

Running Python from Command Lines.

This is a guide for how to run a Python code from command line.

Much of the information is also available here in this website:

<http://learnpythonthehardway.org/book/ex0.html>

When operating in Terminal, You can't avoid using a bit Unix. You can learn a little bit Unix here:

<http://www.ee.surrey.ac.uk/Teaching/Unix/>

Python first became popular as a *scripting language*, which is used to automate repetitive tasks on a computer. As a scripting language, it is heavily geared toward being used in text-based *command shell*. In order to learn how to get the most of out Python, you need to learn how to use your command shell.

Command shells are operating system dependent. They are called different things depending on whether you are using Windows, Macintosh, or Linux. The commands that you are allowed to type in them also depend on your choice of OS. Below we describe how to use the command shell in each of the popular computer operative systems.

The specific commands on the various operating systems are similar, but they can also be very, very different (particularly between Windows and OS X/Linux). If you have never used a command shell before, we highly recommend that you **pick one operating system and use it for the entire semester**; otherwise, this can get very confusing. In particular, if you have a Macintosh laptop, we suggest that you bring it to the lab sections, as the lab computers are all Windows machines.

You can follow the instructions there as well.

Mac OS X

1. You can choose to use any editor to edit and save your program. For example, to start, we use IDLE. However, I strongly recommend you download Sublime text 2:
<http://www.sublimetext.com/2>
You can put Sublime at the dock in your desk.
2. Open your terminal. In OSX, this can be done by search Terminal in Spotlight.
3. In your Terminal, run **python**. You run things in Terminal by just the name and hitting Return.
4. Type **quit()**, **Enter**, and get out of **python**.
5. You should be back at the prompt similar to what you had before typed **Python**, if not, find out why.
6. Check which version of Python it is installed by typing "which Python". For example, on my computer, the terminal sys:
"/Users/bxiao/anaconda/bin/Python"

I installed anaconda and the assumed version of Python is the Python inside the folder anaconda.

Make sure the Python you use is Python 2.7

7. Learn how to make a directory in Terminal. This can also simply be done by drag a folder on your desktop to the terminal. Try this.
8. Learn how to change into a directory in Terminal by using **CD** (changing directory), **ls** (list contents), and **pwd** (show path).
9. Use your editor to make a file containing some code. Save it as a directory. Change into the directory (e.g. **cd /Users/bxiao/Dropbox/Teaching/CSC280_2015**) in Terminal and run Python:
Python helloworld.py
You should see:
hello world
10. Sometimes, you have multiple version of Python installed.

Windows

1. You can choose to use any editor to edit and save your program. For example, to start, we use IDLE. However, I strongly recommend you download Sublime text 2:
<http://www.sublimetext.com/2>
Install the windows version of Sublime 2.
2. Run **PowerShell** from the Start menu. Search for it and you can just press **Enter** to run.
3. Run your PowerShell program (which I will call Terminal later).
4. In your PowerShell (Terminal) program, run python. You run things in Terminal by just typing the name and pressing Enter.
5. If you run Python and it is not there, you can install it from <https://www.python.org/downloads/>
Make sure you install the version 2, not 3.
6. If after you install it python still isn't recognized, then in PowerShell, enter this:
[Environment]:: SetEnvironmentVariable("Path",
"\$env:Path;C:\Python27", "users")
7. Close PowerShell and then start it again to make sure that Python now runs. If it doesn't, restart maybe required.
8. Type **quit()** and press **Enter** to exit Python. You should be back at prompt similar to what you had before typed python. If not, find out why.
9. Learn how to change into a directory in PowerShell by using **CD** (changing directory), **ls** (list contents), and **pwd** (show path).
10. Go back to PowerShell (Terminal) using just the keyboard to switch windows. up if you can't figure it out.
11. Use your editor to make a file containing some code. Save it as a directory. Change into the directory (e.g. **cd**

- `/Users/bxiao/Dropbox/Teaching/CSC280_2015`) in Terminal and run Python:
Python helloworld.py
You should see:
hello world
12. Again this link is super useful:
<http://learnpythonthehardway.org/book/ex0.html>

Linux

1. Install Sublimetext 2 for linux.
<http://www.sublimetext.com/2>
2. Find your terminal programs. It could be called **GNOME Terminal**, **Konsole**, or **xterm**.
3. Put your Terminal in your dock as well.
4. Follow steps 3-9 in OS X guide above.