Exploratory Data Analysis (EDA) on Retail Sales Data

Project Description:

This project analyzes a retail sales dataset to uncover patterns, sales trends, and relationships between stock, price, and sales performance.

Steps Performed:

1. Data Loading & Cleaning

2. Descriptive Statistics

3. Time Series Analysis (Daily & Monthly Sales)

4. Stock vs Sales Analysis

5. Price vs Sales Relationship

6. Visualizations (Line, Bar, Scatter)

7. Final Insights & Recommendations

Key Insights:

- June has the highest sales (11,856), August the lowest (3,278).

- Higher stock availability increases sales.

- Higher product price decreases sales.

- Clear seasonal trends with mid■year peak.

Recommendations:

- Increase inventory during peak months (June–July).

- Provide discounts in low■sales months.

- Maintain proper stock levels to avoid stock■out losses.

- Use dynamic pricing based on demand trends.

Conclusion:

This EDA helps understand retail sales behavior and provides actionable steps to improve business performance.