Getting started with Python

Instruction prior to workshop

September 22, 2017

Installation guide for **python** and **pip** on Ubuntu, Windows and MacOS.

Ubuntu:

1- Open the terminal on your Linux machine and follow commands below
   a. $ python3.6 --version
      If you don't see any version number (e,g 3.6.2) , then you need to install **Python**
2- If you are using Ubuntu 16.10 and newer, then you can easily install Python 3.6 with the following commands:
   a. $ sudo apt-get update
   b. $ sudo apt-get install python3.6
3- For other versions of Ubuntu, I recommend using deadsnakes PPA (Need Link) to install **Python** 3.6:
   a. $ sudo add-apt-repository ppa:fkrull/deadsnakes
   b. $ sudo apt-get update
   c. $ sudo apt-get install python 3.6
4- To verify the installation please go to step 1
5- To install **pip** on Ubuntu use command below
   a. $ sudo apt-get install python3-pip
   b. $ sudo apt-get install python3.6-tk

Windows:

1- Go to the following link: https://www.python.org/downloads/
2- Click on the "Download Python 3.6.2"
   a. A file named python-3.6.2.exe should start downloading into your default download folder. The file size is about 30 Mb so it might take a while to download fully if you are on a slow internet connection.
3- Click on it and follow the installation instruction.
   a. For more information on installation please check the following link: https://www.ics.uci.edu/~pattis/common/handouts/pythoneclipsejava/python.html
4- After finishing the installation please verify the installation by
   a. Open a "command prompt" window
      To open a "command prompt" window press "win + R" then type "cmd" in "Open" textbox and click on OK button.
      For more information about command prompt window please check https://www.howtogeek.com/235101/10-ways-to-open-the-command-prompt-in-windows-10/
5- To install **pip** on windows
   a. download get-pip.py from https://bootstrap.pypa.io/get-pip.py

Open a command prompt window and navigate to the folder containing get-pip.py. Then run "python get-pip.py". This will install pip.
For more information please see:
https://github.com/BurntSushi/nfldb/wiki/Python-&-pip-Windows-installation

MacOS:

1- On terminal type
   a. $ python --version
      If you get an error message, you need to install **Python**
2- To update your current version or install the latest version of **Python** type:
   a. $ brew install python
      For more information on installation of brew please see
      http://www.pyladies.com/blog/Get-Your-Mac-Ready-for-Python-Programming/
3- To install **pip**
   a. curl –o http://python-distribute.org/distribute_setup.py
   b. python distribute_setup.py
   c. curl –o https://raw.github.com/pypa/pip/master/contrib/get-pip.py

Installing a text editor:

1- If you do not already have a text editor that you are comfortable using on your machine, please install one prior to the class
2- One very common one to use is Sublime Text which is available for Windows, Mac and Linux (Ubuntu)
   a. https://www.sublimetext.com
   b. Free to download and evaluate, through the full version of the software for continued use costs money
   c. The free version will be adequate for the class
3- If you are adventurous, learn how to use **vim**, **emacs**, or **nano** which are alternate command line text editors.
   a. These text editors have a steep learning curve, but are very powerful once you get the hard of the.

Installing matplotlib package

1- To install **matplotlib** package:
   a. python –m pip install –U pip setuptools
   b. python –m pip install matplotlib
   c. For more information please see
      http://matplotlib.org/users/installing.html