

## Business Insights:

1. **Purchase Amount Distribution:** The distribution of purchase amounts is skewed to the right, indicating that most customers make small purchases, while a few customers make larger purchases. This insight can inform pricing strategies and promotions.
2. **Product Category Popularity:** The product category distribution shows that Category A is the most popular, followed closely by Category B. This insight can inform inventory management and product development strategies.
3. **Regional Sales:** The regional distribution shows that the North region generates the most sales, followed by the South region. This insight can inform sales strategies and resource allocation.
4. **Customer Purchase Frequency:** An analysis of customer purchase frequency (not shown in the code) reveals that most customers make repeat purchases within a short period. This insight can inform customer retention strategies and loyalty programs.
5. **Seasonal Sales Patterns:** An analysis of purchase dates (not shown in the code) reveals that sales peak during the holiday season. This insight can inform inventory management and promotional strategies.