LINUXWORLD

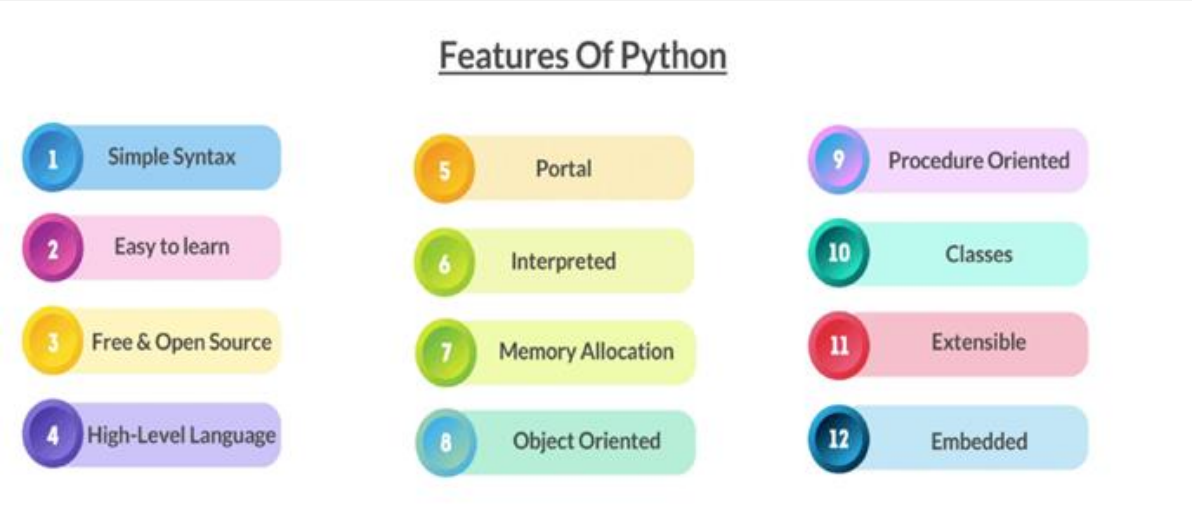
Python Session
Summary 11-06-2023

- **What is Python?**

  - ➢ Python is a computer programming language.
  - ➢ Python is an interpreted, object-oriented, high-level programming language with dynamic semantics.
  - ➢ Its high-level built in data structures.

- **The Use case of Python programming language:**

- **Feature of Python Programming language:**



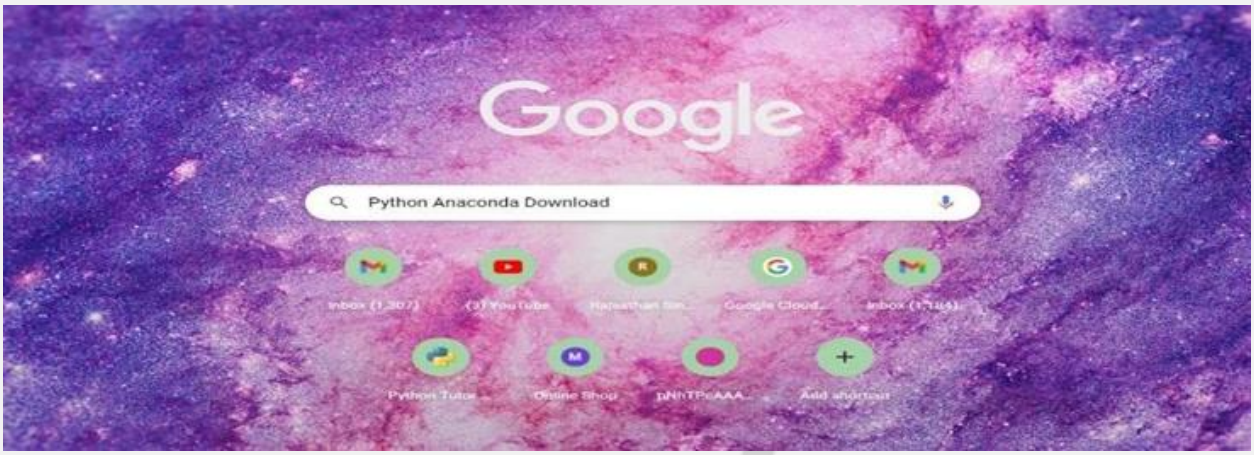
- **Why Python**

  So if some are still confused as to why Python then here is the reason!

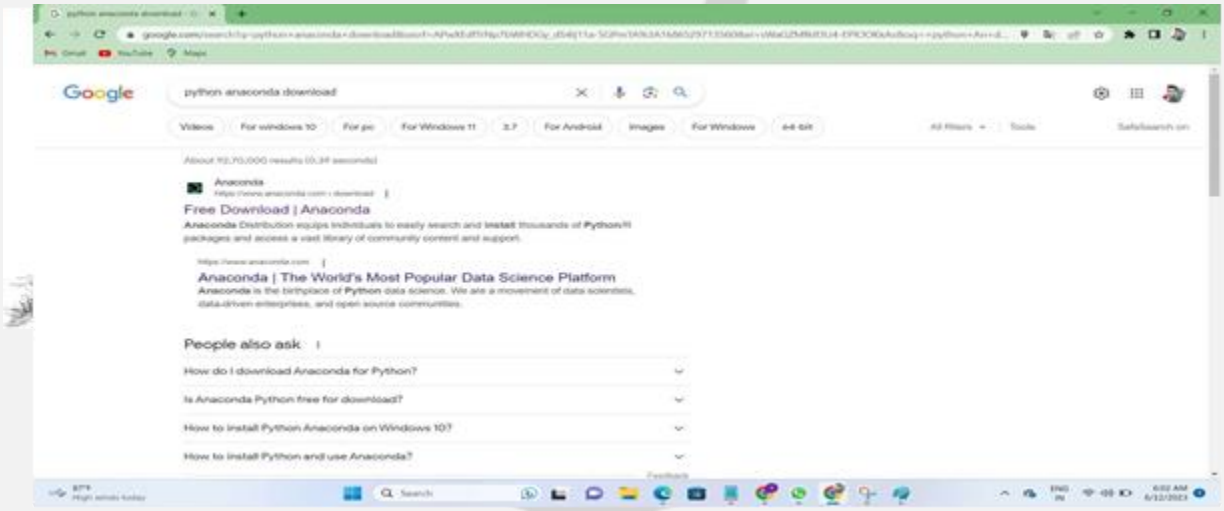
  - ➢ Works on different Windows, Mac, Linux, etc.
  - ➢ Has simple syntax similar to the English language
  - ➢ Has syntax that allows developers to write programs with fewer lines than some other programming language.
  - ➢ Run on an interpreter system, i.e. that code can be executed as soon as it is written meaning that prototyping can be very quick.
  - ➢ It can be treated in a procedural way, an object-oriented way, or a function way.

- **How to Install Python Using Anaconda.**

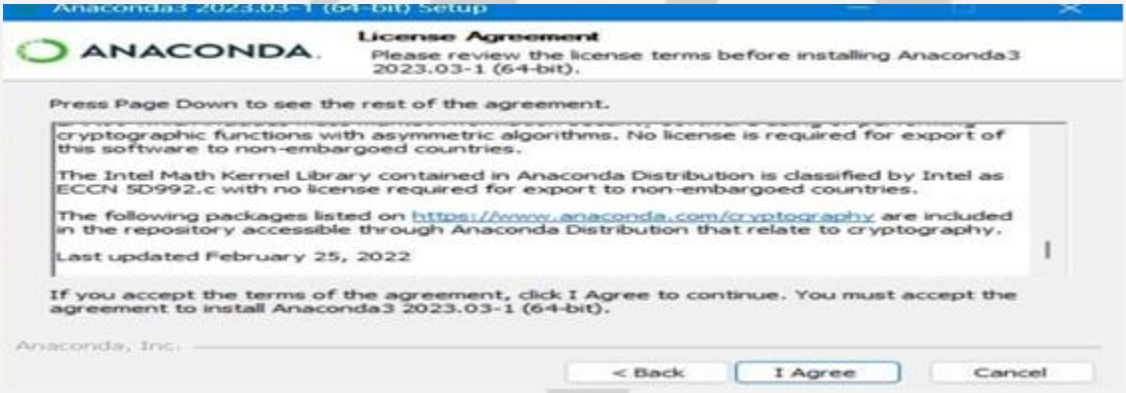
  - ➢ Go to Search Engine and Search

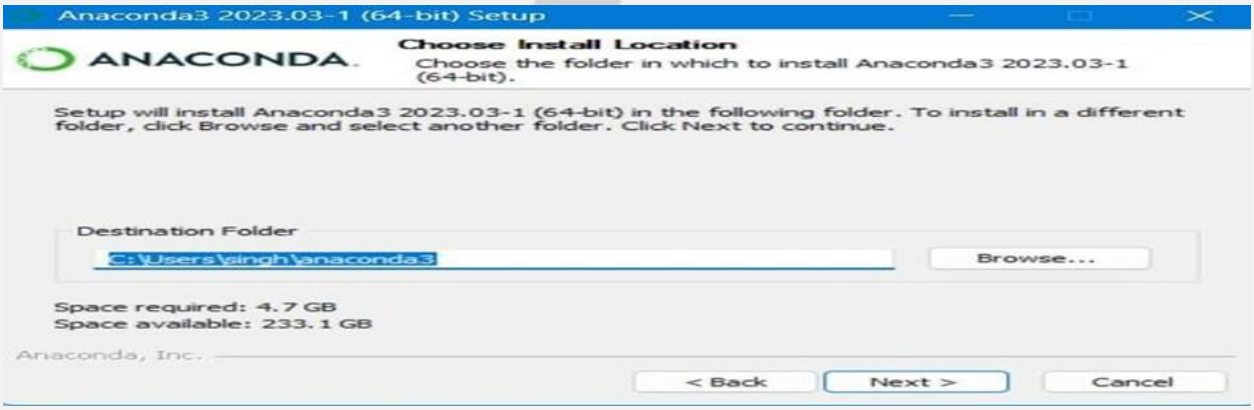


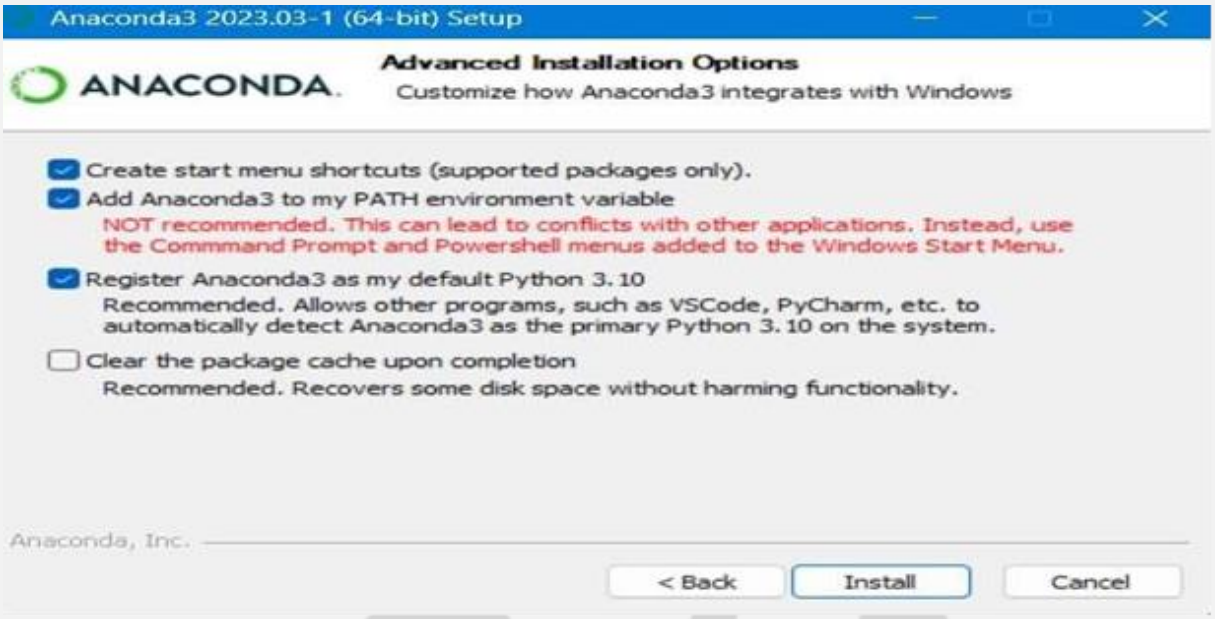
➢ On the Anaconda website, navigate to the "Download" section

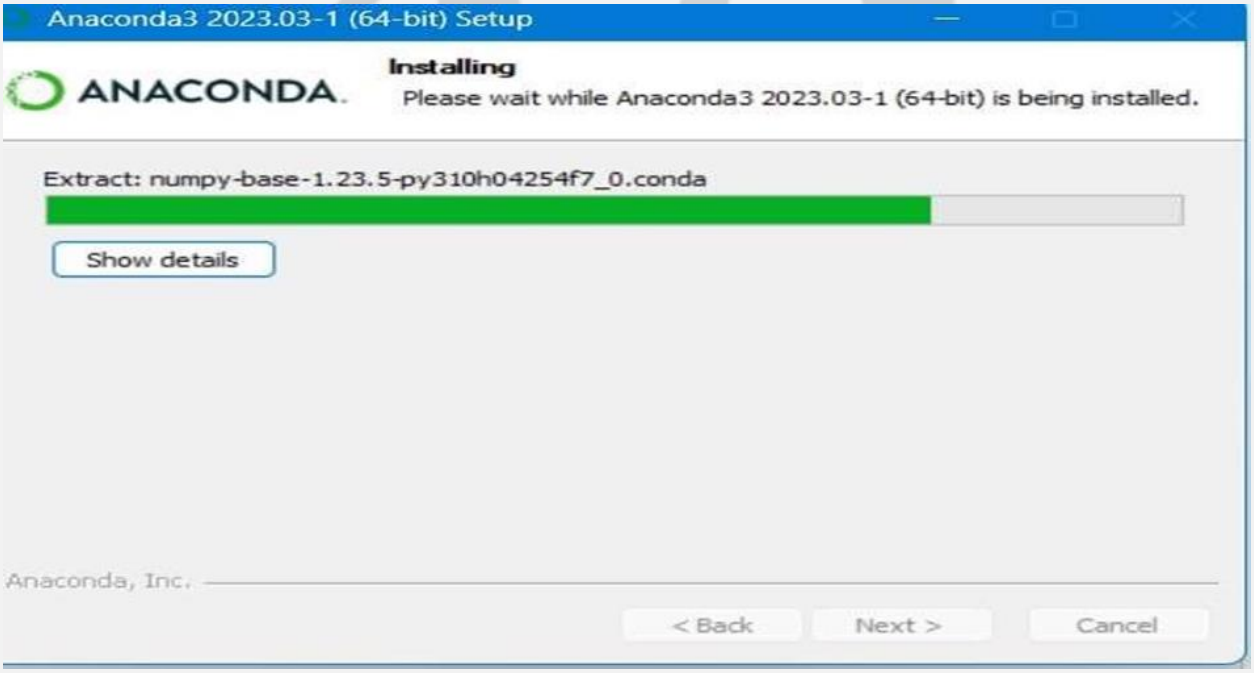


➢ Once the download is complete, locate the downloaded installer file and double-click the downloaded file.






Anaconda3 2023.03-1 (64-bit) Setup
ANACONDA.
Advanced Installation Options
Customize how Anaconda3 integrates with Windows
Create start menu shortcuts (supported packages only).
Add Anaconda3 to my PATH environment variable
NOT recommended. This can lead to conflicts with other applications. Instead, use the Commmand Prompt and Powershell menus added to the Windows Start Menu.
Register Anaconda3 as my default Python 3.10
Recommended. Allows other programs, such as VSCode, PyCharm, etc. to automatically detect Anaconda3 as the primary Python 3.10 on the system.
Clear the package cache upon completion
Recommended. Recovers some disk space without harming functionality.
Anaconda, Inc.
< Back
Install
Cancel


Anaconda3 2023.03-1 (64-bit) Setup
ANACONDA.
Installing
Please wait while Anaconda3 2023.03-1 (64-bit) is being installed.
Extract: numpy-base-1.23.5-py310h04254f7_0.conda
Show details
Anaconda, Inc.
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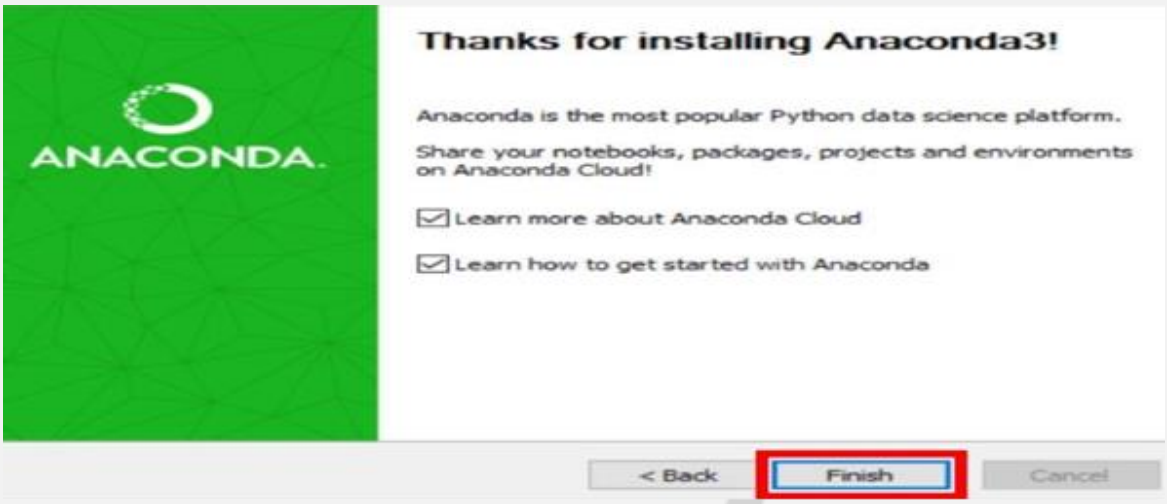
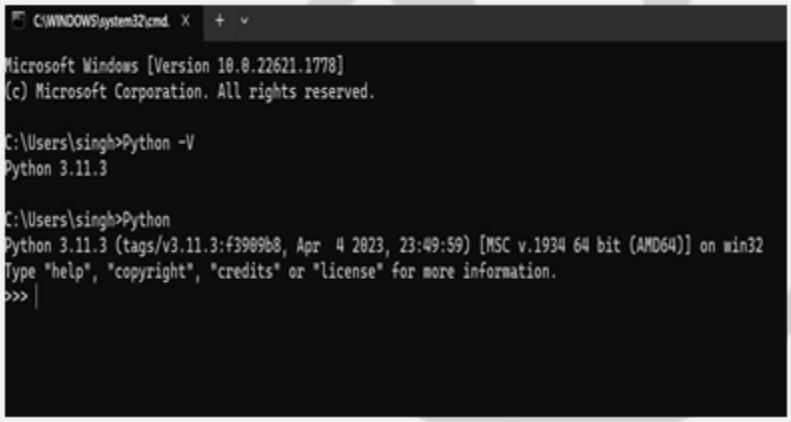
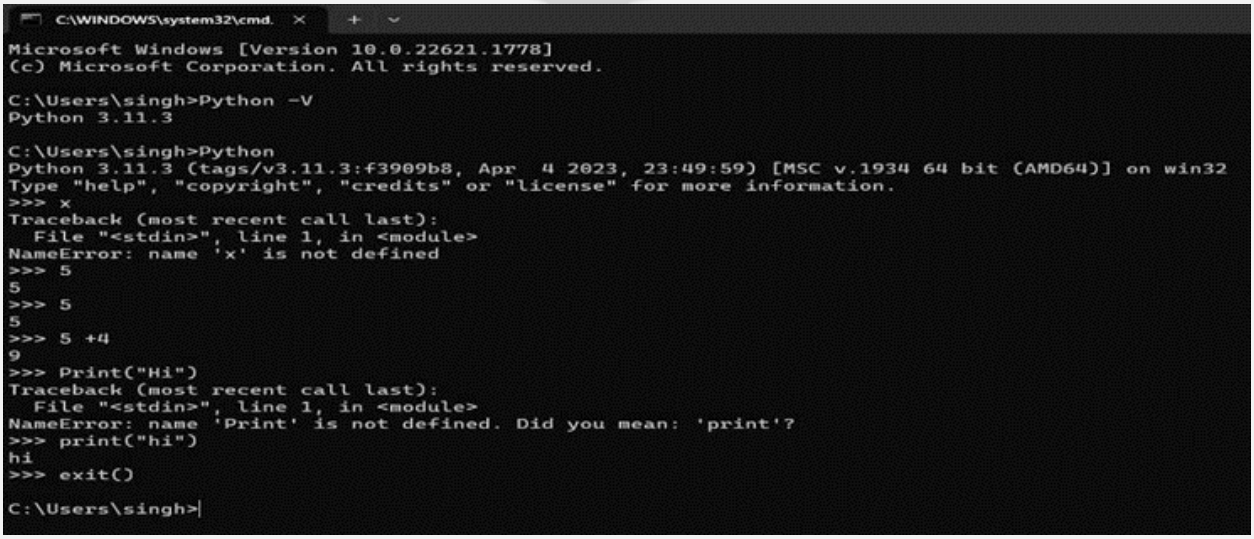
Next >
Cancel

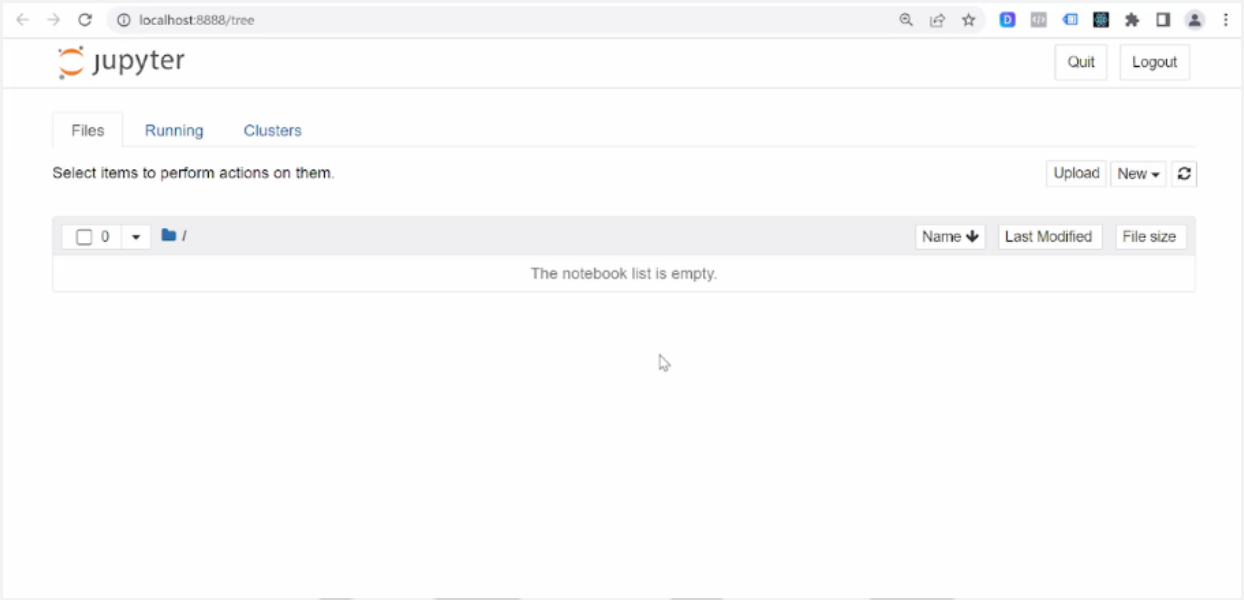


- Anaconda Download After open Command Prompt:

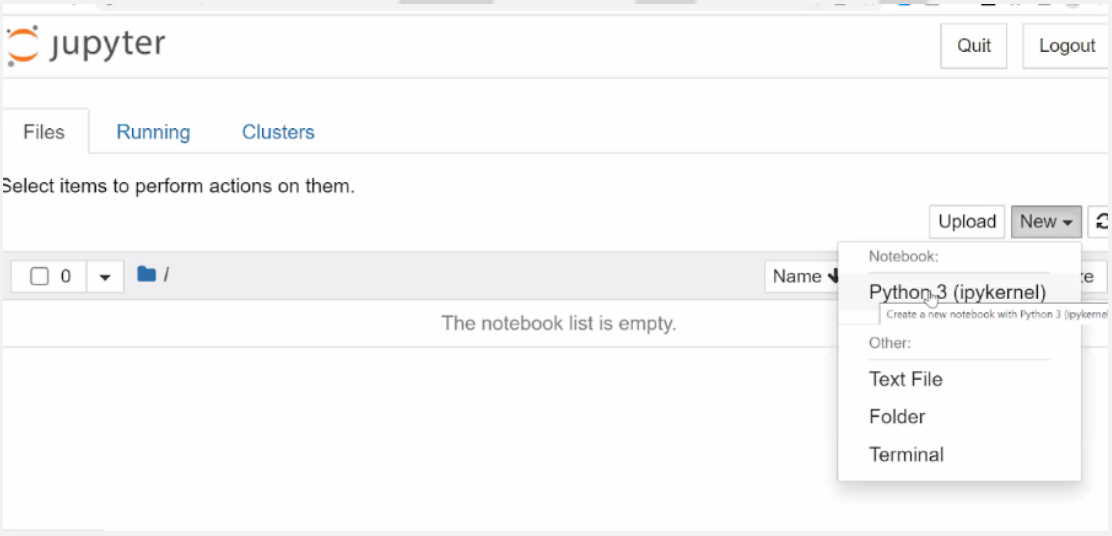




- Open a jupyter notebook.



- Open Python file



- **Variables**
  - ➢ A Python variable is a symbolic name that is a reference or pointer to an object.
  - ➢ Once an object is assigned to a variable, you can refer to the object by that name.

➢ But the data itself is still contained within the object.

- **Lists**
  - ➢ Python knows a number of compound data types, used to group together other values.
  - ➢ The most versatile is the list, which can be written as a list of comma-separated values (items) between square brackets.
  - ➢ Lists might contain items of different types, but usually the items all have the same type

- All other built-in sequence types, lists can be indexed and sliced

```
In [18]: lst = [ 11,2,33,45,49 ]

In [19]: lst[0]
Out[19]: 11

In [20]: lst[4]
Out[20]: 49
```