

PERFUM Python Camp 2023

Guide to Python installation

There are plenty of options installing Python in your computer or laptop. The most easiest way is to install via Anaconda Python distribution where all the libraries that we need included in this distribution. Another option is using VS Code Python but the libraries need to be integrated either using Python interpreter or from Anaconda distribution. Another option is using Google Colab where we only need google account and web browser. Here I have listed several options for the user to choose.

1. <https://www.anaconda.com/download>
2. <https://code.visualstudio.com/docs/python/python-tutorial>
3. https://colab.research.google.com/?utm_source=scs-index

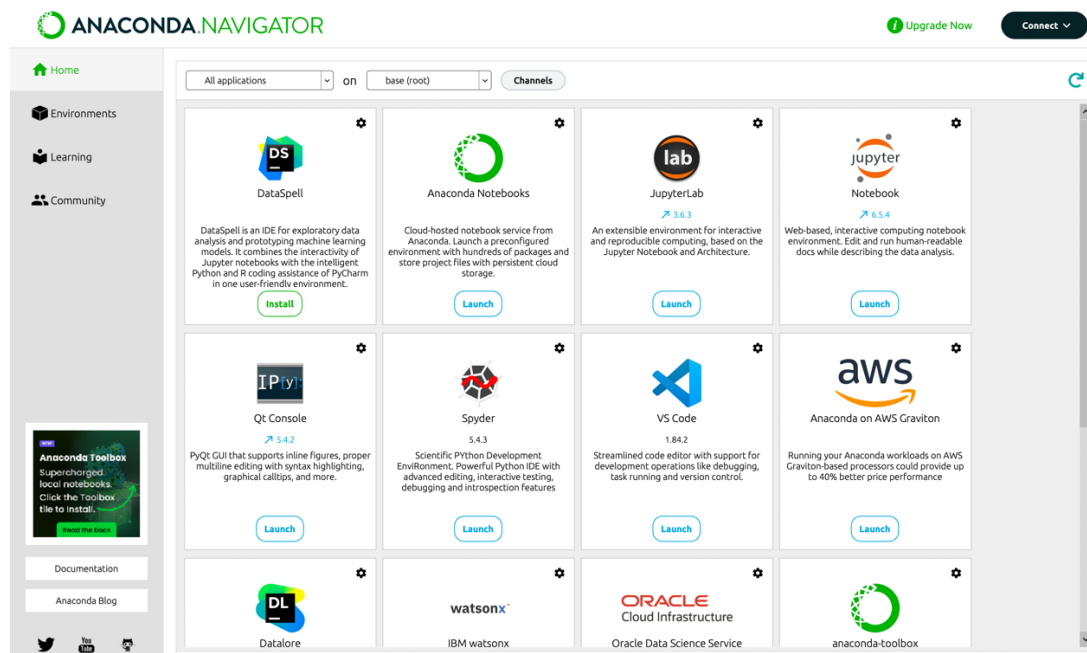
Option 1-2 need to be installed in your computer locally and it supported Windows, Mac OSX and Linux and for option 3, you need to have stable internet connection. For this camp, I will used VS Code integrated with Anaconda distribution. Python libraries needed in this camp are:

1. Numpy
2. Matplotlib
3. Pandas
4. Scipy
5. scikit-learn

We also need video or animation writer for our animation video such as imagemagick, ffmpeg or pillow depending on your operating system.

Reminder : Please install Anaconda Python and VS Code beforehand because all installation requires strong and stable internet connection. If you have smaller memory and storage capacity, you can install Python extension from VS Code or install Miniconda instead of Anaconda.

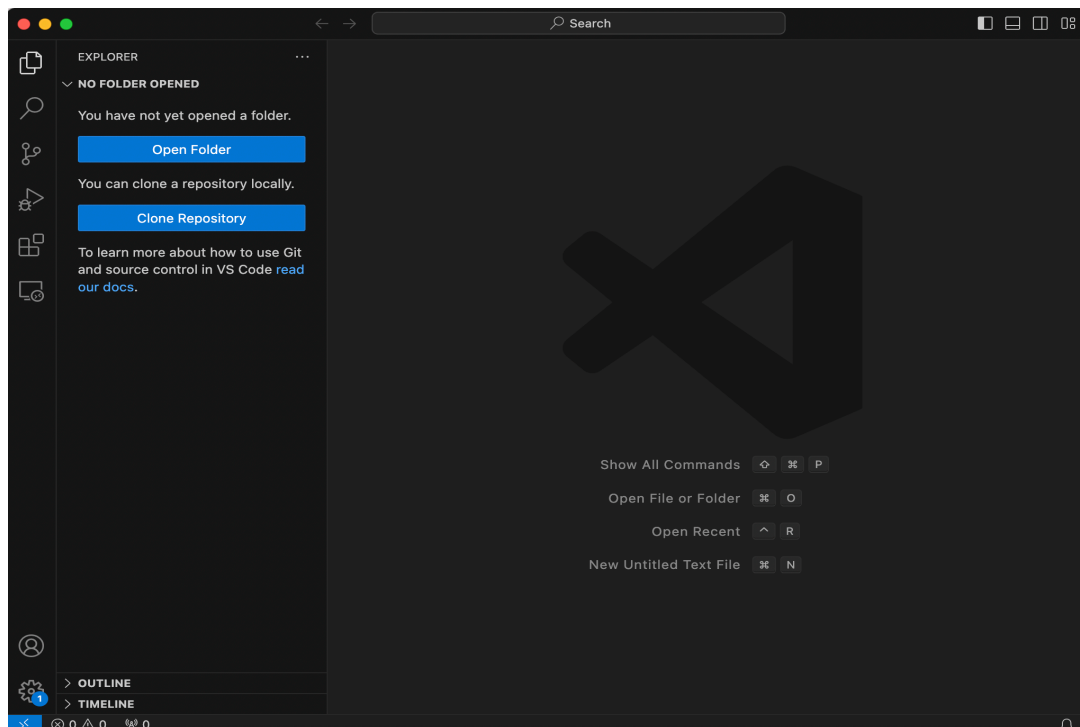
Example of Anaconda Navigator page in your computer



Note that if you install VS Code before Anaconda Python, the VS Code will be shown in Anaconda Python after installation.

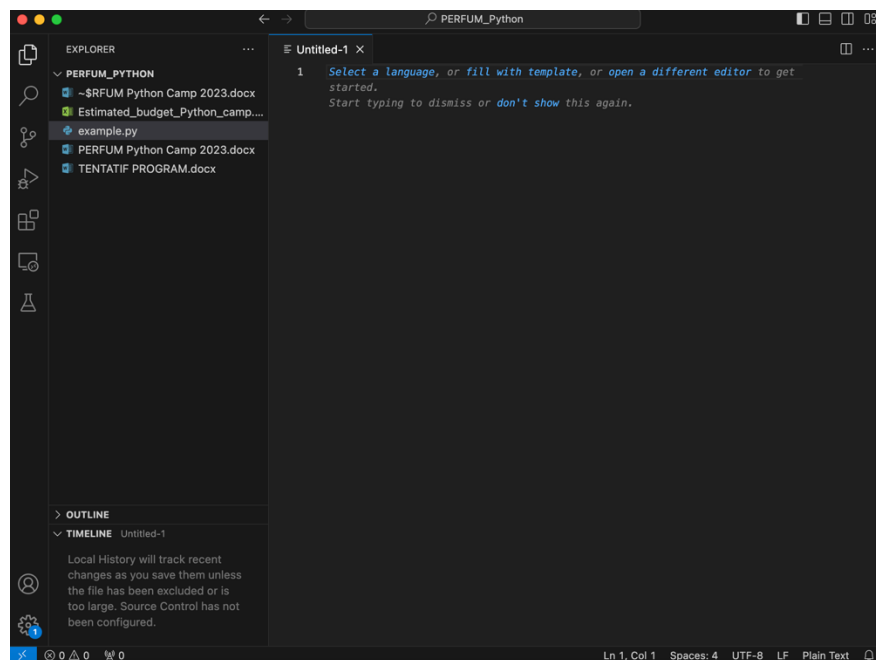
Basic guide to run simple Python program using VS Code.

After installation is complete, you can launch VS Code from Anaconda Python, or your home tab and you will get an interface like this:

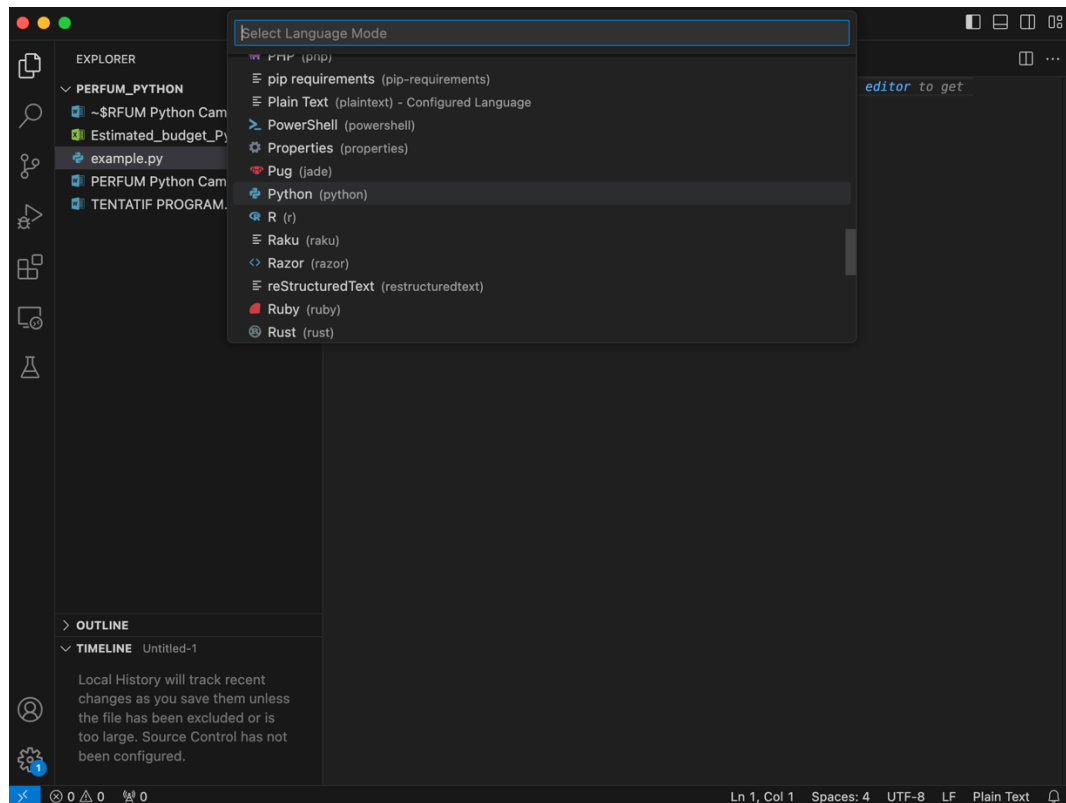


Before you create any Python file, click open folder and go to any folder that you need to save your file. It is important you know where is your file is located!!

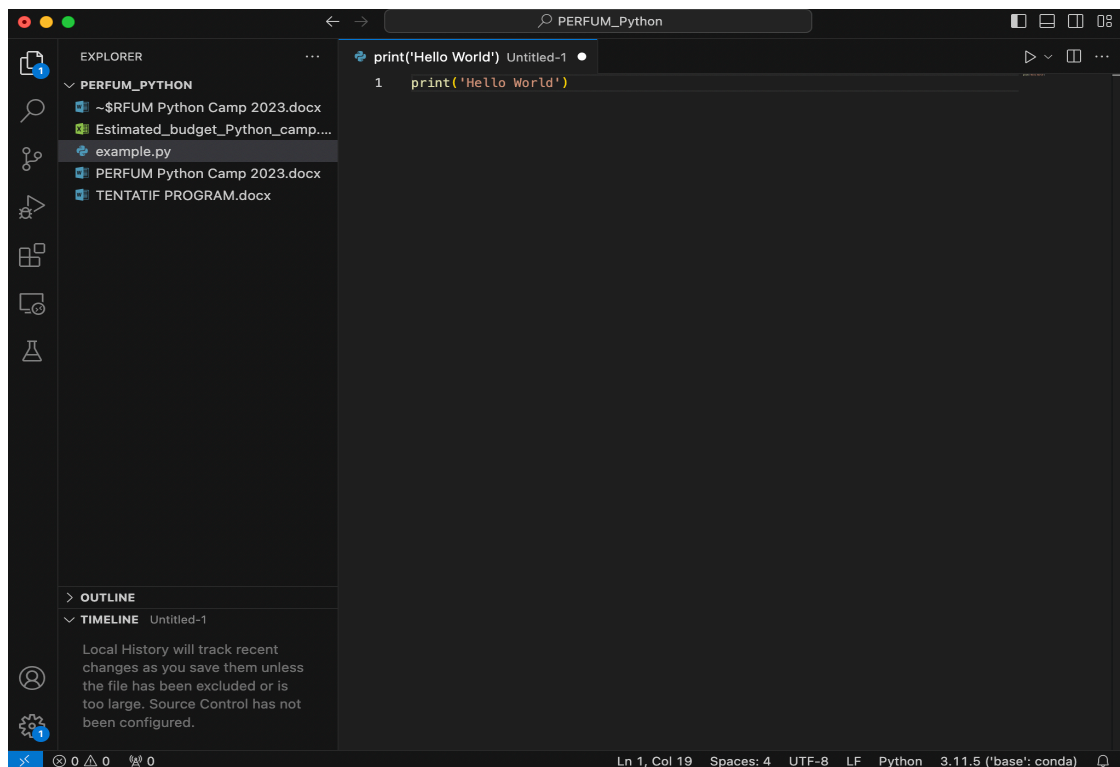
After you open your folder, you can start to open new file to create your first Python code.



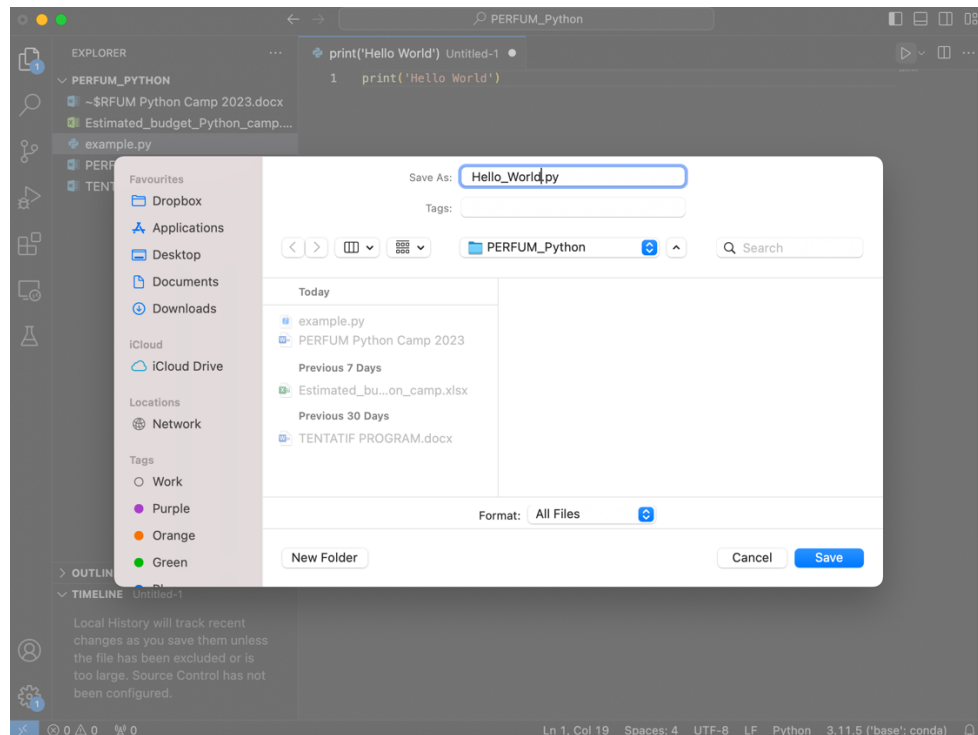
From the editor, you need to select a language and we shall choose Python. You can also choose new python file directly when you create new file.



In this example we shall write the famous printing command which is Hello World!

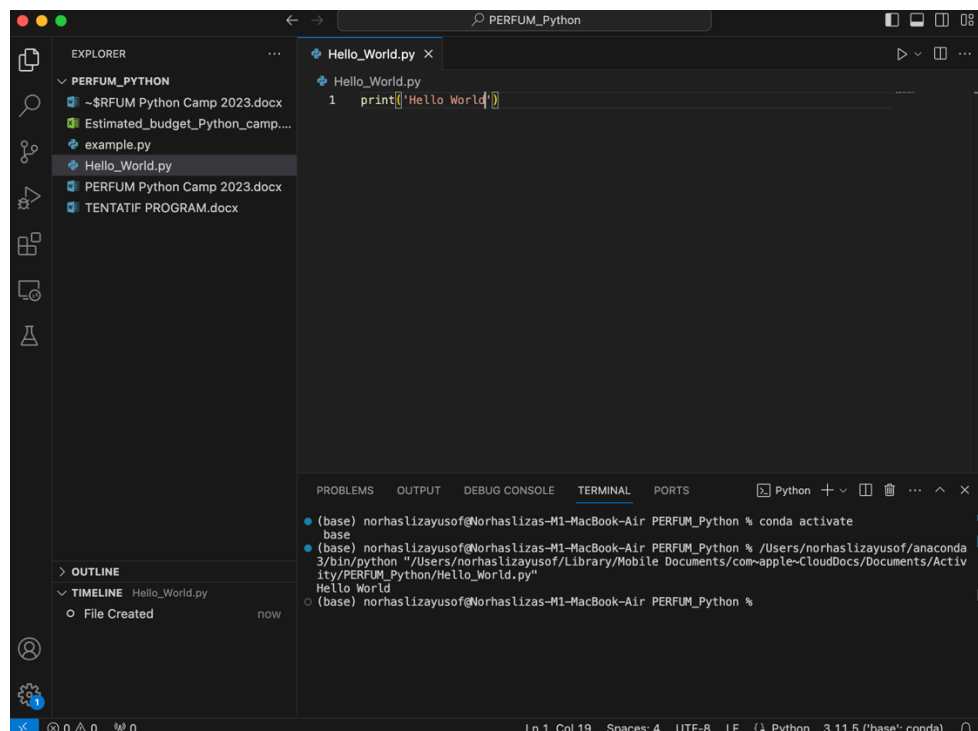


To run the program, click or press the run button (triangle shape button) located on the top right of your editor. VS Code will ask you to save the file. Save the file as `Hello_World.py`.



It is important to save the file in the correct way (without any space) in order to make your program can be read in any operating system.

Run your code and the result is written in the terminal at the bottom of your editor.



Congratulations! You have successfully run a Python program!