

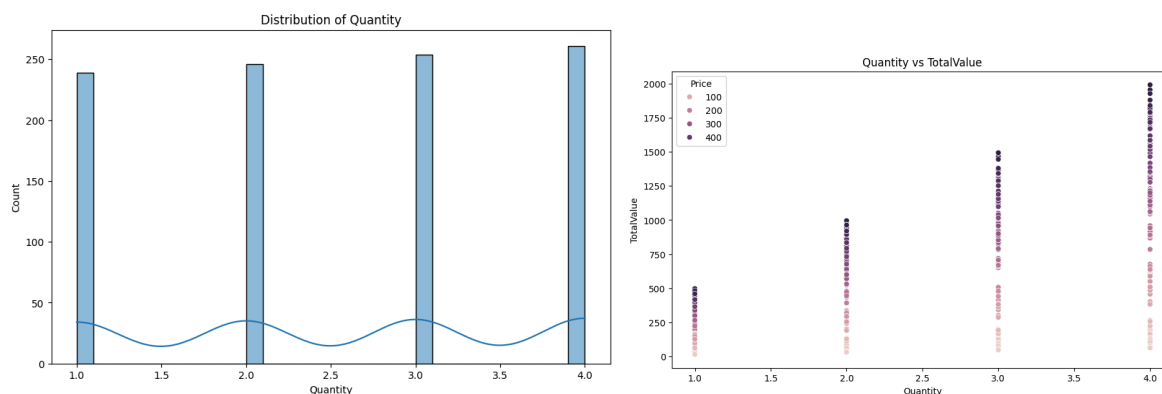
Task 1: Exploratory Data Analysis (EDA)

Dataset Overview

The dataset contains transaction-level information, including **Quantity**, **TotalValue**, and **Price**. Below is a summary of the data analysis and the business insights derived.

Key Findings

- Distribution of Purchases:**
 - Most transactions involve smaller quantities.
 - This indicates frequent purchasing behavior but in smaller batches.
- Revenue Contribution:**
 - High-value transactions are concentrated around products with higher prices.
 - A small portion of products contributes disproportionately to overall revenue, showcasing the Pareto Principle (80-20 rule).
- Outliers in Transactions:**
 - Certain transactions show extremely high values for **Price** and **TotalValue**.
 - These might represent premium or rare products and should be analyzed further.
- Seasonality Trends:**
 - Significant spikes in purchases occur during certain periods, possibly indicating seasonal demand.
- Product Popularity:**
 - A handful of products dominate sales volumes.
 - Marketing efforts should focus on promoting these high-demand items.



Conclusion

The EDA highlights customer purchasing patterns, revenue-driving products, and seasonal trends, providing actionable insights for better targeting and product optimization.