Installation Assignment
Installing Python3, pip, IPython, Jupyter, and Matplotlib

This task must be completed by October 1 before the beginning of the class. There will be a Python diagnostic test that you will take on your laptop using Python 3. No points will be awarded for this assignment, although the submission on canvas as detailed below is required.

1. Install Python 3.7.x, pip, IPython, Jupyter, and matplotlib on your laptop.

Installation and setup procedures are discussed in Chapter 1 of the book for different operating systems including Apple (OSX, macOS), Windows, and GNU/Linux. If needed, do necessary updates to the installation to have the latest version. [You may have to look it up on the web and still make some modifications. For example, https://mas-dse.github.io/startup/anaconda-macosx-install/ provides instructions on installation and update for MacOS]

Check which versions of software you have:
(for example)
```
python --version
python --m pip --version
>>>import matplotlib
>>>matplotlib.__version__
Jupyter --version
```

2. Check that
A. Python 3 is running (see Chapter 2.1); q to quit
B. IPython is running (see Chapter 2.2); exit() to quit
C. Jupyter is running (see Chapter 2.2); Shift-Enter to execute; Close and halt or ctrl-C to quit
D. Matplotlib is integrated (see Chapter 2.2)
E. Draw a Jupyter inline plot using matplotlib as shown in Figure 2.6
   (import numpy as np)

3. Clone the data and code notebooks provided by the author of the book from the following repository:
   https://github.com/wesm/pydata-book
4. Preliminaries

First, let us check that you are working with Python3, and that you have the package required for the tests. **Nose.** The line below works on colab.research.google.com. If it does not work on your laptop, do:

If you use pip to install packages:

```
!pip install nose
```

Otherwise, if you use Conda:

```
!conda install nose
```

```
In [0]: from nose.tools import assert_equal, assert_true, assert_false
In [0]: # We check that you are running Python 3.
import sys
assert_equal(sys.version_info.major, 3)
```

**Submission Requirements**

1. On canvas, provide the following information. For example:
   
   Operating System: MacOS 10.13.6
   Python: 3.7.2
   IPython: 7.3.0
   pip: 19.0.3
   matplotlib: 3.0.2
   Jupyter: 4.4.0

2. If you are unable to complete these tasks, take help from your peers and as a last resort, from the teaching team at the very beginning of the class on October 1. You should have finished these tasks before you can take the Diagnostic Test in class on October 1.

**Reading Assignment**

Chapter 1: Preliminaries
Chapter 2: Sections 2.1 and 2.2
Appendix B (Optional): Advanced IPython