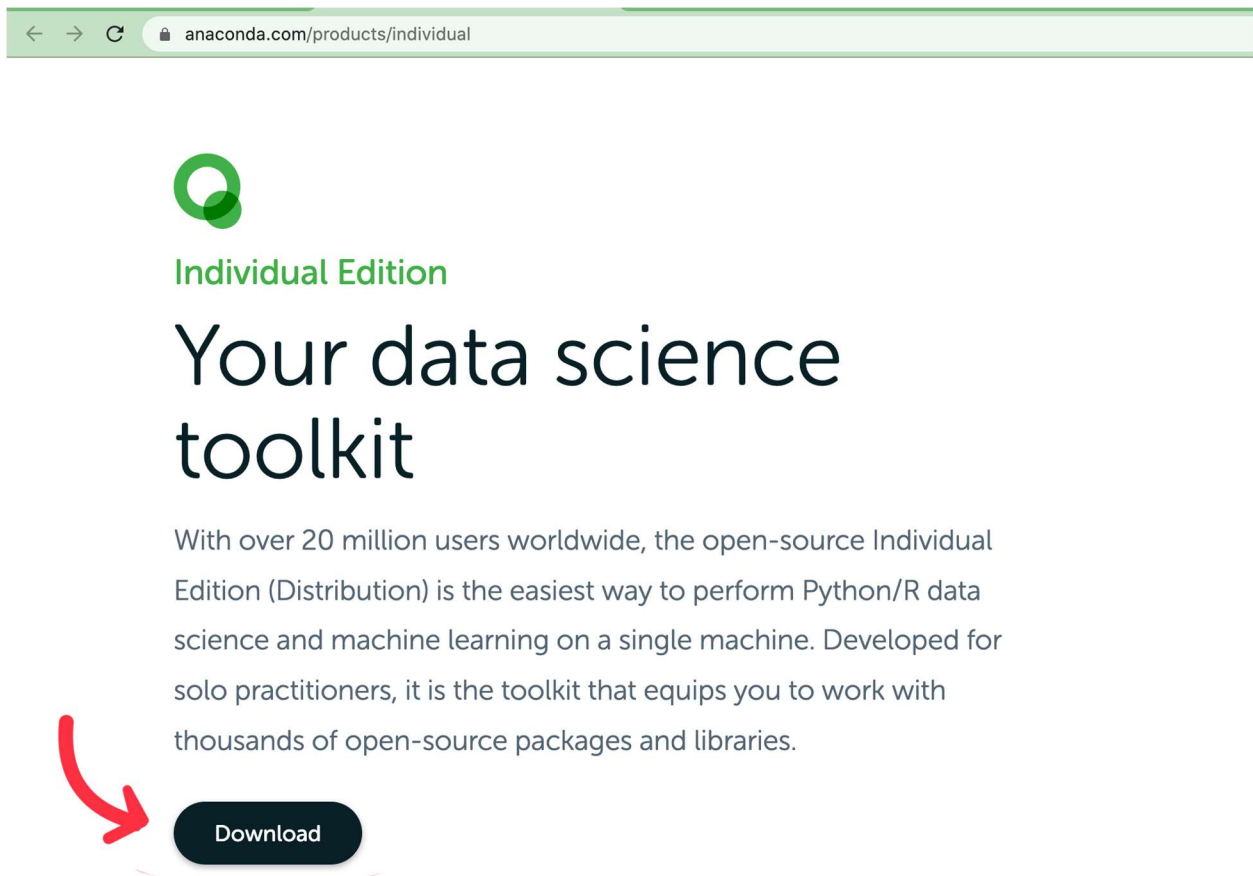


Steps needed to install and run the notebook

Step1: Install anaconda.

Visit the website <https://www.anaconda.com/products/individual> and click on the download button:



This will take you to the bottom of the page where you can select either: [64-Bit Graphical Installer \(457 MB\)](#) if you are a windows user or [64-Bit Graphical Installer \(435 MB\)](#) if you are a Mac user.

Once you have downloaded the Graphical Installer, follow the steps on <https://docs.anaconda.com/anaconda/install/windows/> to complete the installation if you a window user. Or use <https://docs.anaconda.com/anaconda/install/mac-os/> to complete the installation if you a mac user.

Step 2: Create an environment for Python 3.7:

Once the setup is complete you would have installed Python 3.8 by default. For our needs and requirements, we will need to downgrade the python version to 3.7

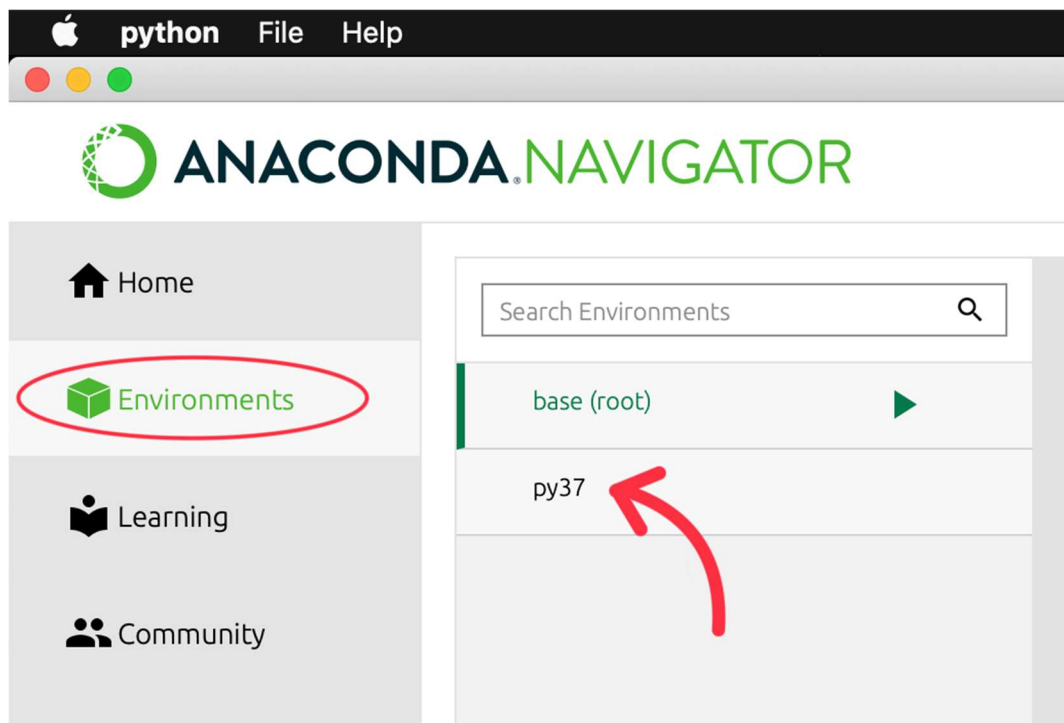
To install python 3.7 on your PC you will need to run the following command in your terminal:

```
conda create -n py37 anaconda=2020.07 python=3.7
```

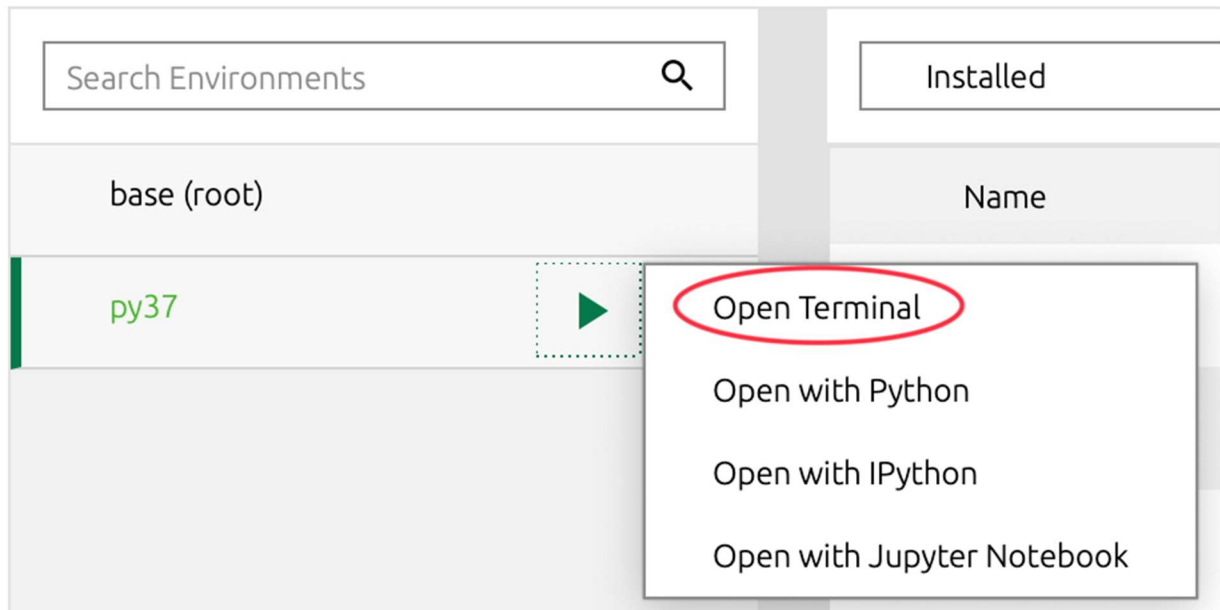
This will create a new environment from which you can open your jupyter notebook. To verify if the right version of python is installed on your conda, open the Anaconda-navigator (this would have been installed once you finish installing anaconda in Step 1).

Once you open the Anaconda Navigator, click on the Environments tab on the Left navigation bar and check if it has two environments installed:

1. The base or the root environment where Python 3.8 is installed
2. The py37 environment where we will be running our code



Open a terminal from the py37 tab as shown below:



Step 3: Install dependencies:

The following pip commands need to be executed to install all the dependencies needed by our notebook. Type the following commands in the terminal one after another:

pip install plotly

once installed proceed to execute the next line

pip install pystan==2.19.1.1

once installed proceed to execute the next line

pip install prophet

once installed proceed to execute the next line

pip install statsmodels

once installed proceed to execute the next line

pip install tensorflow

once installed proceed to execute the next line

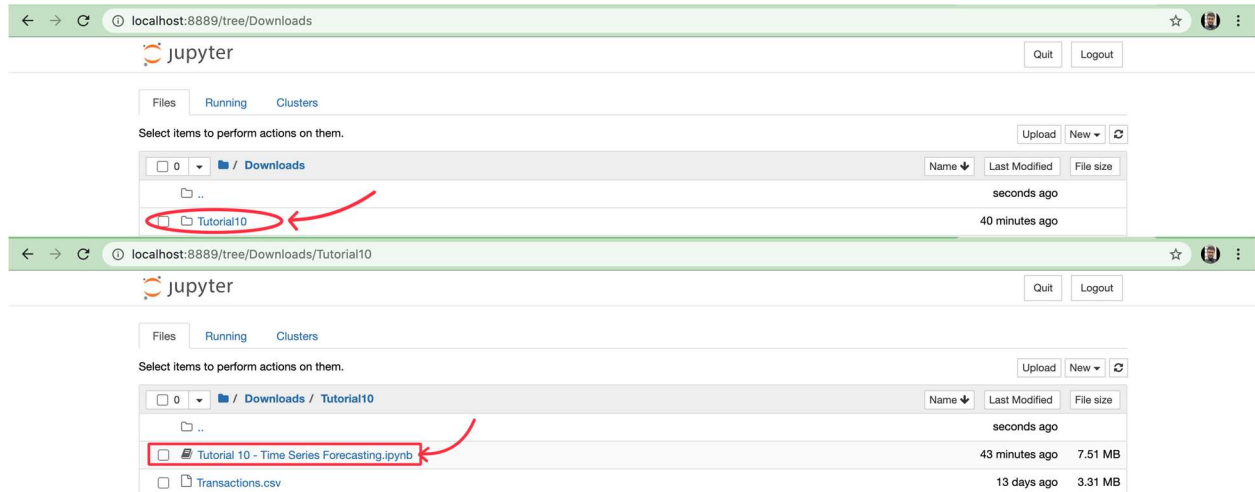
pip install pmdarima

once installed proceed to execute the next line

jupyter notebook

after executing the above command a new jupyter notebook will open in your default browser:

Click on the folder where you have downloaded Tutorial 10 and open the Tutorial 10 – Time Series Forecasting.ipynb file as shown below.



Once you open the Jupyter notebook run the first two cells to verify if all the packages are installed correctly.

Check versions:

```
In [2]: 1 from platform import python_version
2 print('python version installed      : ', python_version(), ' ,needed: 3.7.7')
3 print('pmdarima version installed    : ', pmdarima.__version__, ' ,needed: 1.8.0')
4 print('tensorflow version installed  : ', tensorflow.__version__, ' ,needed: 2.4.1')
5 print('statsmodel version installed   : ', statsmodels.__version__, ' ,needed: 0.11.1')
6 print('prophet version installed      : ', prophet.__version__, ' ,needed: 1.0')
7 print('pystan version installed        : ', pystan.__version__, ' ,needed: 2.19.1.1')
8 print('plotly version installed        : ', plotly.__version__, ' ,needed: 4.14.3')
9 print('matplotlib version installed   : ', matplotlib.__version__, ' ,needed: 3.2.2')

python version installed      : 3.7.7      ,needed: 3.7.7
pmdarima version installed    : 1.8.0      ,needed: 1.8.0
tensorflow version installed  : 2.4.1      ,needed: 2.4.1
statsmodel version installed   : 0.11.1    ,needed: 0.11.1
prophet version installed     : 1.0        ,needed: 1.0
pystan version installed      : 2.19.1.1   ,needed: 2.19.1.1
plotly version installed      : 4.14.3     ,needed: 4.14.3
matplotlib version installed   : 3.2.2     ,needed: 3.2.2
```

Proceed to run the rest of the cells.