Q1 Explain python's role in Data Science.

- Data analysis and visulization are essential aspects of Data science at the present time.

- Python has several libraries that make it easy to analyze and visudize data.

1. Exploring Datasets :- Pandas library provided that tools for reading and writing data in various format such as CSV, Excel and SQL

2. Data Cleaning And Preprocessing :- Pandas library that data cleaning and preprocessing tools such as removing duplicates, dealing with missing values, and transforming data

3. Data Wrangling And Manipulation: NumPy library provided that tools for working with arrays such as indexing slicing & reshaping arrays.

4. Generating Statistical Reports :- Scipy library & provided that tools for statistical analysis, such as hypothesis testing, regression analysis & cluster analysis

5. Graphical Representation :- Seaborn library provides tools for creating statistical graphics, such as heatmap, Pair plot and facet grids