**1. Customers.csv**

- **Objectives:**
    - Understand customer demographics and segmentation potential.
    - Identify key customer characteristics.
    - Identifying unique values in dataset.
- **Key Analyses:**
    - **Data Visualization:**
        - Histograms and box plots for numerical features to understand their distribution.
        - Bar charts and countplots for categorical features to analyze their frequencies.
        - Scatter plots to visualize relationships between features.
    - **EDA:**
        - I have done Exploratory Data Analysis on Customers dataset to show the analysis of Signup by Years and customer distribution by region.

- **Potential Insights:**
    - Identify key customer segments based on Region, SignUpDate.
    - Understand the distribution of customer demographics.
    - Discover any potential correlations between customer attributes.

**2. Transactions.csv**

- **Objectives:**
    - Understand purchase behavior and patterns.
    - Analyse sales trends and product performance.
- **Key Analyses:**
    - **Descriptive Statistics:** Calculate total sales, average order value, and other relevant metrics.
    - **Data Visualization:**
        - Time series plots to analyse sales trends over time.
        - Histograms and box plots for numerical features.
        - Bar charts to analyse product popularity and sales distribution across different categories.

- **EDA:**
  - I have done Exploratory Data Analysis on transaction dataset to show the analysis of distribution by quantity, price, totalvalue.
  - I have done analysis on Analyze Transaction Dates, and also done Correlation Heatmap for Numerical Features.

- **Potential Insights:**
  - Identify peak sales periods and seasonality.
  - Analyze customer purchase frequency and recency.
  - Understand product performance and identify best-selling items quentity.

**3. Products.csv**

- **Objectives:**
  - Understand product characteristics and their distribution.
  - Identify potential relationships between product attributes.
- **Key Analyses:**
  - **Descriptive Statistics:** Calculate summary statistics for numerical features (e.g., Price).
  - **Data Visualization:**
    - Histograms and box plots for numerical features.
    - Bar charts and count plots for categorical features (e.g., ProductCategory).
    - Scatter plots to visualize relationships between price and other features (if available).
  - **EDA:**
    - I have done Exploratory Data Analysis on product dataset to show the analysis of distribution by price, product category, product price

- **Potential Insights:**
  - Understand the price distribution and identify price ranges for different product categories.
  - Analyze the popularity and distribution of different product categories.
  - Identify potential relationships between product attributes and price.