Introduction to Python 0 – How to run Python

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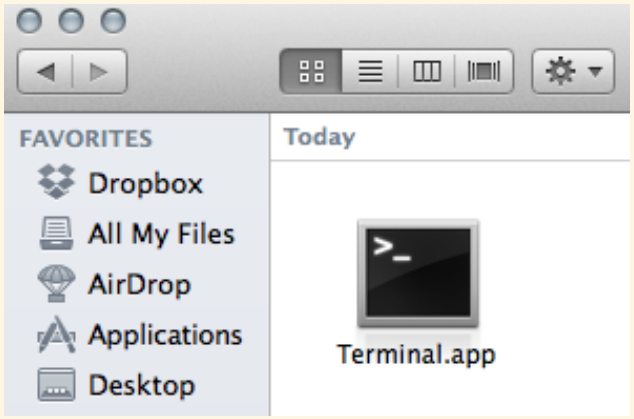
Schedule

from		to	topic	note
9:30am	-	10:30am	How to run Python; Comments; Variables; Integers and Floating point numbers; Strings; None; Operators	
10:30am	-	11:00am	Break	
11:00am	-	noon	Flow Control and Compound statements; File I/O; Defining and Calling a Function; Local and Global Variables; Importing a module	
noon	-	1:30pm	Lunch break	#242
1:30pm	-	2:30pm	List; Dictionary; Data Structure	
2:30pm	-	3:00pm	Break and Optional Evaluation	
3:00pm	-	4:00pm	Tuples; Class; Exception Handling; Regular Expression	

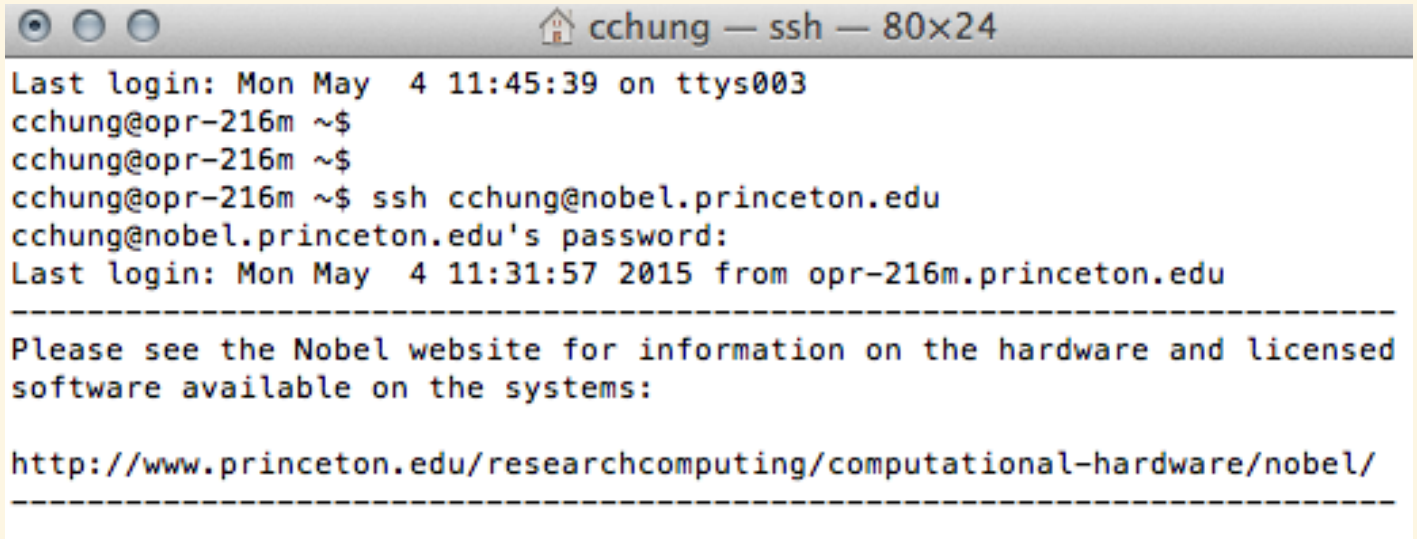
Running Python Read-Eval-Print Loop 1

- For those who are using UNIX-like systems, including Apple Mac, Nobel, or Adroit.
- On Mac, open the terminal window.



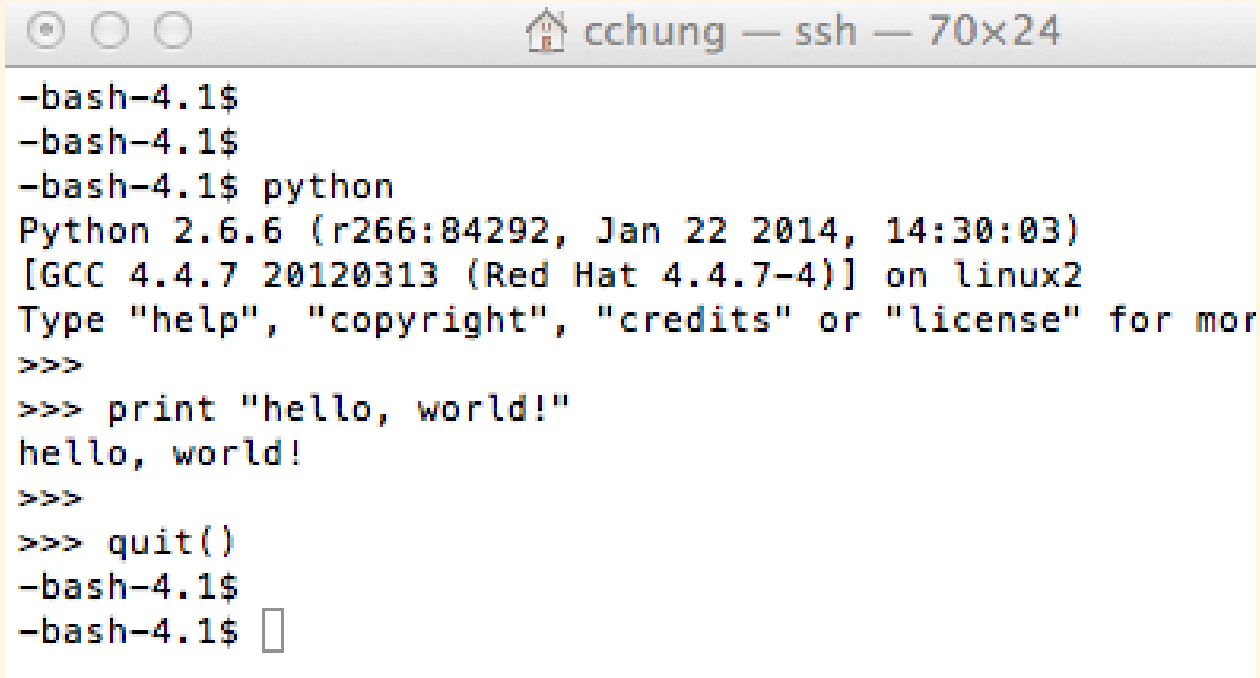
Running Python Read-Eval-Print Loop 2

- Skip this step, if you are running locally installed Python. Continue, if you are to run Python on Nobel or Adroit.
- Register for an account at: `http://www.princeton.edu/researchcomputing/computational-hardware/`
- Secure Shell (ssh) into Nobel (or Adroit).



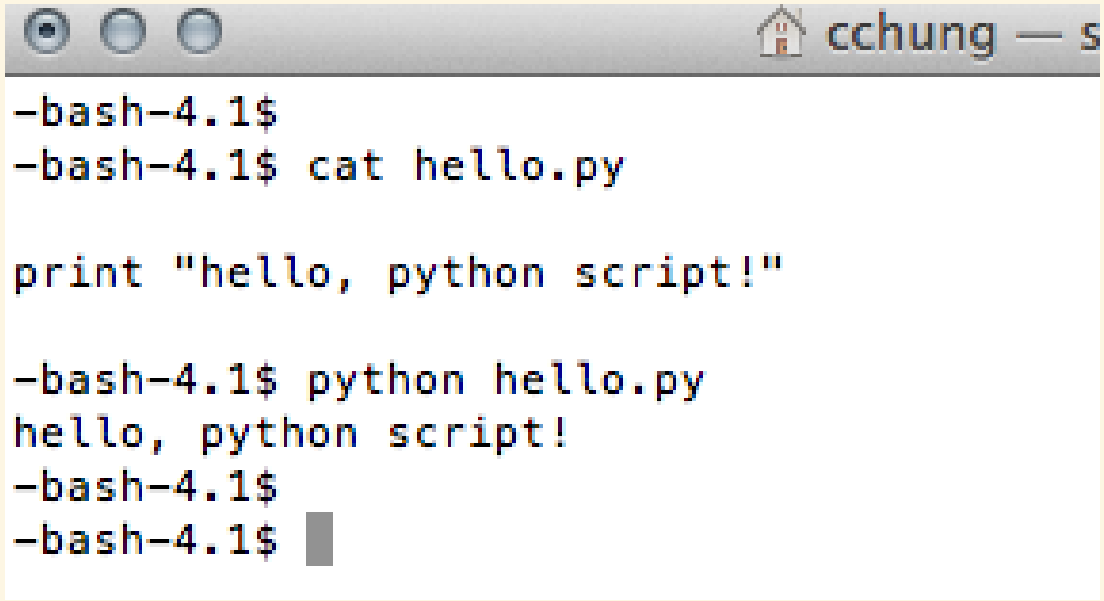
Running Python Read-Eval-Print Loop 3

- Run Python REPL at the shell prompt.



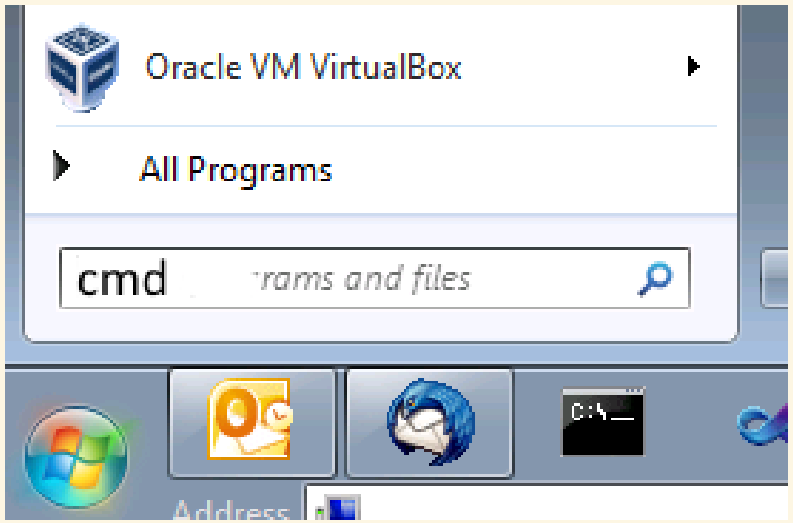
Running a Python Script File (.py)

- Create a python script file using a text editor (nano, vim, emacs, ...).
- Type "python" followed by the script file name at the shell prompt.



Running a Local Python REPL on Windows 1

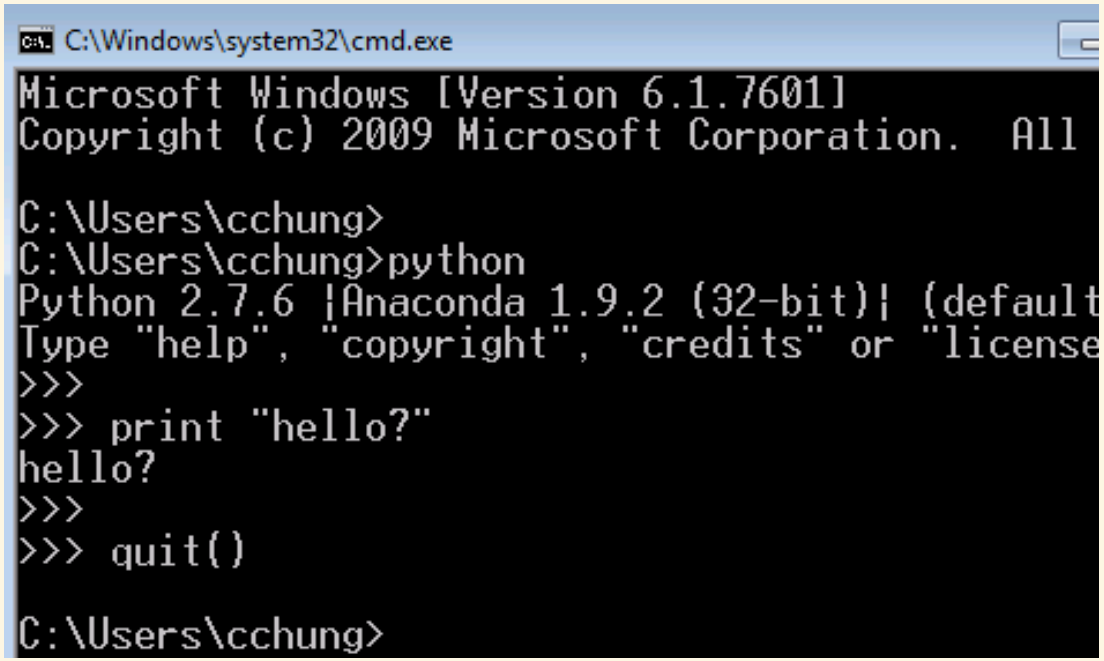
- (MS Windows before 8) Open a cmd window.



- (Ms Windows 8 and 8.1) Swipe up to show the Apps screen. Swipe or scroll to the right and click on the Command Prompt under the Windows System section.

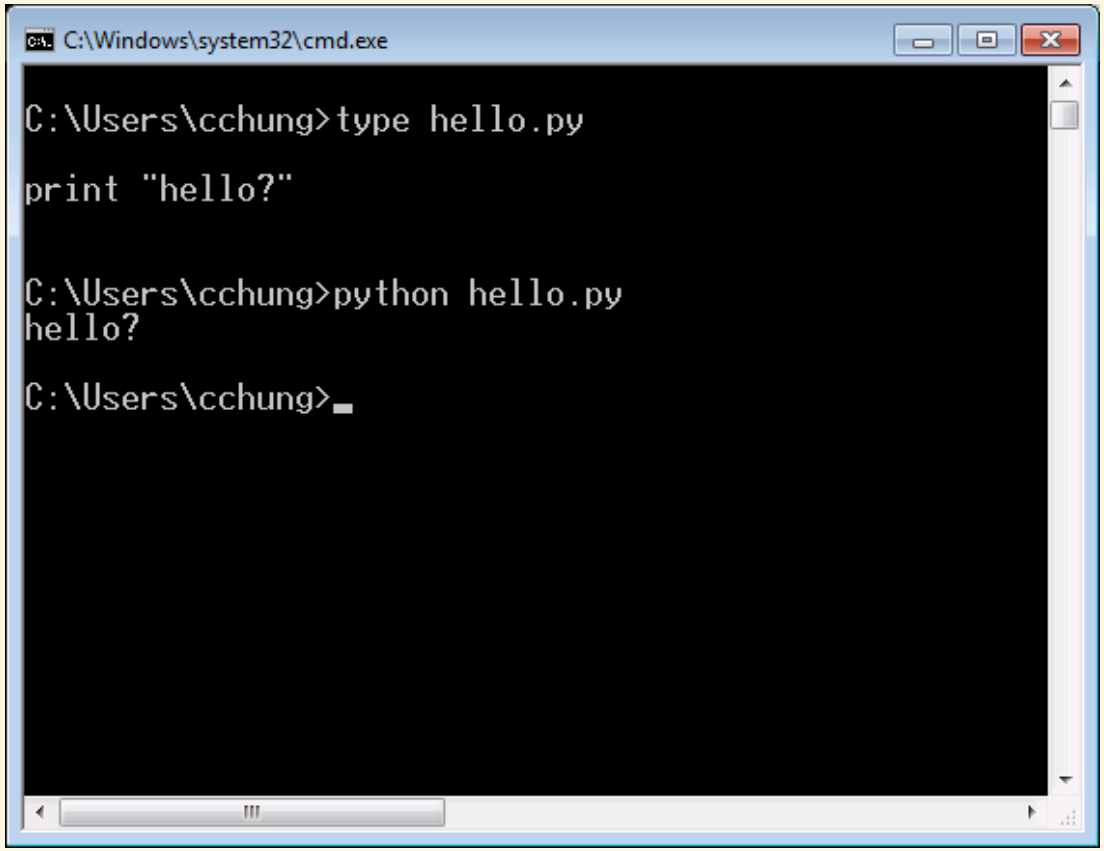
Running a Local Python REPL on Windows 2

- Start Python REPL.



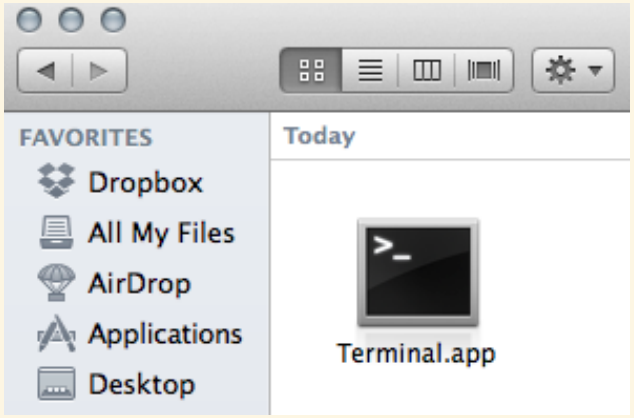
Running a Python Script File (.py) on Windows

- Create a python script file using a text editor (notepad, nano, vim, emacs, ...).
- Execute python command with the script file name at the shell prompt.



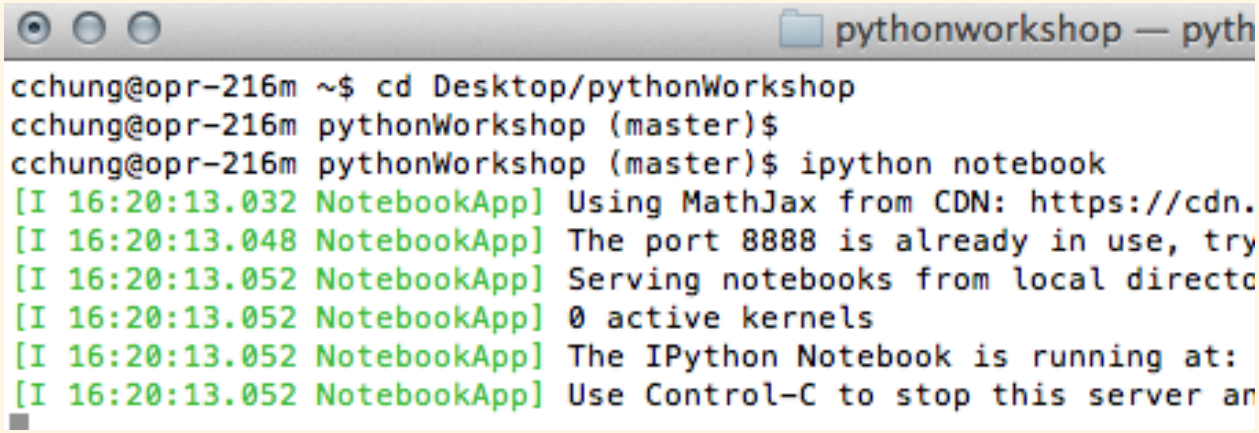
Starting IPython Notebook 1

- For those who are using Apple Mac.
- Open the terminal window.



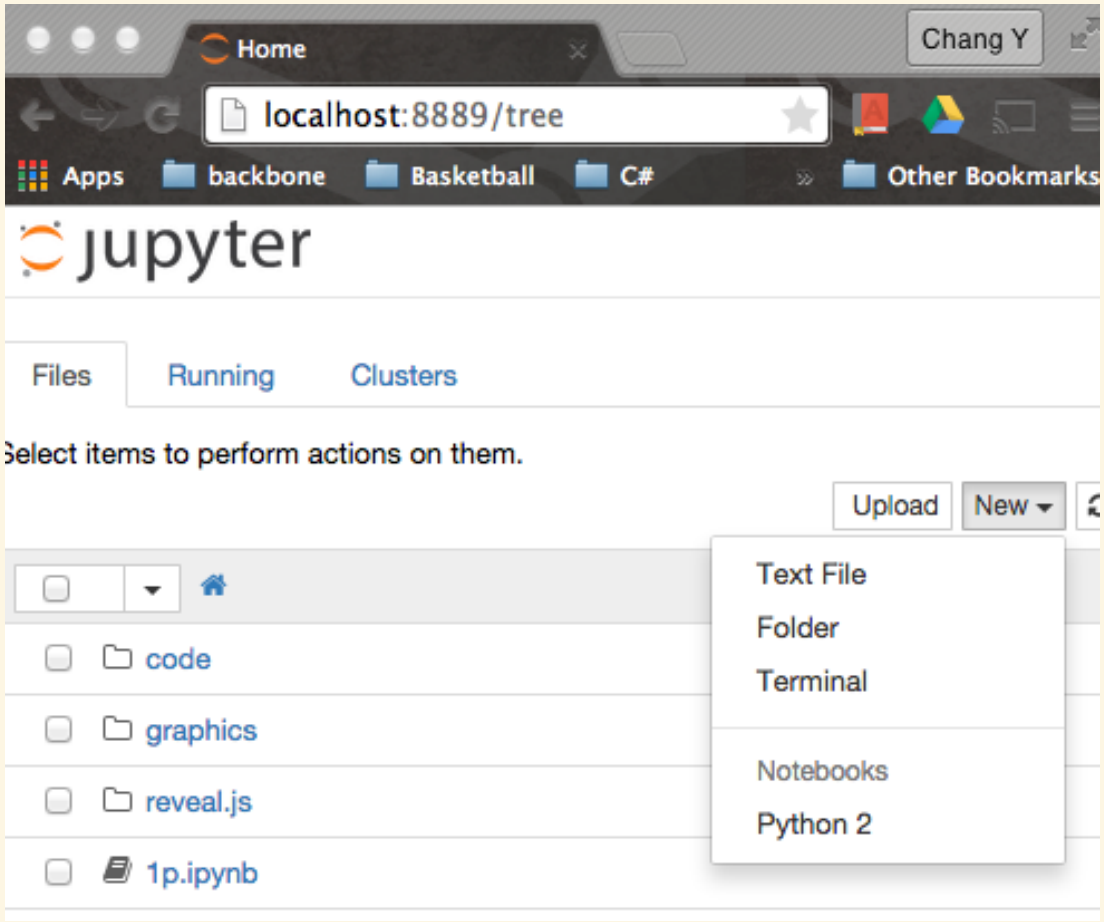
Starting IPython Notebook 2

- (Optional) Change directory to the desired sub-directory.
- Execute "ipython notebook" command. The default browser should open up showing the current working directory.



Starting IPython Notebook 3

- Either open an existing ipython notebook (.ipynb) or create a new one (click on Python 2 under New > Notebooks)



Quiz

- Print out a "HELLO" in your environment.
- Print out "HELLO" 20 times in your environment.
- Print out "HELLO" *vertically*, that is, the printed output should look like below (line numbers are not required).

```
1 H
2 E
3 L
4 L
5 O
```