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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 (3.7.0)
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) (2.8.2)
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->matplotlib) (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) (3.7.0)
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) (3.0.9)
Requirement already satisfied: cycler>=0.10 in c:\programdata\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (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) (22.0)
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) (9.4.0)
Requirement already satisfied: pytz>=2020.1 in c:\programdata\anaconda3\lib\site-packages (from pandas>=0.25->seaborn) (2022.7)
Requirement already satisfied: six>=1.5 in c:\programdata\anaconda3\lib\site-packages (from python-dateutil>=2.7->matplotlib!=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\anaconda3\lib\site-packages (1.5.3)
Requirement already satisfied: numpy>=1.21.0 in c:\programdata\anaconda3\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) (2.8.2)
Requirement already satisfied: six>=1.5 in c:\programdata\anaconda3\lib\site-packages (from python-dateutil>=2.8.1->pandas) (1.16.0)
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 [9]: `pip list`

Package	Version
alabaster	0.7.12
anaconda-client	1.11.2
anaconda-navigator	2.4.0
anaconda-project	0.11.1
anyio	3.5.0
appdirs	1.4.4
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3
astroid	2.14.2
astropy	5.1
asttokens	2.0.5
atomicwrites	1.4.0
attrs	22.1.0
Automat	20.2.0
autopep8	1.6.0
Babel	2.11.0

In [10]: `import matplotlib`
`print(matplotlib.__version__)`
3.7.0

In [11]: `import seaborn`
`print(seaborn.__version__)`
0.12.2

In [12]: `import numpy`
`print(numpy.__version__)`
1.23.5

In [13]: `import pandas`
`print(pandas.__version__)`
1.5.3