1 Introduction

Thanks for taking an interest in my Python workshop! I'm thrilled you want to learn Python. Whether you're an experienced programmer in another language, or a complete beginner, I think you'll find Python to be a worthwhile addition to your toolbox. This manual is going to take you through the basic "housekeeping" steps to make sure you have an identical environment to the one I used to write and test the code in this tutorial. Note that the setup steps may seem overly complicated for simply writing basic Python... and they are! The reason for this is that by setting up a robust environment, we'll be able to avoid putting out too many fires at the beginning of the workshop, and also I think that getting exposure to more capable tools from the start will make your learning curve with Python quite a bit easier. I anticipate that these steps will take 10-20 minutes.

2 Code Editor

The editor I use for all languages is Microsoft's VsCode. If you use a different editor for coding, it probably works fine for Python, and you can keep using it, you just might not get robust code linting, completion, and debugging features. Also, I'll be less equipped to help you fix any issues you might have. So, use anything other than VsCode at your own risk.

Install VsCode here: `https://code.visualstudio.com/`

3 Python Environment

There are two ways to set up an environment so that you can run the code for this event. The first (and simplest) way is through Docker. The main advantage of doing it this way is that everything runs in a container, a self-contained environment totally configured by scripts I already wrote for you. This will ensure that 1) nothing you do will break anything you normally use, and 2) if you screw something up you can just rebuild the container and it'll

be back in working order. If you are not comfortable using a command line I highly, highly recommend just using Docker as it will basically just configure everything for you. Also, Docker is a great tool to have as a programmer, you'll probably want to learn how to use it at some point.

3.1 Docker

How you install Docker depends on your operating system. Please see the appropriate subsection. No matter which version you install, at no point should you actually need to create a Docker account. Technically you're supposed to make one before you get to the download link, but I've conveniently skipped that step for you and put the links directly in this document.

When you get to the workshop, I'll provide you with a repository that will include the Dockerfile and config files needed to allow you to instantly begin writing Python inside a container. (i.e. You're done once you've installed Docker.)

3.1.1 Windows

The version of Docker you need depends on whether you have a *pro* or *home* version of Windows. If you aren't sure, (on Windows 10 only), right click on the Start Menu icon, click System, then read the "Windows specifications" section.

If you have Windows 10 Pro: `https://download.docker.com/win/stable/Docker%20for%20Windows%20Installer.exe` you will be installing *Docker Desktop*.

If you have Windows 10 Home: `https://docs.docker.com/toolbox/toolbox_install_windows/`. You will be installing *Docker Toolbox*. This program has the same functionality as Docker Desktop, but the installation is a little bit more complicated. Please follow the instructions at the link and let me know if you have any questions.

3.1.2 Linux

If you use Linux on your daily driver I shouldn't need to tell you how to install Docker... NEXT!

3.1.3 Mac

Ugh... if you've been coming to my events you know that Apple can be the WORST when it comes to setting up a development environment that doesn't revolve around XCode. Luckily the Docker installer takes care of all the weird bits for you this time. `https://download.docker.com/mac/stable/Docker.dmg`

4 Directly Installing Python

If Docker won't work for you, or you have something against containers, you can simply install Python on your system. If you know what you're doing, just install Python and Pylint, and I can help you make sure VsCode recognizes your Python install. If you haven't done something like this before, I recommend installing Miniconda: `https://docs.conda.io/en/latest/miniconda.html`. Simply follow the instructions for your operating system, and then I'll take you through the rest of the setup steps at the Workshop.