Instructions for Windows Users

On Windows, there are two options:

A) Use Python and Unix tools directly in Windows via Anaconda and Git Bash
B) Run a Linux virtual machine using either VMWare or VirtualBox

This guide will go over how to set up and use Python via Option A.

Covered Here

1. Installing Unix tools on Windows via Git Bash
2. Install Python via Anaconda
3. Opening a Bash shell (For Unix Commands)
4. Opening a Python interpreter
5. Opening Jupyter Notebooks

Installing Unix tools on Windows via Git Bash

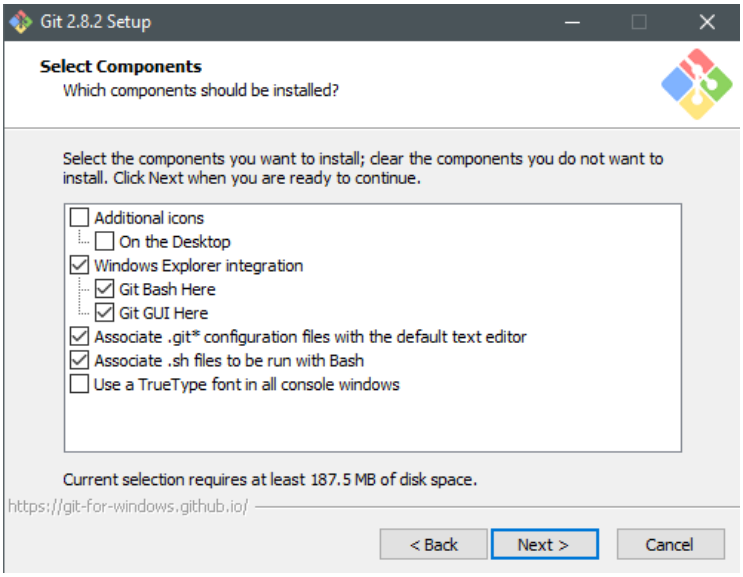
Installing Git for Windows gives you convenient access to a command-line environment with common Unix tools like `grep`, `sort`, `cut`, or `curl`.

There are other methods to achieve this, using Cygwin or MSYS, so if you already have one of these set up, feel free to skip to the next section.

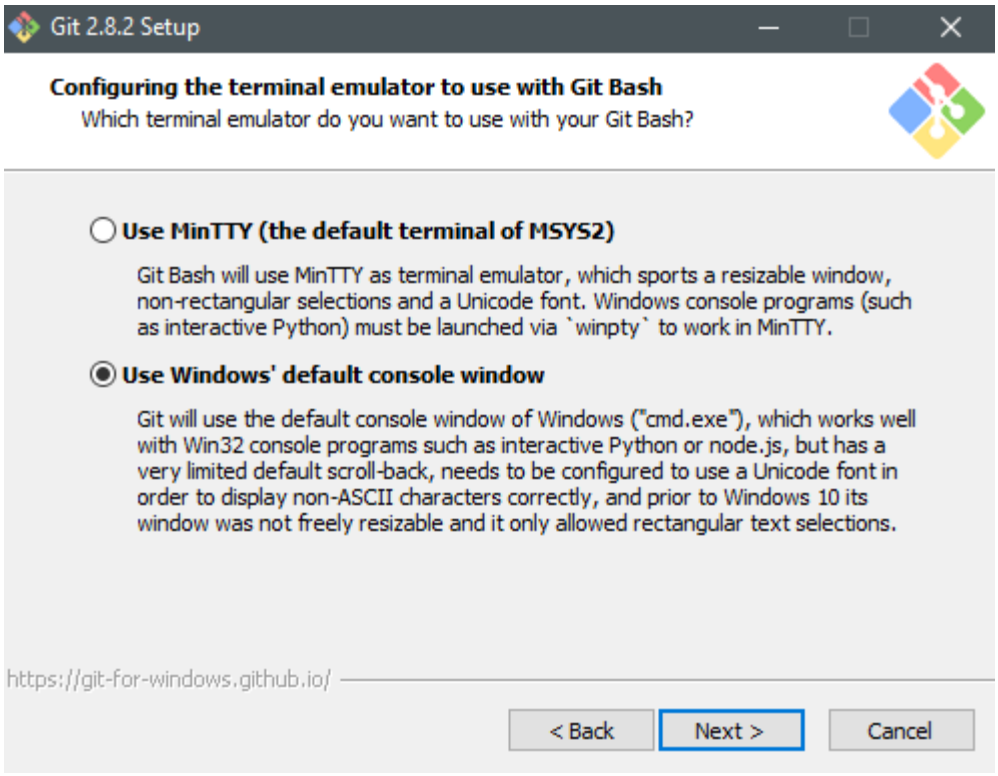
Download the latest Windows installer from: https://git-scm.com/downloads

Run the installer:

1. **Make sure to keep "Git Bash Here" checked when setting options (shown right).**
2. **Select "Use Windows' default console window". (shown below)**
3. **Other options can be left as-is**



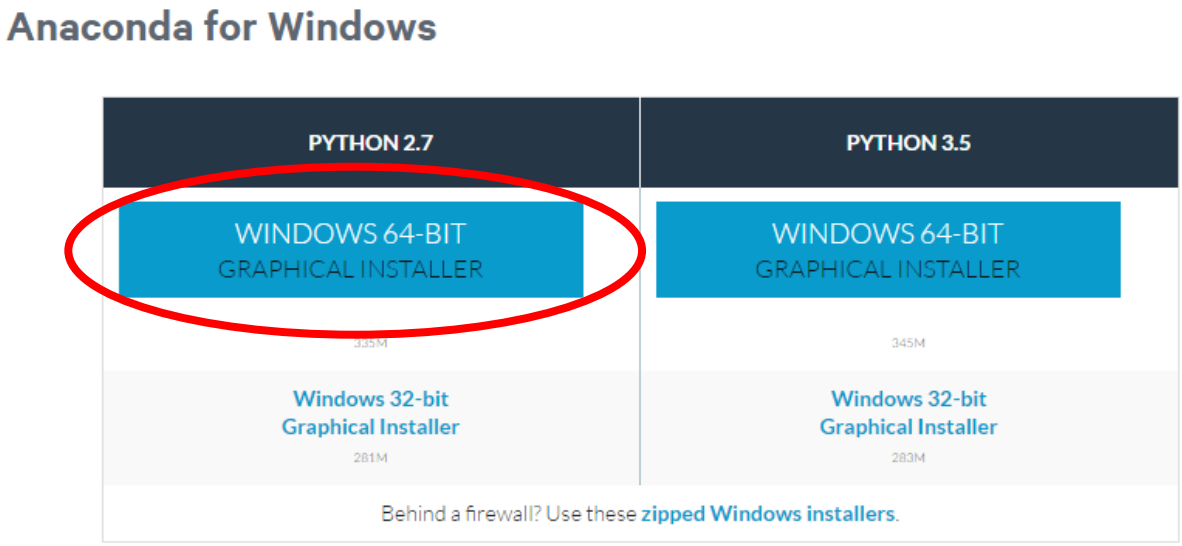
Make sure to leave "Git Bash Here" checked



Check the second option here (shown). This is important to be able to run Python from the Git Bash

Installing Python via Anaconda

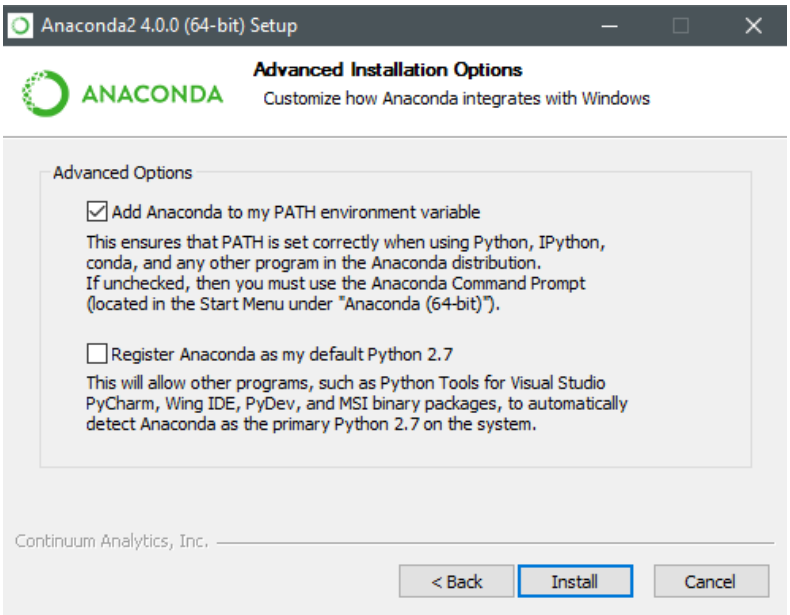
Go here (https://www.continuum.io/downloads) and download the latest installer for Python 2.7



Screenshot of www.continuum.io/downloads . Select the 64-bit option (circled) unless you are on a 32-bit system.

Once it's downloaded, run the installer.

- **Make sure to select "Add Anaconda to my PATH environment variable" checked**

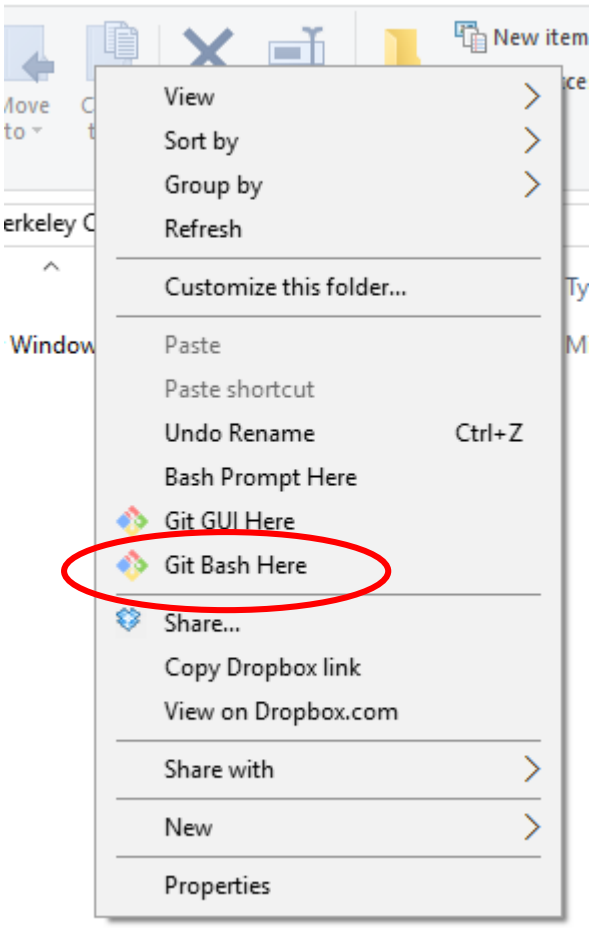


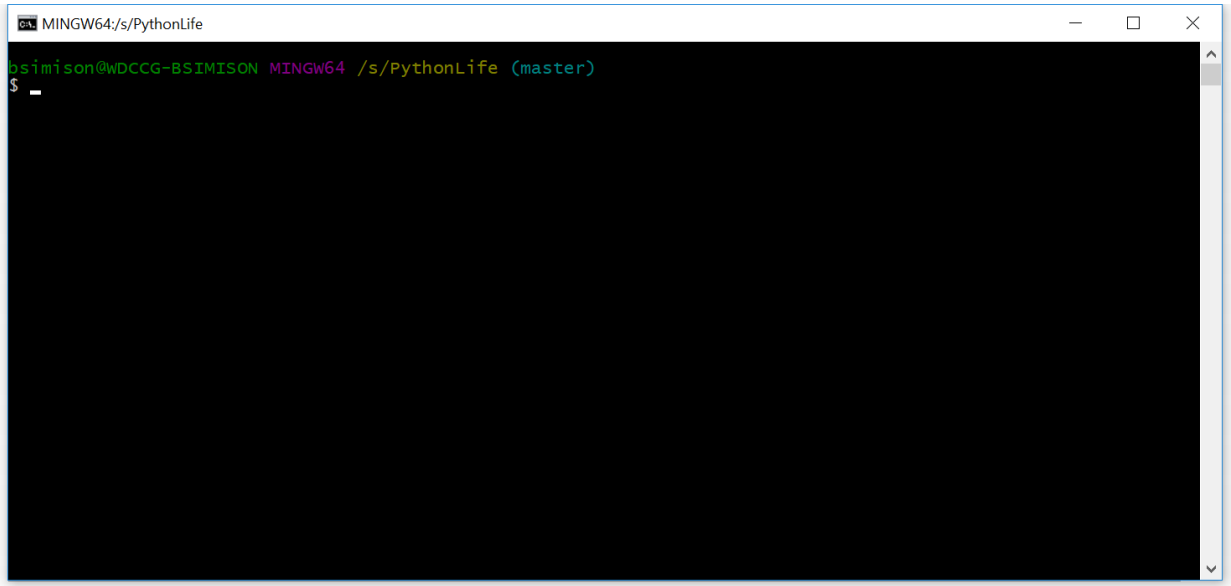
Opening a Bash Terminal (For Unix Commands)

In any folder, you can have access to Unix tools by opening a bash shell.

This is easily done by right-clicking in the folder and selecting “Git Bash Here”

We’ll teach you how to use Unix commands in the Bash shell to manipulate your files.

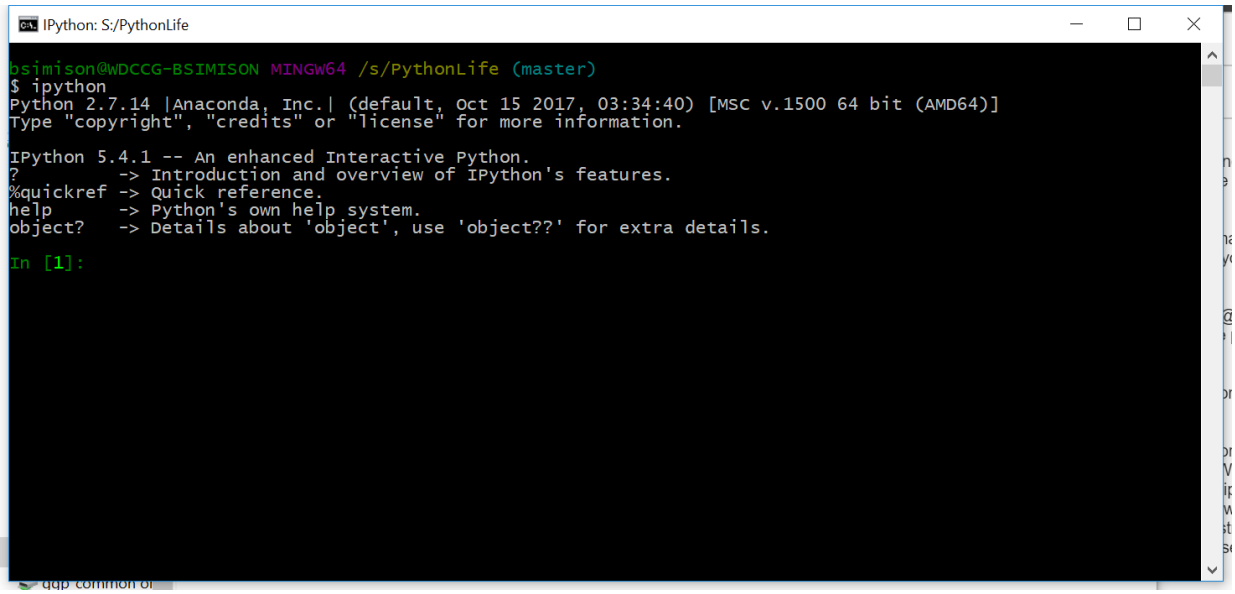




Opening a Python Interpreter

There are a few ways you can use Python. One useful method is to use the Python interpreter. This gives you the ability to enter in commands, one line at a time, to interactively explore data and run analyses. This is similar to how you might interact with MATLAB or R.

To use the Python interpreter, open up a terminal (either by right-clicking in a folder and selecting "Git Bash Here", or just selecting File >> Open Command Prompt when viewing a folder in Windows Explorer). In the terminal, just type **`ipython`**, and the Python interpreter will begin.



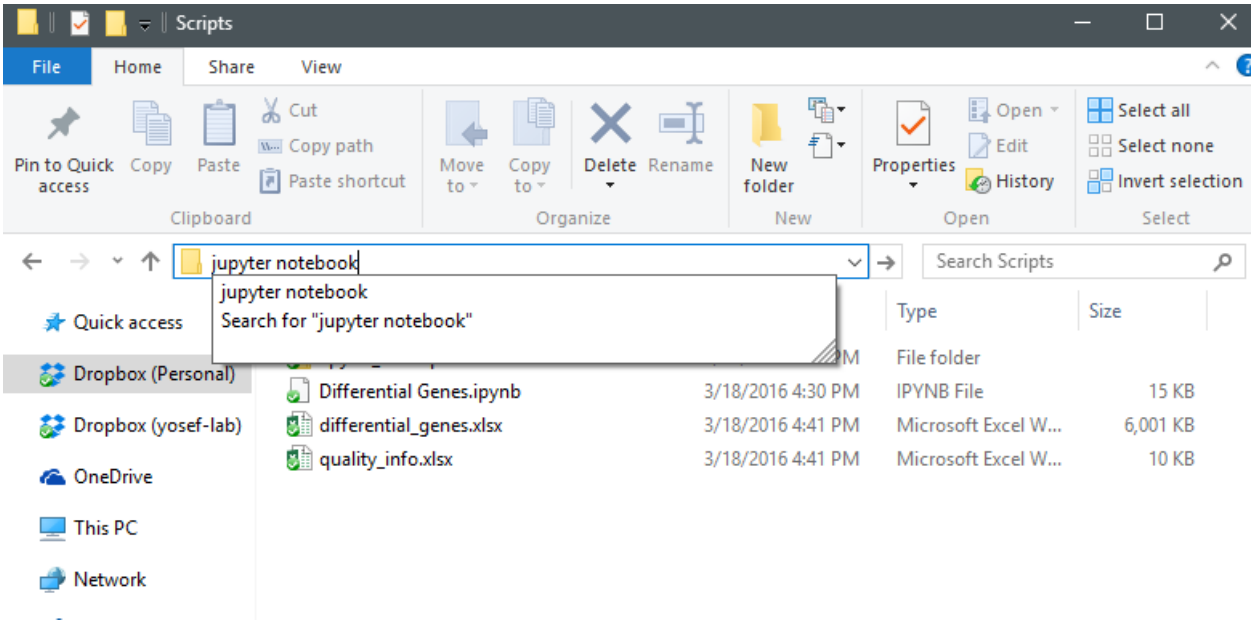
Opening Jupyter Notebooks

Jupyter Notebooks are a great tool for working with and demonstrating data analysis scripts written in Python. We'll be teaching you how to use it in the class. This document just shows how to run the program in Windows.

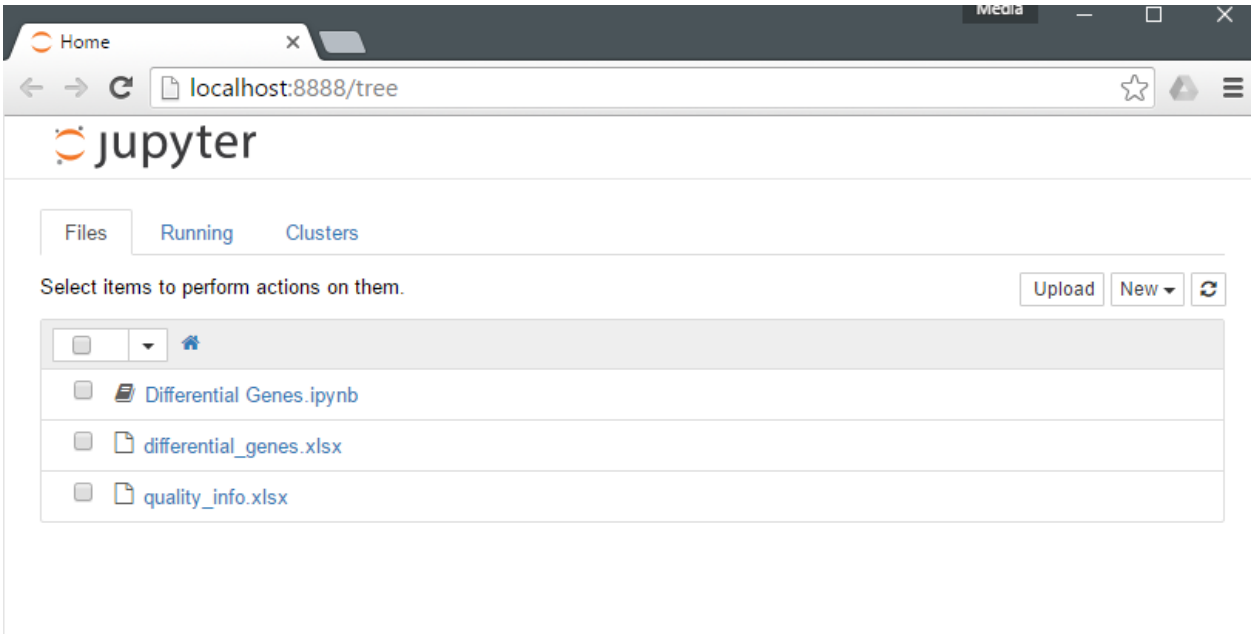
Jupyter Notebooks are saved in files with a .ipynb extension. To open them, you must run the notebook server from the folder containing the file (or from a folder higher in the hierarchy).

To run the notebook server, you can either:

- Open a terminal (from the correct folder) and type **`jupyter notebook`** and hit enter
- **Or,** as a shortcut, just type **`jupyter notebook`** in the address bar in the Windows Explorer and hit enter



Shortcut to launch Jupyter Notebooks from within a folder



The result: Jupyter Notebook launches in a new browser window

DOWNLOAD AND UNPACK THE CORE COURSE FILES
In terminal, change to the directory you'd like to work in. If you don't know how to do that from terminal, it's okay to do it right where you are, in "home". Type:

```
git clone https://github.com/calacademy-research/PythonLife.git
```

RUN JUPYTER NOTEBOOK
From the command line, go to your newly downloaded PythonLife folder and run notebook! The step below you'll execute every time you want to start the notebook.

```
cd PythonLife
jupyter notebook
```

This will launch the class in your browser. Check out the notebook basics!