

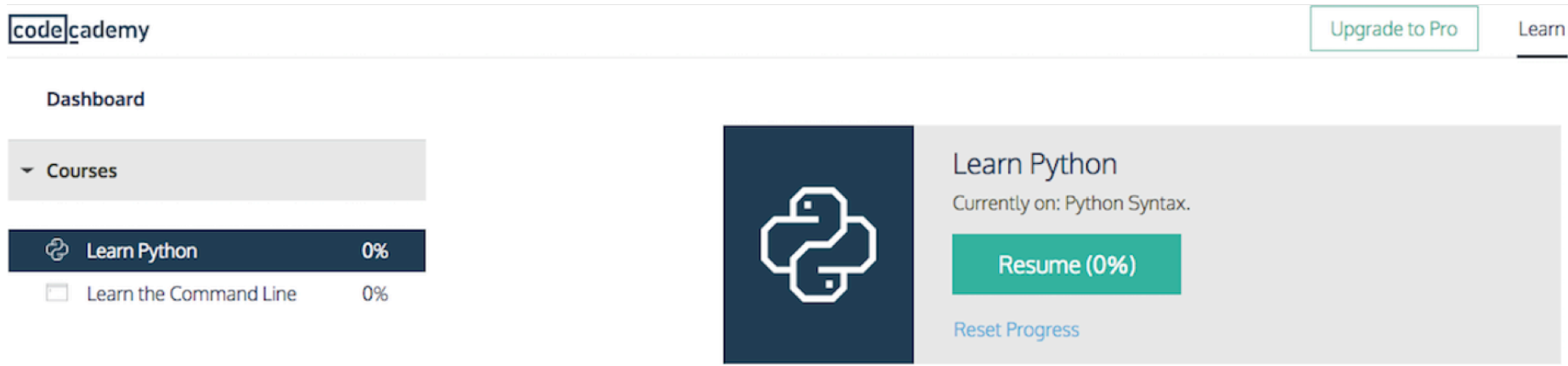
Install Anaconda

- Install anaconda version **2.7** from:
<https://www.anaconda.com/download/>

It will directly install a lot of useful tools related to python usage to your computer. If your computer refuses to install it, then download python 2.7 here instead:

<https://www.python.org/downloads/release/python-2712/>

If you have never programmed



The screenshot shows the Codecademy dashboard. At the top left is the 'codecademy' logo. At the top right are links for 'Upgrade to Pro' and 'Learn'. Below the logo is a 'Dashboard' section. On the left, under 'Courses', there is a list of courses: 'Learn Python' (0%) and 'Learn the Command Line' (0%). The 'Learn Python' course is highlighted. To the right of the course list is a large card for 'Learn Python'. It features the Python logo and the text 'Learn Python' and 'Currently on: Python Syntax.'. There is a green 'Resume (0%)' button and a blue 'Reset Progress' link.

codecademy

Upgrade to Pro

Learn

Dashboard

▼ Courses

Learn Python 0%

Learn the Command Line 0%

Learn Python

Currently on: Python Syntax.

Resume (0%)

Reset Progress

Codecademy.com

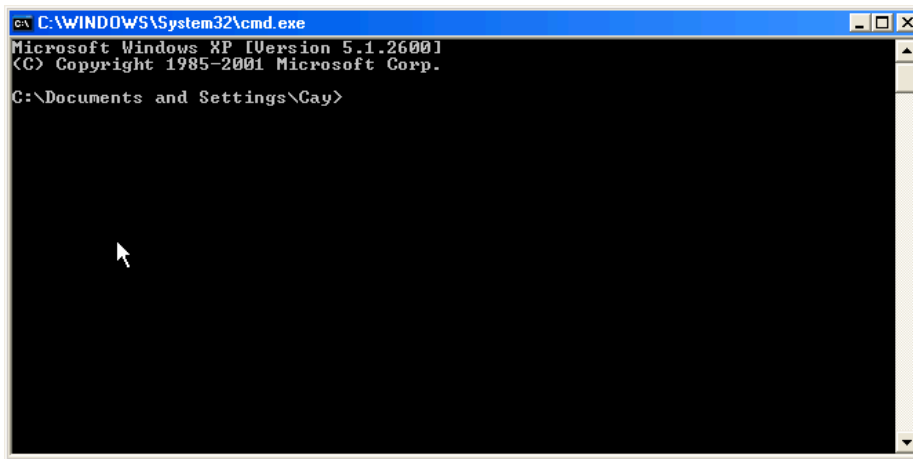
These are self-contained tutorials to get you familiar with python!



You need:

1. Windows Command Prompt

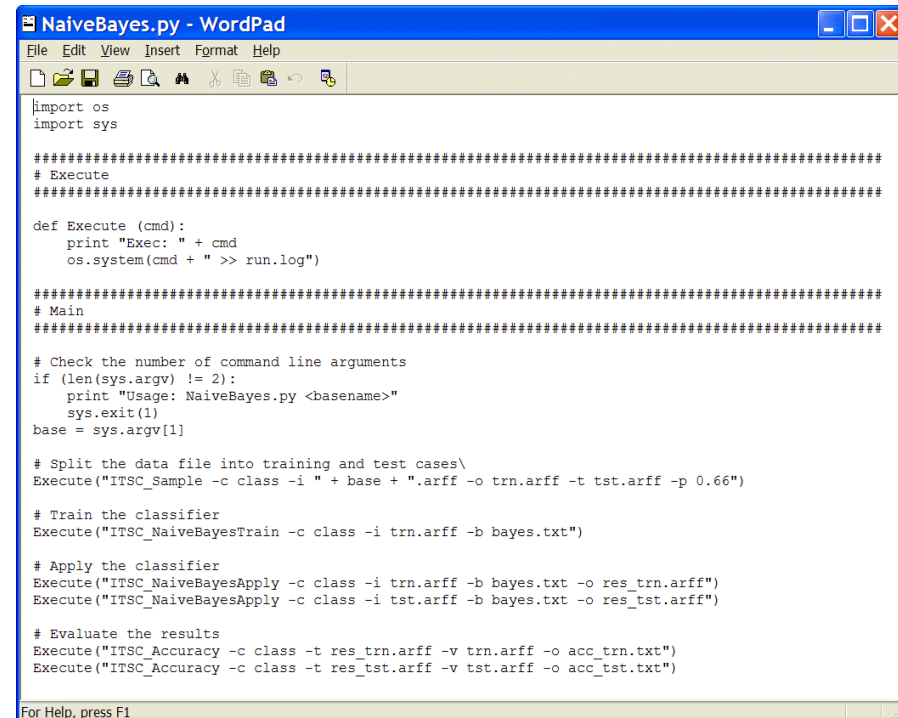
It will read python code if you type:
ipython



```
C:\WINDOWS\System32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Documents and Settings\Cay>
```

* If you opened ipython directly from Anaconda no need of starting ipython from the terminal, it is the same thing.

2. A Text editor. You can open scripts there. For example *wordpad*. All the scripts are text files that can be ran bit by bit or at once. Today we want to run them bit by bit.



```
NaiveBayes.py - WordPad
File Edit View Insert Format Help

import os
import sys

#####
# Execute
#####

def Execute (cmd):
    print "Exec: " + cmd
    os.system(cmd + " >> run.log")

#####
# Main
#####

# Check the number of command line arguments
if (len(sys.argv) != 2):
    print "Usage: NaiveBayes.py <basename>"
    sys.exit(1)
base = sys.argv[1]

# Split the data file into training and test cases\
Execute("ITSC_Sample -c class -i " + base + ".arff -o trn.arff -t tst.arff -p 0.66")

# Train the classifier
Execute("ITSC_NaiveBayesTrain -c class -i trn.arff -b bayes.txt")

# Apply the classifier
Execute("ITSC_NaiveBayesApply -c class -i trn.arff -b bayes.txt -o res_trn.arff")
Execute("ITSC_NaiveBayesApply -c class -i tst.arff -b bayes.txt -o res_tst.arff")

# Evaluate the results
Execute("ITSC_Accuracy -c class -t res_trn.arff -v trn.arff -o acc_trn.txt")
Execute("ITSC_Accuracy -c class -t res_tst.arff -v tst.arff -o acc_tst.txt")

For Help, press F1
```



You need:



1. Terminal (in Applications/Utilities)

It will read python code if you type:
ipython

```
Terminal — bash — 80x24
Last login: Fri Jan 30 19:47:33 on ttys000
Macintosh:~ amitbhawani$ defaults write com.apple.dashboard devmode YES
Macintosh:~ amitbhawani$
```

2. A Text editor. You can open scripts there.
For example *TextEdit*. All the scripts are
text files that can be ran bit by bit or at once.
Today we want to run them bit by bit.

```
ubiquitous_C63CFFE0-FC5F-4BC0-B628-7CF7680AB20D.mailsignature — Edited
Content-Transfer-Encoding: 7bit
Content-Type: text/html;
  charset=us-ascii
Message-Id: <A9B62A79-4847-4310-B5C1-4DF48788E499@nyc.rr.com>
Mime-Version: 1.0 (Mac OS X Mail 8.0 \((1955.2)\))

<body style="color: rgb(0, 0, 0); letter-spacing: normal; orphans: auto; text-align:
start; text-indent: 0px; text-transform: none; white-space: normal; widows: auto;
word-spacing: 0px; -webkit-text-stroke-width: 0px; word-wrap: break-word; -webkit-
nbsp-mode: space; -webkit-line-break: after-white-space;">This is a temporary
placeholder. It will be overwritten later...</body>
```

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from Anaconda no need of starting
ipython from the terminal, it is the
same thing.

<http://tinyurl.com/k9ore9o>

- GettingStarted.pdf
 - How to open python on your own computer
- AdvancedBasics.py
 - data structures and python basics
- Summary_fasta.py
 - Output a brief summary from an input file
- data_and_plotting.py
 - process data using python and easy plotting
- resources.txt
 - Some links to a few nice resources