Python & the Command Line

Getting Started with the Command Line

When walking into a coffee shop you will almost immediately notice three types of people: those socializing with friends, those studying for their exams, and those who code. Those who code can easily be spotted by the black background and white letters on their computer screens known as the command line. To many, the command line can look intimidating but to others, it is a saving grace.

One of the most essential parts of conducting any type of data science project is the ability to navigate and execute commands via the terminal command line. The terminal command line allows users to navigate directories, install libraries, locate files, access files, and execute commands in an efficient and concise way. This chapter is by no means a comprehensive overview of the full capabilities the command line has, but does cover a general list of essential commands a data scientist should know.

The command line is available for Mac, PC, and Linux. While the examples listed below are were executed on a Mac, very similar functionality is also applicable on a PC, but with a slightly different syntax. I will present the code for both Mac and PC in the following examples. You can begin the process by opening the command line known as **Terminal** on a Mac, and **Command Line** on a PC. Opening Terminal will usually, and by default, bring you to what’s known as your home directory. The text you first see will specify your username as well as the name of your system, separate by the *@* symbol. In order to identify the path of your current (working) directory, you can use the *pwd* command to identify the path of the working directory.

alkhalifas@titanium ~ % pwd

This will return the exact directory in which you are currently in. In the case of my system, the returned path was:

Users/alkhalifas

In order to identify the contents within this particular directory, you can use the ls command which will return a list of directories and files.

alkhalifas@titanium ~ % ls