**Codveda Data Analytics Internship - Task 2 Report**

**Name:** Monil Sunilkumar Panchal

**Task Title:** Exploratory Data Analysis (EDA)  
**Dataset Used:** iris.csv

**Objective:**  
To perform summary statistics and visualize distributions and relationships in the data.

**Steps Performed:**

1. Loaded the iris dataset and checked the structure using .info().
2. Generated summary statistics using .describe().
3. Calculated mean, median, mode, and standard deviation for all numerical columns.
4. Plotted visualizations:
   * Histogram of all numerical columns
   * Boxplot of all numerical columns
   * Scatter plot of all the different combinations of two numerical columns
   * Correlation heatmap for numerical features

**Insights:**

* Sepal length is right-skewed.
* Setosa species has smaller sepal and petal dimensions.
* Strong positive correlation between petal length and petal width.

**Conclusion:**

EDA revealed meaningful patterns in the iris dataset. Visualizations and statistics helped identify trends, spread, and relationships between variables