

Project Title: Exploratory Data Analysis (EDA) on Superstore Sales Data

Objective: Perform complete exploratory data analysis on a real-world Superstore dataset Use Python libraries like Pandas, Matplotlib, Seaborn, Plotly (optional)

1. Data Loading

- Load the dataset
- Display the first 10 rows
- Show shape, column names, and basic info

2. Data Cleaning

- Check for missing values
- Handle missing values (mean, median, mode, or drop)(optional)
- Check data types and convert if necessary
- Check for duplicates

3. Visualization

Use the following plots to visualize key aspects of the data:

- **Bar Chart:** Use for Category, Sub-Category, Segment, Region, State
- **Scatter Plot:** Use to compare Sales vs Profit, Discount vs Profit
- **Histogram:** Use for numeric distributions such as Sales, Profit, Quantity, Discount
- **Heatmap:** Use to visualize correlations between numeric variables such as Sales, Profit, Discount, and Quantity

4. Outlier Detection

- Use boxplots to identify outliers in Sales, Profit, and Discount