Name:- Om Patil 6265 SYIT-C

## Practical No. 1

Aim: To install different Python libraries to perform Data Visualisation.

```
In [1]: pip install matplotlib
           Defaulting to user installation because normal site-packages is not writeable
           Requirement already satisfied: matplotlib in c:\programdata\anaconda3\lib\site-packages (3.7.8)
           Requirement already satisfied: cycler>=0.10 in c:\programdata\anaconda3\lib\site-packages (from matplotlib) (0.11.0)
           Requirement already satisfied: python-dateutil>=2.7 in c:\programdata\anaconda3\lib\site-packages (from matplotlib) (2.8-
           Requirement already satisfied: contourpy>-1.0.1 in c:\programdata\anaconda3\lib\site-packages (from matplotlib) (1.0.5)
           Requirement already satisfied: fonttools>=4.22.0 in c:\programdata\anaconda3\lib\site-packages (from matplotlib) (4.25.0)
Requirement already satisfied: kiwisolver>=1.0.1 in c:\programdata\anaconda3\lib\site-packages (from matplotlib) (1.4.4)
           Requirement already satisfied: packaging>=20.0 in c:\programdata\anaconda3\lib\site-packages (from matplotlib) (22.0)
           Requirement already satisfied: pyparsing>=2.3.1 in c:\programdata\anaconda3\lib\site-packages (from matplotlib) (3.0.9)
Requirement already satisfied: pillow>=6.2.0 in c:\programdata\anaconda3\lib\site-packages (from matplotlib) (9.4.0)
Requirement already satisfied: numpy>=1.20 in c:\programdata\anaconda3\lib\site-packages (from matplotlib) (1.23.5)
           Requirement already satisfied: six>=1.5 in c:\programdata\anaconda3\lib\site-packages (from python-dateutil>>2.7->matplotl
           ib) (1.16.0)
           Note: you may need to restart the kernel to use updated packages.
In [2]: pip install seaborn
          Defaulting to user installation because normal site-packages is not writeable Requirement already satisfied: seaborn in c:\programdata\anaconda3\lib\site-packages (0.12.2)
           Requirement already satisfied: matplotlib!=3.6.1,>=3.1 in c:\programdata\anaconda3\lib\site-packages (from seaborn) (3.7.
           Requirement already satisfied: pandas>-0.25 in c:\programdata\anaconda3\lib\site-packages (from seaborn) (1.5.3
           Requirement already satisfied: numpy[=1.24.0,>=1.17 in c:\programdata\anaconda3\lib\site-packages (from seaborn) (1.23.5)
Requirement already satisfied: pyparsing>=2.3.1 in c:\programdata\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.
           1->seaborn) (3,8,9)
           Requirement already satisfied: cycler>=8.10 in c:\programdata\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->s
           eaborn) (0.11.0)
Requirement already satisfied: fonttools>=4.22.0 in c:\programdata\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=
           3.1->seaborn) (4.25.0)
           Requirement already satisfied: packaging>=20.0 in c:\programdata\anaconda3\lib\site-packages (from matplotlib|=3.6.1,>=3.1
            >seaborn) (22.8)
           Requirement already satisfied: kiwisolver>=1.0.1 in c:\programdata\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=
           3.1->seaborn) (1.4.4)
           Requirement already satisfied: contourpy>=1.0.1 in c:\programdata\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.
1->seaborn) (1.0.5)
Requirement already satisfied: python-dateutil>=2.7 in c:\programdata\anaconda3\lib\site-packages (from matplotlib!=3.6.1,
           >=3.1->seaborn) (2.8.2)
           Requirement already satisfied: pillow>=6.2.0 in c:\programdata\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->
           seaborn) (9.4.8)
           Requirement already satisfied: pytz>=2020.1 in c:\programdata\anaconda3\lib\site-packages (from pandas>=0.25->seaborn) (20
           22.73
           Requirement already satisfied: six>=1.5 in c:\programdata\anaconda3\lib\site-packages (from python-dateutil>=2.7->matplotl
           ib!=3.6.1,>=3.1->seaborn) (1.16.0)
Note: you may need to restart the kernel to use updated packages.
In [3]: pip install numpy
          Defaulting to user installation because normal site-packages is not writeable 
Requirement already satisfied: numpy in c:\programdata\anaconda3\lib\site-packages (1.23.5)
          Note: you may need to restart the kernel to use updated packages.
In [4]: pip install pandas
          Defaulting to user installation because normal site-packages is not writeable
          Requirement already satisfied: pandas in c:\programdata\anaconda>\lib\site-packages (1.5.3)
Requirement already satisfied: numpy>=1.21.0 in c:\programdata\anaconda>\lib\site-packages (from pandas) (1.23.5)
          Requirement already satisfied: pytz>-2020.1 in c:\programdata\anaconda3\lib\site-packages (from pandas) (2022.7)
Requirement already satisfied: python-dateutil>-2.8.1 in c:\programdata\anaconda3\lib\site-packages (from pandas) (2022.7)
Requirement already satisfied: six>=1.5 in c:\programdata\anaconda3\lib\site-packages (from python-dateutil>=2.8.1->panda
           5) (1.15.0)
           Note: you may need to restart the kernel to use updated packages.
In [5]: import matplotlib.pyplot as plt
In [6]: import seaborn
In [7]: import numpy as np
In [8]: import pandas as pd
```

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```
In [18]: import matplotlib print(matplotlib,_version_)

3.7.8

In [11]: import seaborn print(seaborn_version_)

8.12.2

In [12]: import numpy print(numpy,_version_)

1.23.5

In [13]: import pandas print(pandas,_version_)

1.5.3
```