

# BIST Python Bootcamp

## Why Python?

14.09.2017



# Other ways of Data Analysis - Excel

	A	B	C
1			
2			
3			
4			
5			
6			
7			



# Other ways of Data Analysis - Excel

	A	B	C
1			
2			
3			
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5			
6			
7			



# Other ways of Data Analysis - Excel

	A	B	C
1			
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	A	B	C
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7			

	A	B	C
1			
2			
	A	B	C
1			
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3			
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7			

# Python – Arrays (Block 4)

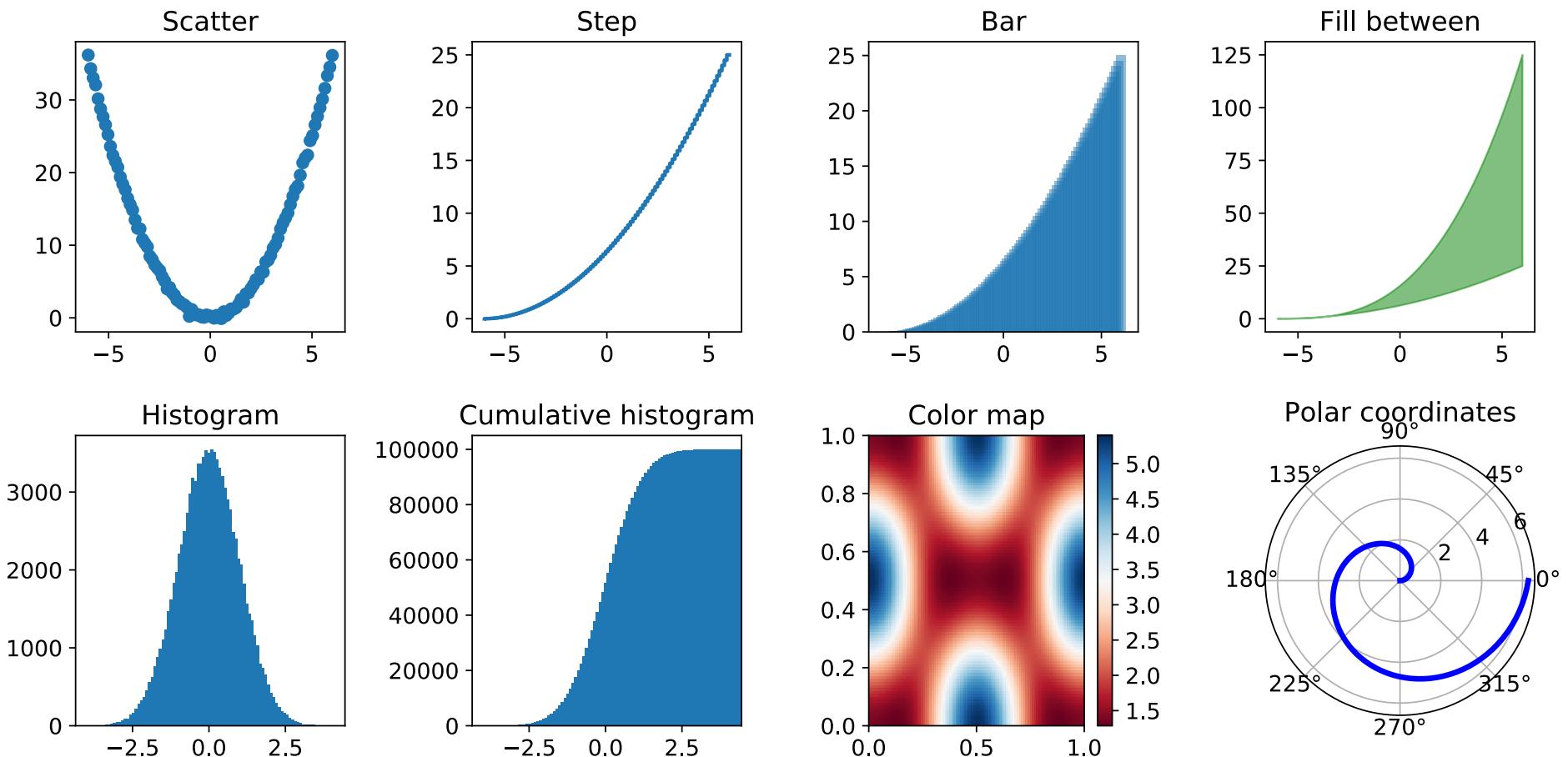
In [4]: `np.random.randint(0, 100, (3, 6, 5))`

Out[4]:

```
array([[[17, 31, 15, 89, 63],  
       [40, 77, 88, 96, 88],  
       [66, 93, 30, 39, 40],  
       [52, 76, 28, 33, 31],  
       [94, 46, 61, 62, 70],  
       [88, 60, 97, 36, 28]],  
  
      [[11, 82, 96, 38, 43],  
       [27, 86, 70, 93, 31],  
       [90, 78, 48, 72, 94],  
       [57, 66, 27, 88, 44],  
       [67, 54, 47, 90, 88],  
       [18, 52, 24, 83, 50]],  
  
      [[98, 25, 51, 97, 34],  
       [41, 20, 20, 46, 38],  
       [29, 58, 95, 51, 83],  
       [90, 63, 4, 72, 60],  
       [57, 74, 24, 3, 84],  
       [82, 58, 4, 18, 69]]])
```



# Python – Plotting (Block 5)

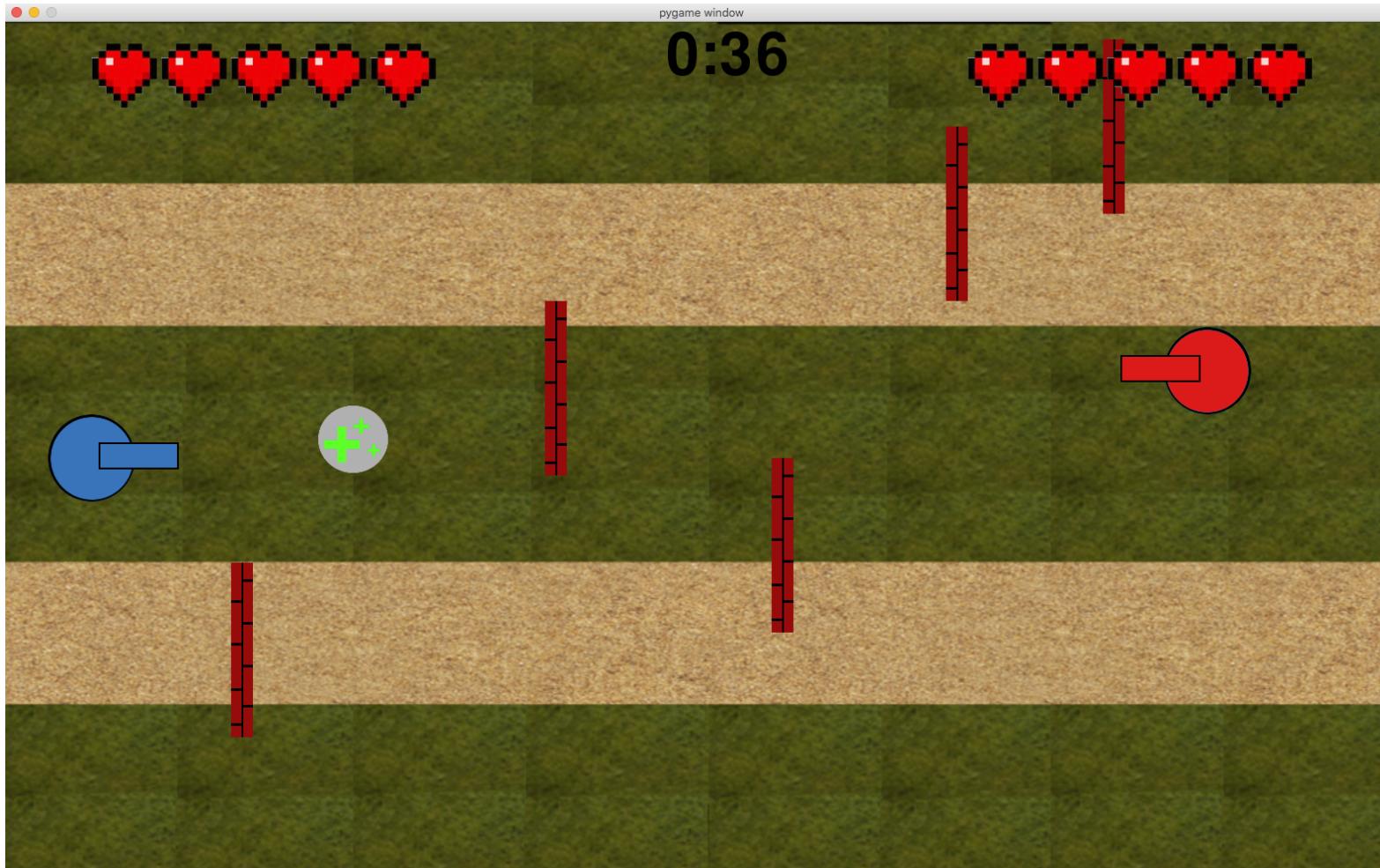


# Alternatives to Python



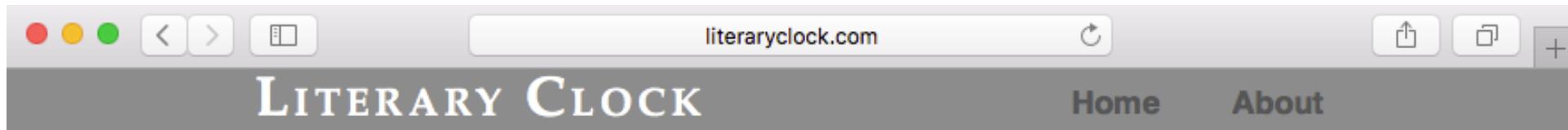
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# Other uses for Python - Games



[www.raywenderlich.com/24252/beginning-game-programming-for-teens-with-python](http://www.raywenderlich.com/24252/beginning-game-programming-for-teens-with-python)

# Other uses for Python - Twitter



I picked up my briefcase, glancing at my watch again as I did so. Three thirty-three.

[11/22/63 by Stephen King](#)

[pythonhow.com/building-a-website-with-python-flask/](#)



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# Other uses for Python - Twitter

 **Literary Clock**  
@literaryclock

Tweets	Following	Followers	Likes	Moments
221	39	28	3	0

 **Literary Clock** @literaryclock · Aug 16  
if we all step smartly and follow Lor— Com— Sir Samuel we ought to be  
back here for lunch no later than half past one  
Jingo  
Terry Pratchett

Reply Retweet Like More

 **Literary Clock** @literaryclock · Aug 16  
Half-past one, The street lamp sputtered, The street lamp muttered,  
Rhapsody on a Windy Night  
T. S. Eliot

Reply Retweet Like More

[emerging.commons.gc.cuny.edu/2013/10/  
making-twitter-bot-python-tutorial/](http://emerging.commons.gc.cuny.edu/2013/10/making-twitter-bot-python-tutorial/)



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# Anaconda - Download

## Download Anaconda Distribution

Version 4.4.0 | Release Date: May 31, 2017

Download For:   

[www.anaconda.com/download/](http://www.anaconda.com/download/)



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# Anaconda

ANACONDA NAVIGATOR BETA

Applications on root Channels Refresh

Home Environments Learning Community Documentation Developer Blog Feedback

**jupyter notebook** 4.2.3

Web-based, interactive computing notebook environment. Edit and run human-readable docs while describing the data analysis.

**qtconsole** 4.2.1

PyQt GUI that supports inline figures, proper multiline editing with syntax highlighting, graphical calltips, and more.

**spyder** 3.0.0

Scientific Python Development Environment. Powerful Python IDE with advanced editing, interactive testing, debugging and introspection features

**glueviz** 0.10.4

Multidimensional data visualization across files. Explore relationships within and among related datasets.

**orange3** 3.4.1

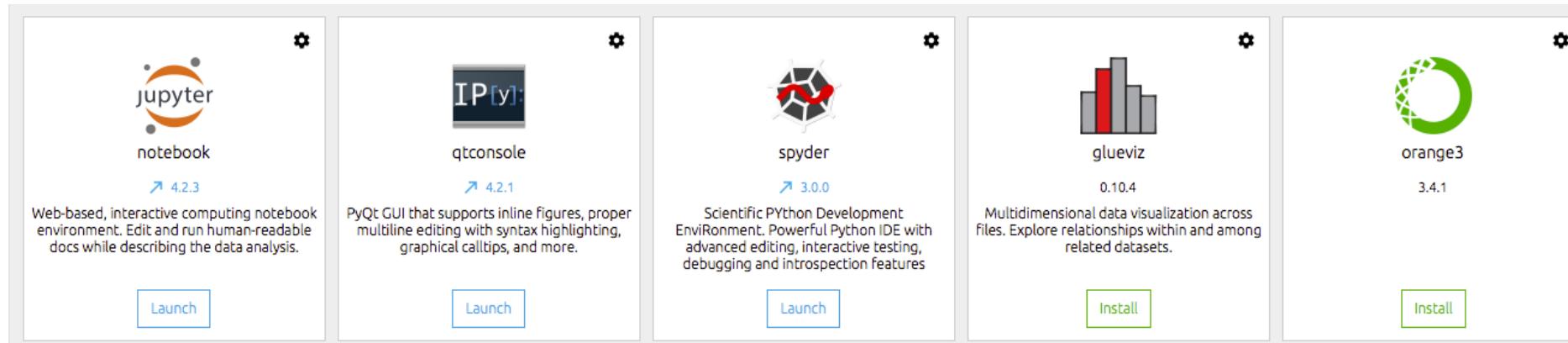
Install

The screenshot shows the Anaconda Navigator application interface. On the left is a sidebar with icons for Home, Environments, Learning, and Community, along with links for Documentation, Developer Blog, and Feedback. The main area displays a grid of application cards. Each card includes the application icon, name, version, and a brief description. Buttons for 'Launch' or 'Install' are present in each card. The top navigation bar shows 'root' under 'Applications on' and 'Channels', with a 'Refresh' button. A status bar at the bottom right shows the current session ID.



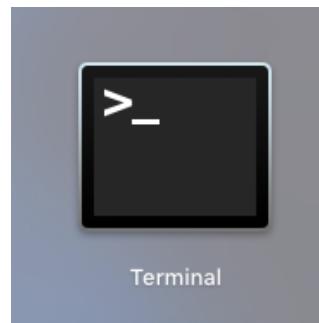
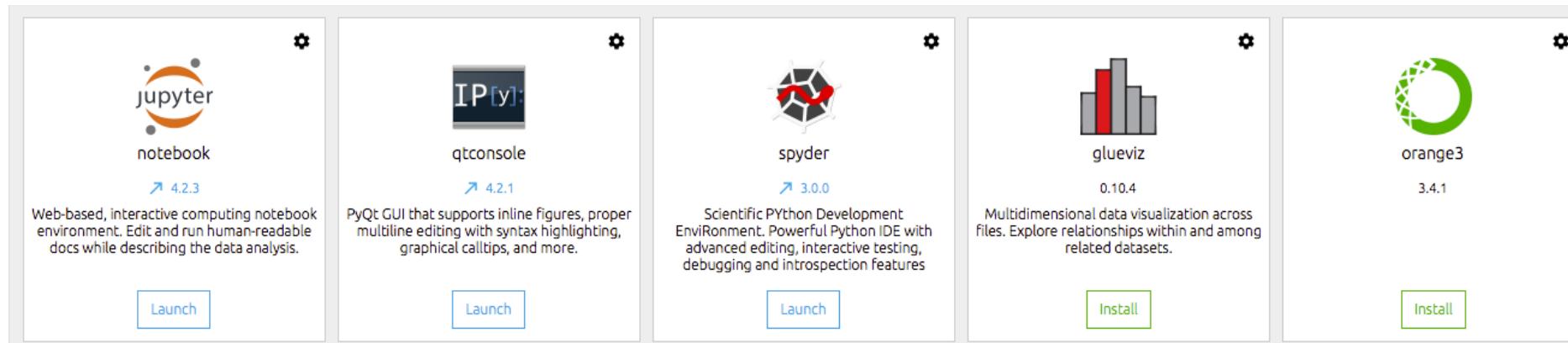
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# Anaconda

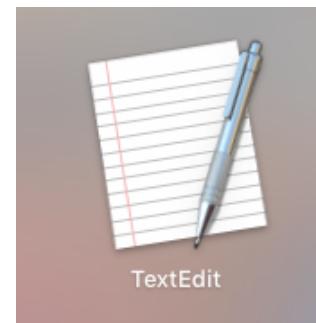


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# Anaconda – Mac OS X



Terminal

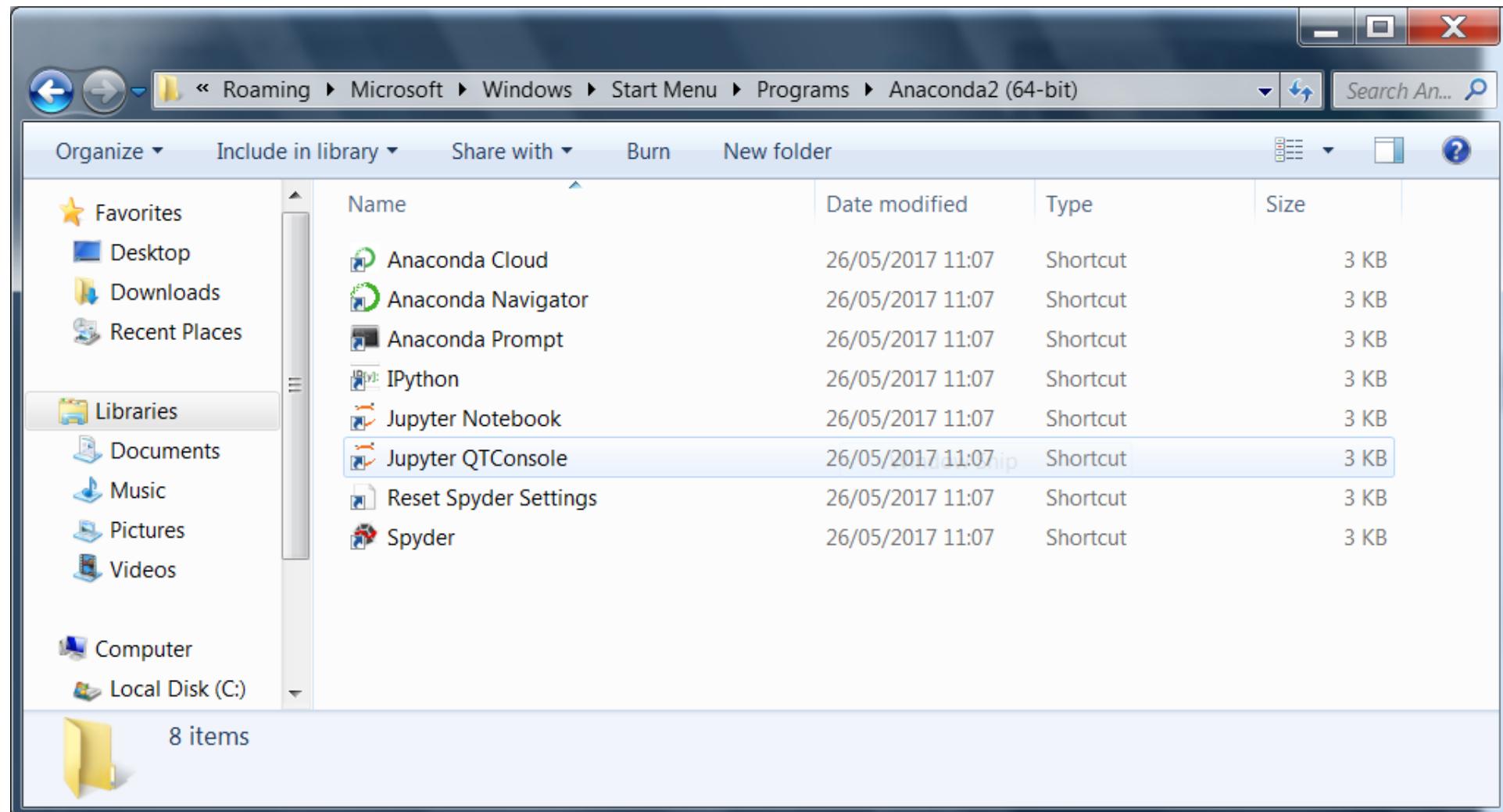


TextEdit



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# Anaconda – Windows



# Getting the course data - Github

## Git

Git is a version control software that lets you keep track of the history of your code, data, and documents. To download the course materials

<https://github.com/bdobon/BIST-Python-Bootcamp>

Scientific python course material for two days. <http://bist.eu/master/>

python data-science scientific-computing course-material

70 commits

1 branch

0 releases

3 contributors

Branch: master ▾

New pull request

Find file

Clone or download ▾

 apozas committed on GitHub Minor typo corrections

Latest commit d60b592 4 days ago

 stocks

Added interactive plotting and stocks datasets

19 days ago

 0\_Preliminary\_Requirements.md

Corrections for 0\_Prelim

2 months ago

 1\_Git\_Anaconda\_Jupyter\_Spyder.ipynb

Add git log and git checkout

15 days ago

 1\_Why\_Python.pdf

1\_Why\_Python - presentation added

4 days ago