Editor vs IDES

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In [ ]:
Editor --> Is something on which we write our code --> Code

IDE --> Integrated Development Enviorment --> is something which gives an enviorment for
                                             write our code and along with that we can excute our code.
IDE --> Code + Compilers

Example: Python(IDE) --> Pycharm,Spyder,Jupyter
         Java(IDE) --> Eclipse , Intellij
         C/C++(IDE) --> Dev C and Turbo C++

These IDES are giving an enviornment to write as well as to execute our code.


IDLE --> Integrated Development Learning Enviroment --> Specific to Python

IDE --> Term is Common for Every Programming Language.
IDLE --> Term is specific to Python Programming
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Extensions of Python

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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
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Python IDE'S Specifications

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In [ ]:
RAM --> Less than 4GB --> VS Code,Python IDLE
RAM --> Less Than 8GB --> Anaconda(jupyter notebook,Jupyter lab,Pycharm,Spyder...)
RAM --> Less than 2GB --> Python IDLE,Google Colab


Python Module and DSA Module --> Jupyter Notebook
Preprataion Module and DSA Advance --> VS Code
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What is Anaconda

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In [ ]:
Anaconda is a open source distribution packages built on python and R programming Along with that
Inside anaconda we have alot of libraraies and packages that are widelt used
in machine learning, data science, deep learning etc
IDE --> Integrated Development Enviornment.
IDLE --> integrated development learning enviornment.
```

IDEs Present in Anaconda

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In [ ]:
#Different IDE'S Present in Anaconda?
1.Jupyter notebook
2. Jupyter lab
3. Pycharm
4. Spyder
5. VS CODE
6. R Studio
Etc.......
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Way to open Anaconda Navigator?

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In [ ]:
#Way to open Anaconda Navigator?
Step 1: Go on Search Bar

Step 2: Type Anaconda Navigator

Step 3: Navigator will open(It will take some time)

Step 4: If you want to check the installed libraries and Packages you can check with the
        help of Enviorment Option that is present on the left side of Anaconda Navigator.

Step 5: If you want to open any python Editor than simply click on launch inside anaconda navigator
        you ide will automatically opened
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Ways to open different IDEs

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In [ ]:
#Ways to open different IDEs
First Way  : You can open any IDE with the help of Anaconda Navigator(Just click on Launch button
                                                      after opening Anaconda Navigator)

Second Way : You can open any IDE with the help of Anaconda Prompt(Just write the Ide Name like jupyter notebook)

Third Way  : Search the IDE on Search Bar and Double click on it.
```

Ways to Open Jupyter Notebook

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In [ ]:
#Ways to Open Jupyter Notebook
First Way  : Using Anaconda navigator(just launch jupyter notebook)

Second Way : Using anaconda Prompt(Just type command :   jupyter notebook)

Third Way  : Search Jupyter Notebook on Search Bar and Double click on it.
```

Write first code on jupyter notebook

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In [ ]:
Step 1: Open Juputer Notebook with the help of Anaconda Navigator or Anaconda Prompt.
Step 2: On the Right Side a Button named as NEW click on it.
Step 3: After Clicking on new button You will see the Python Option click on it.
Step 4: After clicking on Python You will redirected to the new file of Jupyter notebook
Step 5: If you want to rename your file you can simply click on the name on the file and after that you can
        rename your file.
Step 6: Cells are given to you Just write you code in the cell.

#For running the cell

Step 7: For executing the cell you can use shift+enter or Run button is given on Top.
Step 8: You code is running and you will see output.


Note: Your code is automatically saved you need not to save your file again and again in case of
       Jupyter Notebook. and All the files are already saved on your default folder(C:\Users\user)
```

About Google Colab

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In [ ]:
Google Colab(Online Edtior Google) -->  Google provides Jupyter Notebook like interface to run Python
                                        code on online Virtual Machines.
```

How to Use Google Colab

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In [ ]:
Step 1: Open https://colab.research.google.com/

Step 2: Select New Python3 Notebook

Step 3: Start Typing code into the code cells. Import all necessary libraries.

Step 4: To add new cell, click on Insert->Code Cell

Step 5: To run a particular cell, select the cell and press Ctrl + ENTER keys or click on Run Button
```