

Using Chatistics

Part 0: Installation and Set up

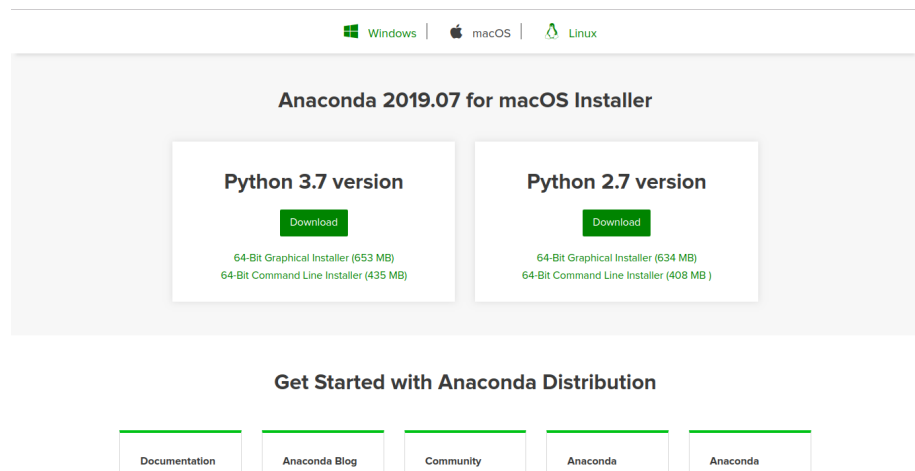
There is no single best way to use python. If you are already comfortable in a certain environment, I encourage you to stick with it, unless you are dealing with problems that can be solved by switching. However, there is a distribution of python which is popular among data scientists: Anaconda.

Anaconda comes with certain software packages pre-installed and reduces the cognitive load of maintaining all your libraries without version conflicts. If you're just starting out, this is one of the best ways to jump straight into solving problems instead of wasting hours tinkering with configurations.

Lets start with a step by step manual describing how to install and set up Anaconda. As this tutorial is meant for beginners, we will take things at a leisured pace. If you are in an environment where installations are unfeasible (eg, if you are working in Library computers that will delete all downloaded programs upon reset) then a good alternative is Google Colaboratory

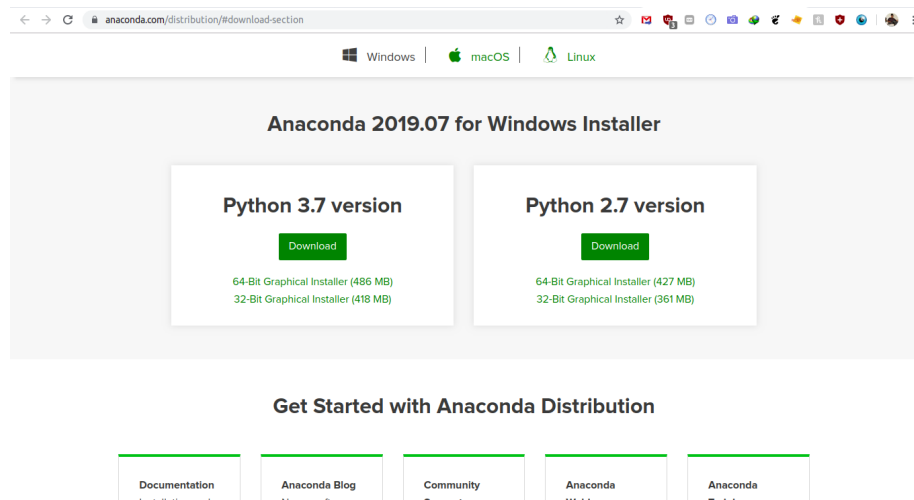
1 Go to Anaconda's download page

Simply click on 'Anaconda' above, or go to the following URL:
<https://www.anaconda.com/distribution/#download-section>



2 Select the appropriate Operating System

By default, the page is opened to Mac OS. You can change this selection by clicking on the icon for your machine's OS (eg, Windows).



3 Download Python 3

Python 2 is a legacy version that was sunset on January 1st, 2020. In this project, we will be using Python 3. You can just click the download button if you don't know whether your system is 64-bit or 32-bit.

4 Install and proceed with default settings

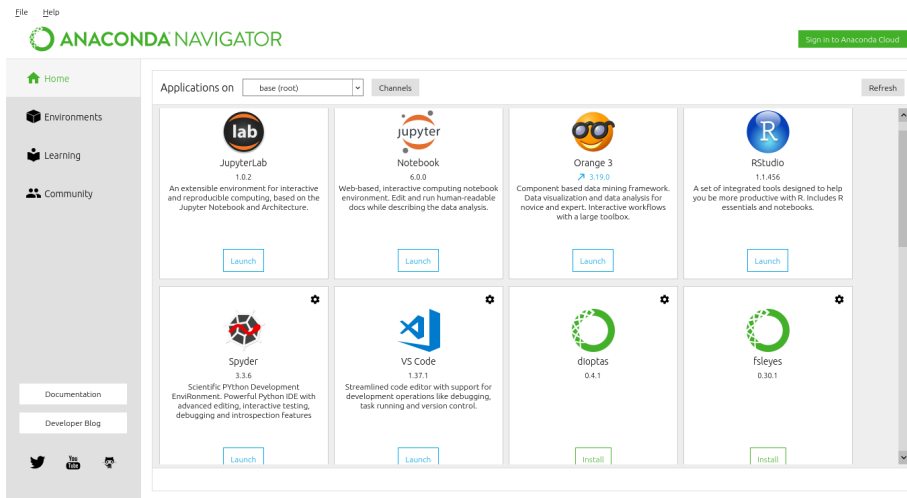
You can double click the installer and keep clicking next. More detailed instructions can be found here: <https://docs.anaconda.com/anaconda/install/windows/>

5 Open Anaconda Navigator

If you're on Mac OS, use Launchpad, and if you're on Windows, type 'Anaconda Navigator' into your search menu. You can drag the icon to your desktop or add it to your start menu for convenience.

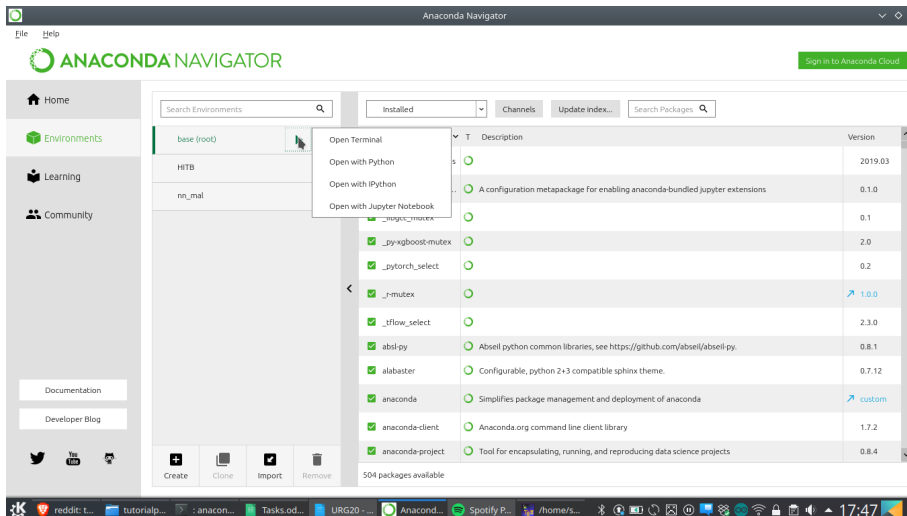
6 Get comfortable looking around

Once you start Anaconda you will be greeted with a screen like this:



7 Open the terminal

Open the terminal by clicking the environment from the menu in the sidebar



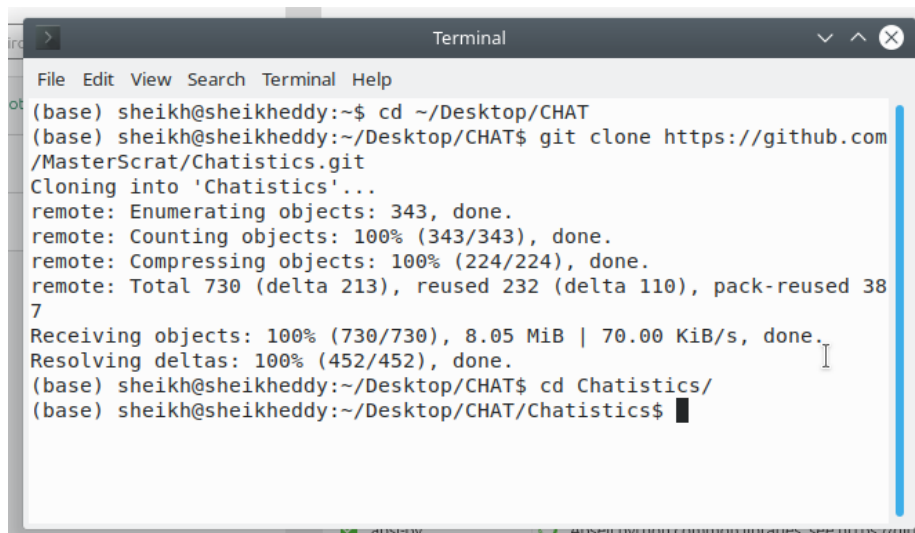
8 Download Chatistics

First navigate to the directory (folder) you would like to download the repository to. The steps to do this are platform dependent and you may want to look up tutorials on common terminal commands such as 'cd' if you are not yet comfortable with the command line.

Once there, enter the following commands (if you already have git installed, you can skip the first one):

```
conda install -c anaconda git
git clone https://github.com/MasterScrat/Chatistics.git
cd Chatistics
```

Which should result in an output like this.

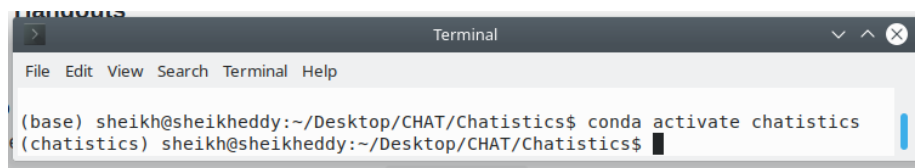
A terminal window titled "Terminal" with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the following output:

```
(base) sheikh@sheikheddy:~$ cd ~/Desktop/CHAT
(base) sheikh@sheikheddy:~/Desktop/CHAT$ git clone https://github.com/MasterScrat/Chatistics.git
Cloning into 'Chatistics'...
remote: Enumerating objects: 343, done.
remote: Counting objects: 100% (343/343), done.
remote: Compressing objects: 100% (224/224), done.
remote: Total 730 (delta 213), reused 232 (delta 110), pack-reused 387
Receiving objects: 100% (730/730), 8.05 MiB | 70.00 KiB/s, done.
Resolving deltas: 100% (452/452), done.
(base) sheikh@sheikheddy:~/Desktop/CHAT$ cd Chatistics/
(base) sheikh@sheikheddy:~/Desktop/CHAT/Chatistics$
```

9 Set up Chatistics

Now enter the following commands:

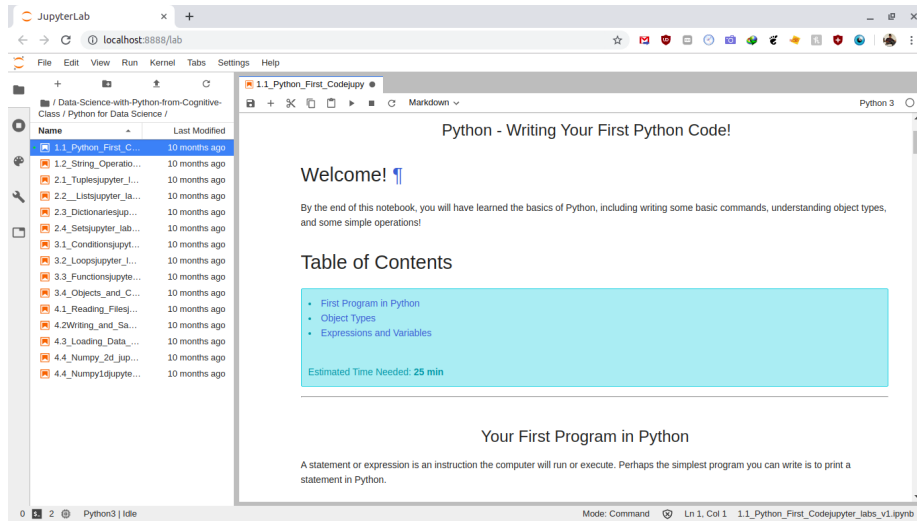
```
conda env create -f environment.yml
conda activate chatistics
```

A terminal window titled "Terminal" with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the following output:

```
(base) sheikh@sheikheddy:~/Desktop/CHAT/Chatistics$ conda activate chatistics
(chatistics) sheikh@sheikheddy:~/Desktop/CHAT/Chatistics$
```

If all goes well, then on the left side you should see (chatistics) instead of (base). This means that all the required packages and libraries have been installed and you don't have to worry about version conflicts since everything is in a virtual environment.

10 Open JupyterLab



JupyterLab is simply an application that allows you to open files called “Jupyter Notebooks”, which are an easy way to run python code in “cells”. There are thousands of tutorials available online on learning python, so we won’t cover that ground here. Instead, in the next part, we’ll dive into an interactive tutorial for Chatistics using a Jupyter notebook instead of a pdf.