What is Anaconda Distribution ?

```
In [ ]:   1  Core python+Data science libraries (numpy, pandas, matplotlib, seaborn)
          2
          3  - It is a python package (libraries) distribution platform
          4  - It is an open source and it provides n number of data science librarues
          5
          6  # core python
          7  # Numpy - Numerical python ---> Numerical computations
          8  # Pandas - Panelling data ----> Data manipulation
          9  # Matplotlib -----> Data visualisation
         10  # Seaborn ------> Data visualisations
         11  # sklearn ----> statistical analysis and machine learning library
         12  # Flask ---- Deployment
         13
```

- A function is a piece of code that you have written once and will call it whenever you want that specific functionality to take place.
- A collection of functions will going to make a module and a collection of modules will become a library/package

What is a Jupyter Notebook?

- It is a browser based IDE(integrated Development Environment) provided by anaconda
- An IDE is an inteface (medium) between the user and the system

An overview Jupyter Notebook

- In jupyter notebook we will write the code in a cell
- We can write a single line or multiple lines of code in a cell
- We can also execute a code as well
- we get the output just below the cell

```
In [4]:   1  a = 10
          2  b = 20
          3  c = a+b
          4  print(c)
```

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Edit mode vs Command mode

Edit mode

- We can write into a cell only in edit mode
- Edit mode is being represented by a green color
- To convert the mode from a command mode to an edit mode press enter key or just click inside the cell

Command mode

- We cannot write anything in a cell when we are in command mode
- In command mode we can select multiple cells and can do any operation
- Command mode is being represented by a blue color
- To convert a cell from an edit mode into a command mode press esc key

Code Cell vs Markdown cell

Code cell

- We are going to write the python code in the code mode
- If we write anything else but pythin code then it will throw an error

In [17]:
```python
1  a = 10
2  b = 20
3  c = a/b
4  print(c)
```

0.5

In [18]:
```python
1  this is a python class
```

```
Cell In[18], line 1
  this is a python class
              ^
SyntaxError: invalid syntax
```

Markdown mode

- In markdown mode, we will write simple text, some observations from the analysis, any advice that you want to give

This is a Python class

Python

Python

Python

Python

Python

Python

Python

a = 10

```
In [22]:   1  b = 20
```

```
In [25]:   1  print(a+b)
```

30

Italaic

- to convert any text to italics put that word in (*)*.......*()
- to convert any text in bold we will use # before the word
- to coonvert any text in bold itlaics form

italics

Bullets

- Text

- Text

Mayank atul Ghai

```
In [ ]:   1
```

ShortCuts

- To run a cell ----> Rshift + Enter
- To add a cell above a particular cell ---> Press esc(to get into command mode)+ press a
- To add a cell below a particular cell ---> Press esc + press b
- To convert the mode of the cell from code to markdown ----> Press esc + press m
- To convert the mode of the cell from markdown mode to code mode ---> Press esc + press y
- To delete a cell ---- press esc + press x
- To get the list of all the other shortcuts in jupyter notebook ---- press esc + press h

In [ ]:   1