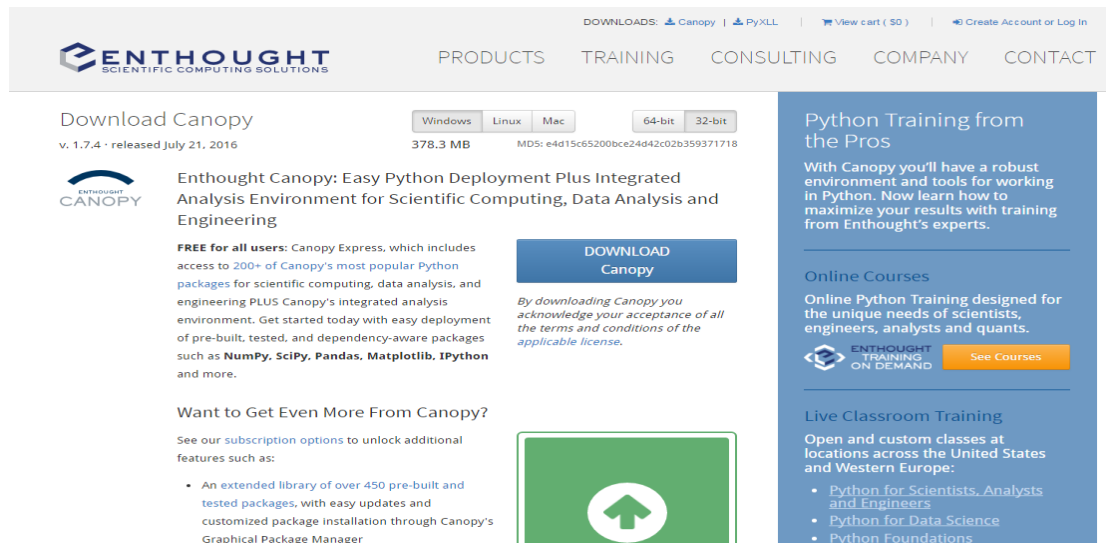


Software requirement
for
Python for Finance (2nd edition)
Packt Publishing, ISBN xxxxxxxx, 2017

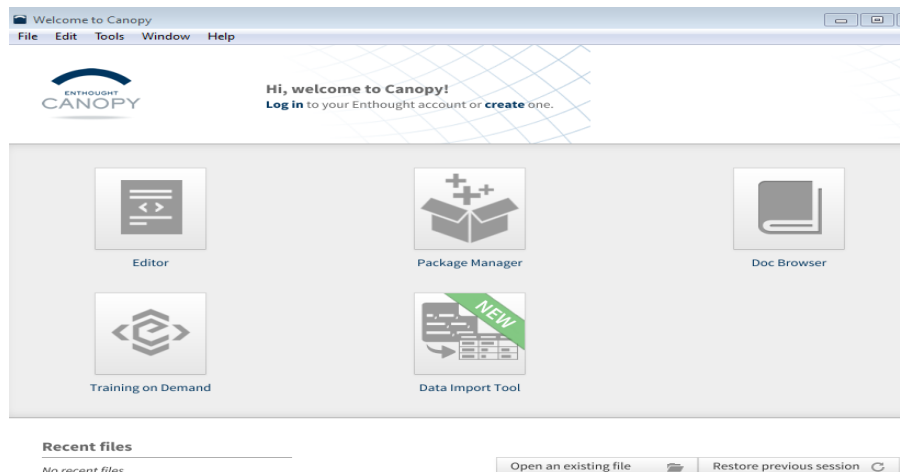
The computational tool used by the book is Python which is free. There are many ways to download this wonderful software. The book introduces three ways to do so: download and install Python via Canopy (Enthought), via Spyder (Anaconda) or download and install Python directly. The Enthought and Anaconda could be viewed as a super package.

Method #1: installing Python via Enthought

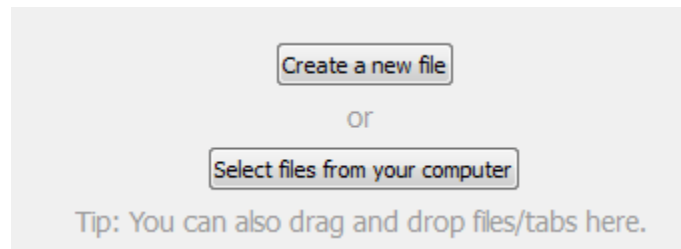
It is a good idea to have another super package to make our programming in Python easier. In this section, we discuss two simple tasks: how to install Python via Canopy and how to check and install various Python modules. To install Python, go to the related web page at <https://store.enthought.com/downloads/#default>. After that, we could see the following image.



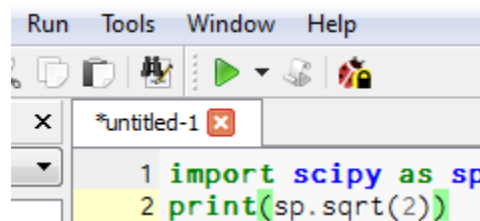
Depend on the operating system, users could download Canopy, such as windows 32-bit. After launching Canopy, the following image would appear.



The two most used panels are Editor and Package Managers. After clicking “Editor”, the following panel would pop up.

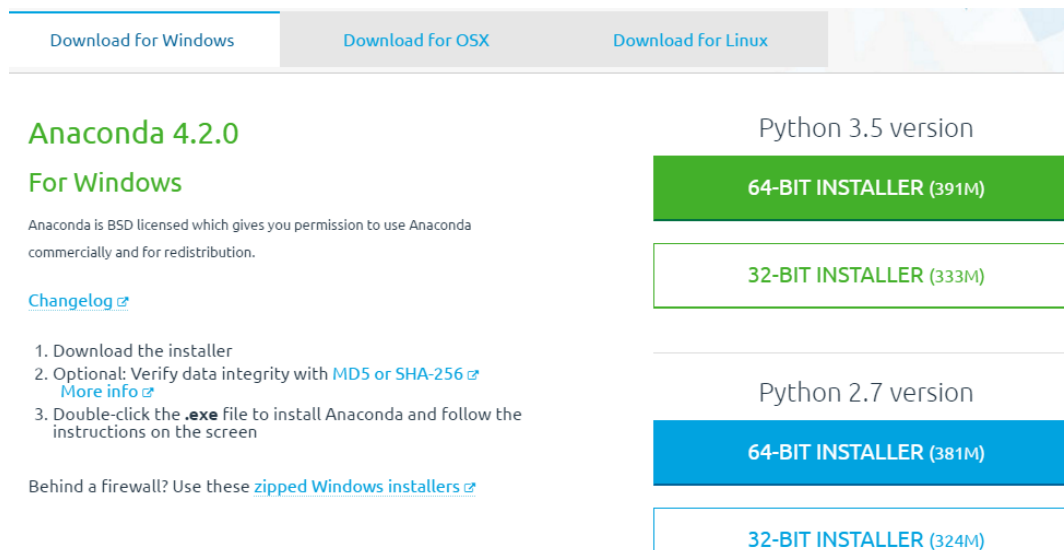


Obviously, we could create a new file or select files from our existing programs. Let’s try the simplest one, see below. After click the green bottom, we could run the program. Alternatively, we could click the “Run” on the menu bar then choose appropriate action.



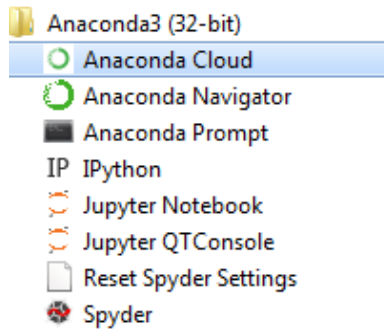
Method #2: installing Python via Anaconda

Below mentioned is a simple 2-step approach. First, we go to <http://continuum.io/downloads>, then find an appropriate package, see the image below.

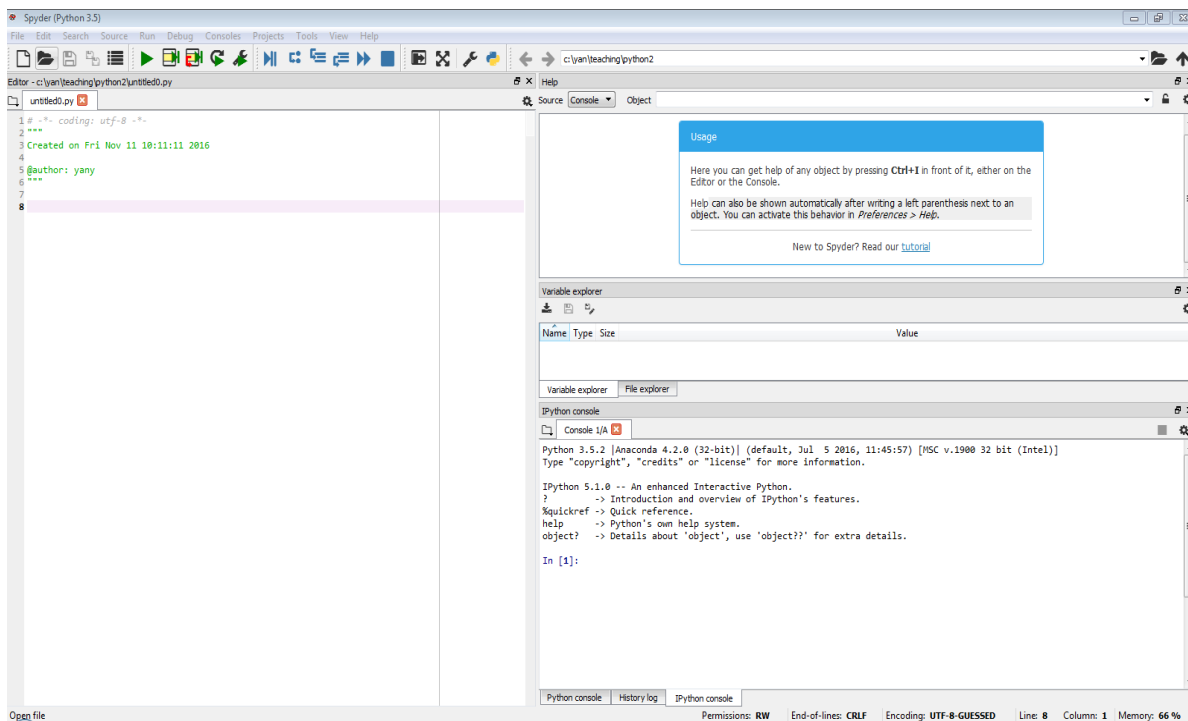


For Python, different versions coexist. From the above image, we see that there exists two versions of 3.5 and 2.7. For this book, the version is not that critical. The old version had fewer problems while the new one usually has new improvements. Again, module dependency could be a big headache, see Chapter 2, Introduction to Python Modules for more detail. The version of Anaconda is 4.2.0. Since we would launch Python through Spyder, it might have different versions as well.

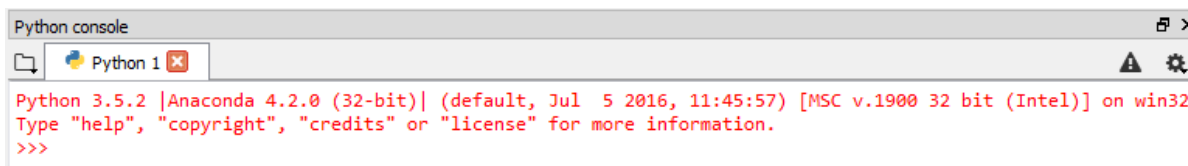
Launch Python via Spyder. After Python is installed via Anaconda, we could see the following image after we click “Start” (for a Window version), All Programs, Anaconda.



After we click “Spyder” of the last entry in the above image, we will see the following 4 panels.



The top left panel (window) is our program editor where we write our programs. The right bottom panel is the IPython console where we could type our simple commands. IPython is the default one. Alternatively, we could launch Python console by clicking “Consoles” on the menu bar then “Open a Python console”. After that the following window would appear.



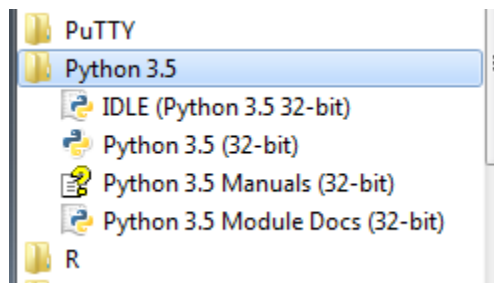
The top panel is our help window where we could seek help. The middle one is called “Variable Explorer” where the names of variables and their values are shown. Depending on personal preference, users would scale those panels or reorganize them.

Method #3: Installing Python directly

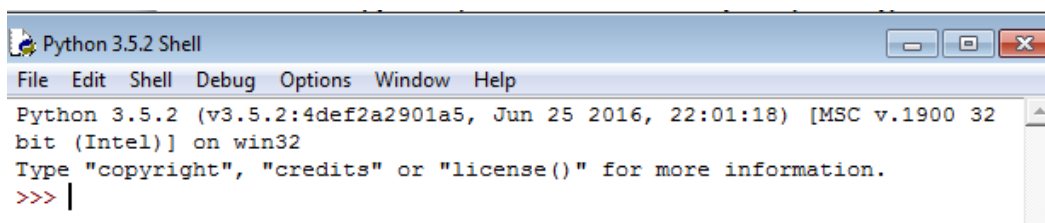
For most users, knowing how to install Python via Anaconda is more than enough. Just for completeness, here the second way to install Python is presented. There are two steps involved. First, go to <http://www.python.org/download>.



Depending on your computer, choose the appropriate package, for example, Python 3.5.2 version. For this book the version of Python is not important. At this stage, a new user could just install Python with the latest version. After installation, we would see the following entries for a window version.



To launch Python, we could click "IDLE (Python 3.5. 32 bit)".



We could type various command, see below.

```
>>> pv=100
>>> pv*(1+0.1)**20
672.7499949325611
>>> import math
>>> math.sqrt(3)
1.7320508075688772
>>>
```