

## Downloading and Installing Python

1. get python 2.7 here
2. download the correct version for your OS
3. expand the downloaded file
4. add Python to your PATH variable
  - Mac Instructions:
    1. open a terminal window (you can find terminal in Applications > Utilities > Terminal.app)
    2. paste the following into your terminal window and hit enter: `echo 'export PATH="/Library/Frameworks/Python.framework/Versions/2.7/bin:${PATH}''`  
`>> ~/.bash_profile`
  - Windows Instructions:
    1. Open System Properties (type it in the start menu, or use the keyboard shortcut Win+Pause)
    2. Switch to the Advanced tab
    3. Click Environment Variables
    4. Select PATH in the System variables section
    5. Click Edit
    6. Select “Edit text”, and Add python’s path to the end of the list (the paths are separated by semicolons). For example:  
`C:\Windows;C:\Windows\System32;C:\Python27`
5. running python
  - i. close your terminal/command prompt window, and open a new one.
  - ii. type `python` into the prompt and hit enter
  - iii. if you see the `>>>` it means you are in a python environment and you can start coding! try typing the following lines of code, followed by enter, and see what they output:  

```
>>> 2+2
>>> print "hello world"
```
6. using/installing Pip: Python now comes packaged with Pip. Pip is a package management system for python. It lets you install useful code libraries for tons of different tasks.
  - i. **using pip:** here are some instructions on downloading a popular machine learning package called “sklearn”
    - **Mac instructions:** in your terminal window, paste the following:  
`pip install sklearn`
    - **Windows instructions:** in your command prompt, paste the following:  
`python -m pip install sklearn`

- *if you get an error*, try installing pip by saving this file to a folder on your machine, and then running the command below, replacing `/path/to/` with the path to your file:

```
python /path/to/get-pip.py
```

- ii. **other packages:** try installing some of these other commonly used packages. They may take a while to install, but you can open a new terminal window, or command prompt to keep using python while the packages download.

- download these packages by replacing “sklearn” with the new package name in the pip commands from step i.
  - numpy
  - pandas
  - csv
  - matplotlib

7. choosing an editor: there are many great editors for creating python code. You can use whatever you are comfortable with, or download one of the following:

- sublime
- pycharm
- aquamacs
- atom