

What is Google Colab?

In []: Google Colab --> Online Python Compiler which is provided by Google.
--> The Interface of the Google colab is similar to Jupyter Notebook.
--> It is running online virtual machine.

How to Use Google Colab ?

In []: Step 1: Go on Google Type Google Colab

Step 2 : Click on First Link

Step 3: Click on new Notebook

Step 4: Start typing your code into the code cell.

Step 5: If we want to insert more cells we can click on + Button

Step 6: To Run the Cell we can click on Run button or we can use short cut for run(Shift+Enter)

Note --> All the Colab Notebooks will store inside google drive.

Editor vs IDE's

In []: Editor --> Is something in which we can write our code.

Example of Editor: Notepad,MS word,Notepad++,VS code,Sublime

IDE --> Integrated Development Enviornment --> is something which gives an enviornemnt for writing our code along with that we can execute our code.

IDE --> Editor+Compiler

Example of IDEs --> C/C++ --> Dev C++/Turbo C++
--> Python --> Spyder/Pycharm/IDLE
--> Java --> Eclipse/IntelliJ

These IDE'S are used to provide an enviornment for the execution of any program/code.

IDLE --> Integerated Development Learning Enviornemnt.

IDE --> Term is common for every Compilers.
IDLE --> Term is specific for Python Compiler.

Introduction to Visual Code(VS Code)

In []: Visual Studio Code, also commonly referred to as VS Code, is a source-code editor made by Microsoft with the Electron Framework, for Windows, Linux and macOS.Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git. Users can change the theme, keyboard shortcuts, preferences, and install extensions that add functionality.

Installation of VS Code For Python

In []: You can Refer this PDF for VS code Installation for Python:

[https://github.com/pratyushsrivastava500/DS010923-Pratyush/blob/13eb05e64ab3e787b8f75a47801c120ddf9c0f4c/Enviornmental%20Setup%20and%20Python%20Installation/Vs%20Code\(Python\)%20Installation.pdf](https://github.com/pratyushsrivastava500/DS010923-Pratyush/blob/13eb05e64ab3e787b8f75a47801c120ddf9c0f4c/Enviornmental%20Setup%20and%20Python%20Installation/Vs%20Code(Python)%20Installation.pdf)

Extensions

In []: Extension:

Text --> .txt
pdf --> .pdf
doc --> .docs
image --> .png,.jpeg.jpg
video --> mp4

Each and Every Python File is also having an Extensions:

Python File --> .py
Python Notebook --> .ipynb

Few Extensions of Different Python IDE'S:

pycharm --> .py
sublime --> .py
spyder --> .py
atom --> .py
vsCode --> .py
jupter notebook --> .ipynb
Jupyter Lab --> .ipynb
Google Colab --> ipynb

Preference of IDE'S:

==> Machine Learning or Data Science --> Jupyter Notebook,Jupyter Lab,Google Colab,Pycharm
==> Web development --> Vs Code,Atom,Pycharm

Important Note

In []: Note --> Currently Python 3.x Version(2008) is Going on.
--> Python 3.x Version won't provide Backward Comepibility to Python 2v.That means It is not mandatory that python2 programs will always in python3 version and vice versa.