Data Visualization in Python

Q What is Data Visualization?

* Data visualiztion is a **quick**,**easy** way to **convert concepts** in **universal manner**.
* Data visualiztion is the **graphical reprentation** of information and data.
* Visual elements like **charts** , **graphs** , and **maps** , data visualization tools provide an accessible way to see and **understand trends** , **outliers** , and **pattern in data**.

Q Types of Data Visualization in python?

Ans- **Plotting Libraries:**

* **Matplotlib** : low level , provides lots of freedom
* **Pandas Visualization** : easy to use interface , built on Matplotlib
* **Seaborn** : High-level interface , great default styles
* **ggplot** : based on R’s ggplot2 , uses Grammer of Graphics
* **Plotly** : can create intreactive ploats

Q What is Matplotlib ?

* Ans- Matplotlib is a plottiong library for Python programming language and its numerical mathematics extentio Numpy.
* Matplotlib is a python library used for data visualization.
* Matplotlib is 2D and 3D plotting python library.
* It was introduced by john hunter in the year 2002.

Q Matplotlib Graph Types ?

* Linear Plot
* Scatter Plot
* Bar Plot
* Stem Plot
* Step Plot
* Hist Plot
* Box Plot
* Pie Plot
* Fill\_Between Plot

Q Installation of matplotlib ?

Ans- Write “pip install matplotlib” on cmd terminal or on jupyter notebook.

Q How to import matplotlib ?

Ans- Write “import matplotlib.pyplot as plt” or “from matplotlib imprt pyplot as plt” on jupyter notebook.