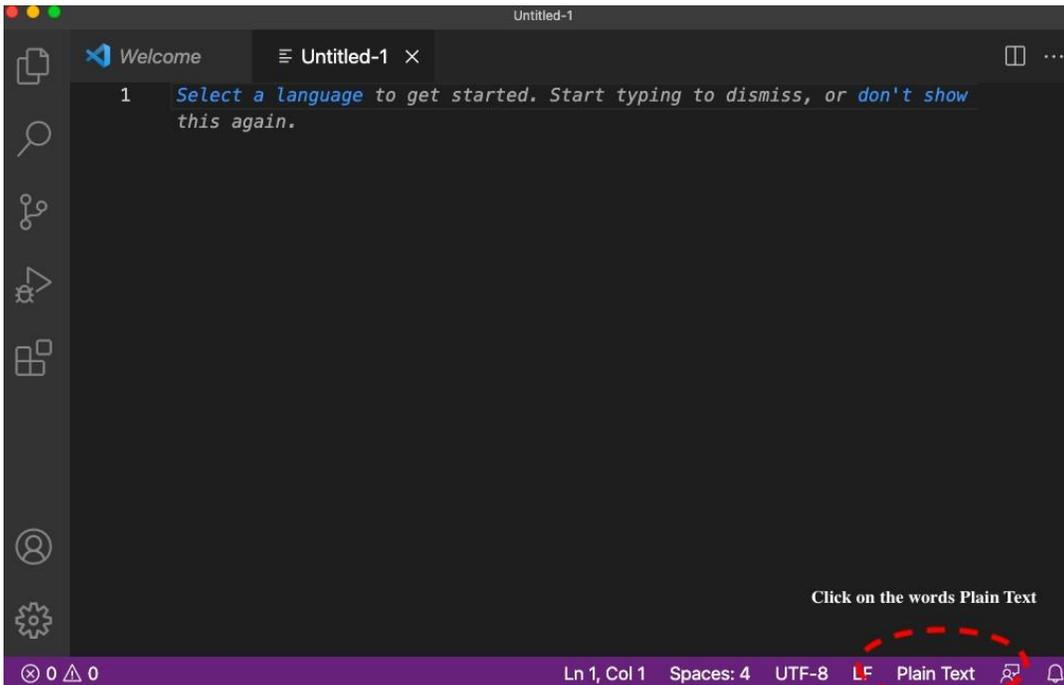
Click Finish to launch VSCode (you should also have a Desktop icon).

Getting started with Python in VSCode:

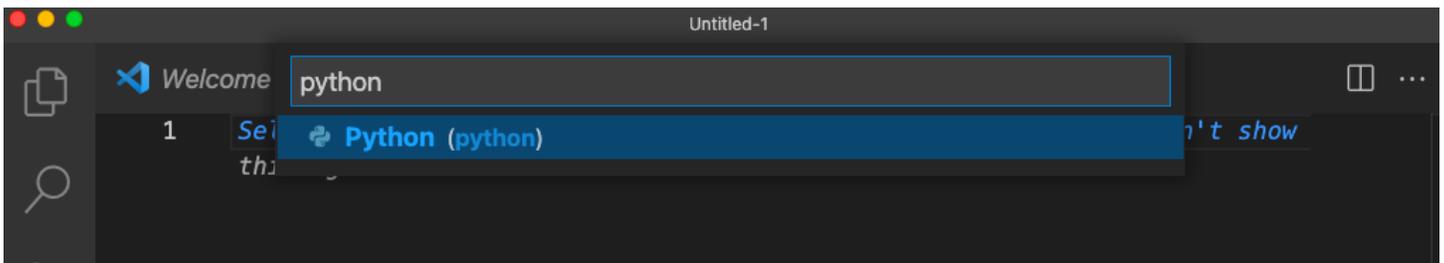
Launch VSCode. You should see something like this:



Open a new file by clicking new file (circled above) or using the drop down menu. Take a look at the text in the bottom right corner of the screen. It likely says Plain Text, click on where it says Plain Text to bring up a menu:



Select Python from the menu that appears (you can just start typing Py and it will come up). This will give you Python syntax highlighting. Syntax highlighting means that it will use different colors to show Python keywords and other structures.



If any messages pop up asking you to install additional software, just exit from them and do not install anything. If a message pops up asking you to select which Python to use, select Anaconda.

We will work more with VSCode once we get started!

Installing Python modules:

We will often need to use Python modules that are not part of the default installation of Anaconda (that is, you don't get them automatically by installing Anaconda). The procedures we suggest that you use for this class, once you have Anaconda installed, are to first try to install with Anaconda and then if that fails, install with pip, the Python installer.