VSCode Installation Instructions

Introduction

In case you were not able to set up Spyder, another alternative is to use VSCode. This document covers installation instructions for VSCode, Python setup, and installing the required packages for 6.100A/B/L.

Downloading VSCode

VSCode download instructions can generally be found on [this website](#), but we have summarized the steps below as well.

Downloading the Installer

1. Visit the [download page](#) for VSCode.

Download Visual Studio Code

Free and built on open source. Integrated Git, debugging and extensions.

↓ **Windows**
Windows 8, 10, 11

↓ **.deb**
Debian, Ubuntu

↓ **.rpm**
Red Hat, Fedora, SUSE

↓ **Mac**
macOS 10.11+

User Installer 64 bit 32 bit ARM
System Installer 64 bit 32 bit ARM
.zip 64 bit 32 bit ARM

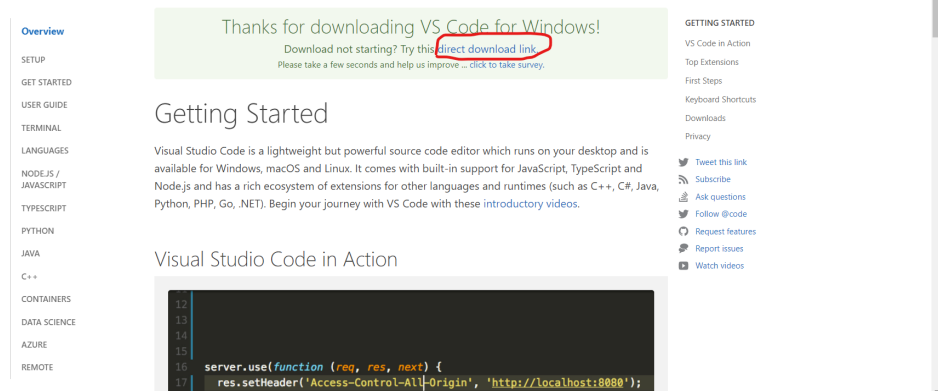.deb 64 bit ARM ARM 64
.rpm 64 bit ARM ARM 64
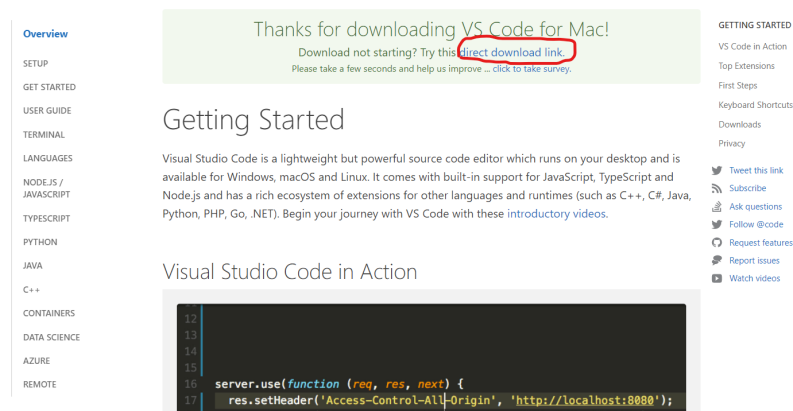.tar.gz 64 bit ARM ARM 64
Snap Store

.zip Universal Intel Chip Apple Silicon

a. <u>On Windows:</u> Click the big blue button right under the Windows icon, and it should start automatically downloading it, and you should see this page:

If the download does not start automatically, click the link circled in red.

b. <u>On Macs:</u> Click the big blue button right under the Apple icon, and it should start automatically downloading it, and you should see this page:

If the download does not start automatically, click the link circled in red.
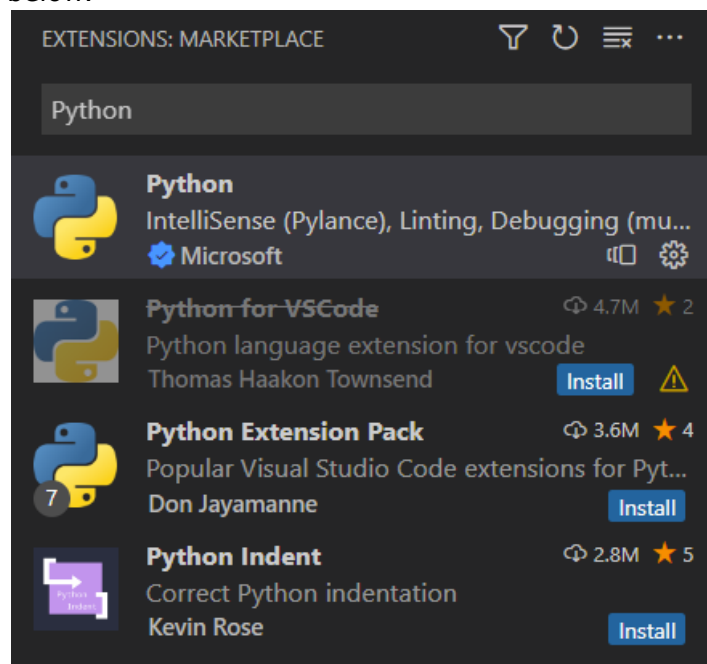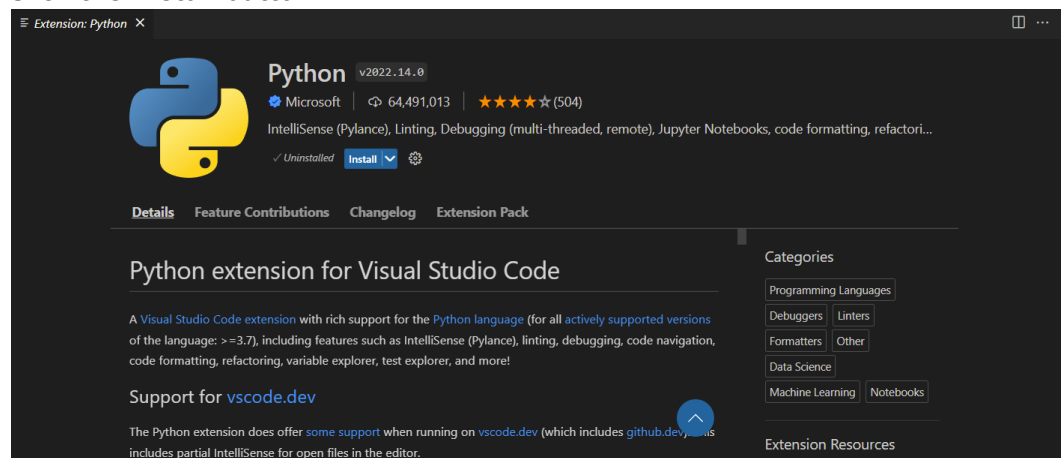
Installing VSCode and Adding Python

1. After downloading the installer, double click the .exe file (on Windows), and follow the on-screen instructions.

2. Launch VSCode.

3. To install Python, we first bring up the extensions view:

   a. You can either click the Extensions icon in the Activity Bar on the side, or go to **View→Extensions** on the Menu bar.

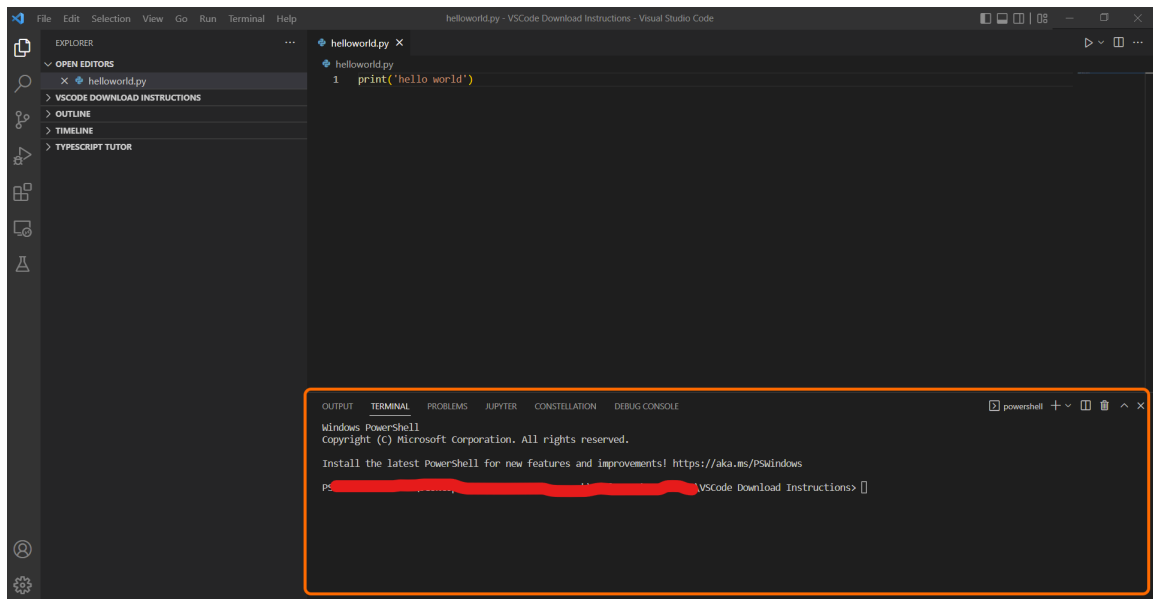   b. In the Search bar, type *Python*, and click on the highlighted result shown below.

   c. Click the Install button

Installing Packages

Unlike Anaconda, VSCode does not come pre-installed with packages. As a result, we need to manually install these. Open the Terminal using the instructions below, and run the following commands in the Terminal to install the libraries you will need throughout the semester. **Important Note: If for whatever reason, you have problems running any of these commands, or if the terminal displays a warning, please come to Office Hours, and ask a TA to help you with this.**

1. To open the Terminal, go to **Terminal→New Terminal** on the Menu bar. This will open the terminal (outlined in the picture below).
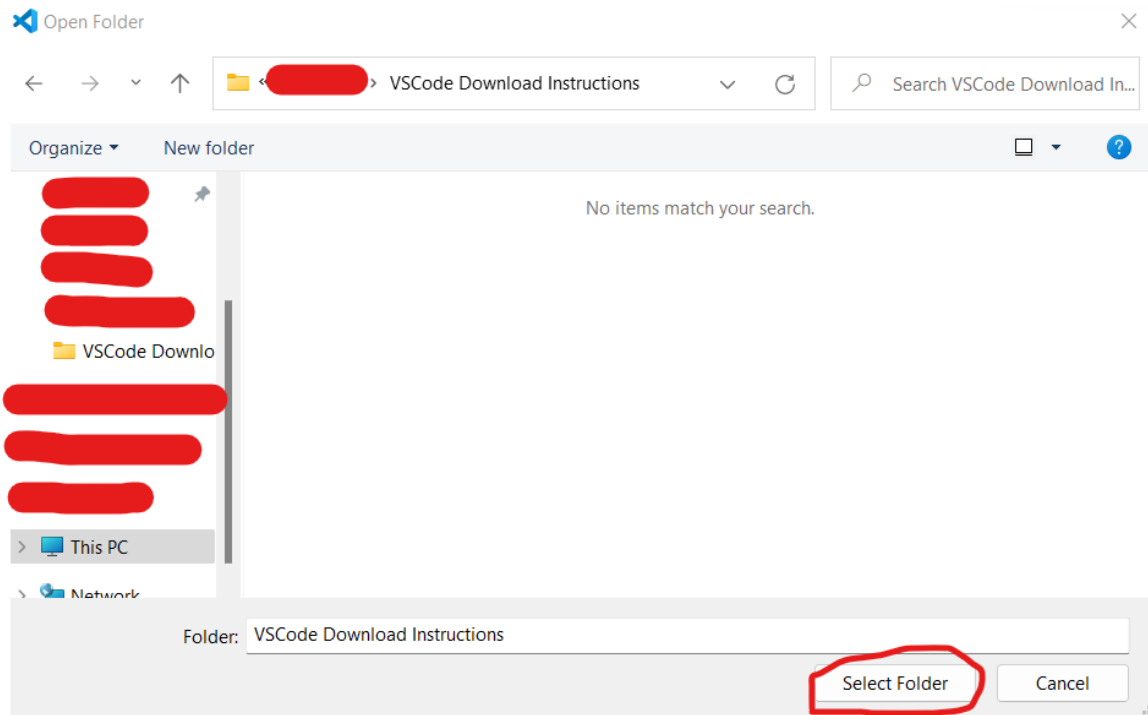

2. In the Terminal, run the following commands to install the packages:

```
a. pip install matplotlib
b. pip install numpy
c. pip install pandas
d. pip install scikit-learn
e. pip install Pillow (only for 6.100L)
```
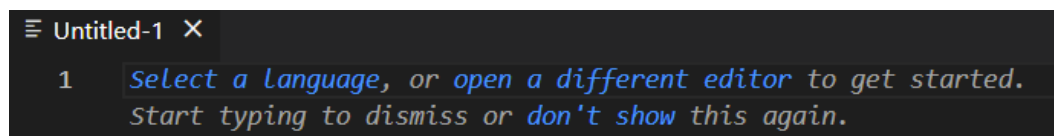
Using VSCode for Editing and Running Code

Editing Code

1. First, go to **File→Open Folder...** on the Menu bar, and navigate to the folder where your code is (or where you want to create the new file). Then, click *Select Folder*.

2. If creating a new Python file:

   a. Go to **File→New Text File** on the Menu bar.

   b. Click on *Select a language*, and choose Python from the list.

   c. Save the file with the name *filename*.py, so, for example, helloworld.py

3. If opening an existing file, go to **File→Open File...** on the Menu bar

4. You can now make changes to your code

Running Code

Once you have made changes, you will need to run the code **(Remember to save any changes before running the code)**. You can do this by clicking the *Run File* icon in the top right.

This will open the terminal, and run your code.