Data Visualization

Overview:
Data visualization is the graphical representation of information and data. It helps identify patterns, trends, and insights that may not be obvious in raw numbers.

Key Libraries:

- **Matplotlib:** For basic visualizations such as bar charts, histograms, and scatter plots.
- **Seaborn:** Built on top of Matplotlib, it provides more attractive and informative statistical plots.

Common Plots:

- **Bar Chart:** Compares categories or groups.
- **Histogram:** Shows the distribution of a single numerical variable.
- **Scatter Plot:** Shows relationships or correlations between two variables.
- **Box Plot:** Highlights data spread and outliers.
- **Heatmap:** Displays correlations using color gradients.

Importance:
Visualization allows better storytelling with data. It converts raw data into meaningful insights, helping in decision-making and hypothesis formation.

Project Milestone:
Completed the first **Exploratory Data Analysis (EDA)** through visual insights.