

Project 1

Analytical Questions

1. **Total Revenue Calculation:** What is the total revenue generated from the sales in this dataset?
2. **Top Customers:** Who are the top 10 customers in terms of total revenue?
3. **Sales by Country:** What are the total sales per country?
4. **Monthly Sales Trends:** How do sales trends vary on a monthly basis?
5. **Most Popular Products:** What are the top 10 best-selling products by quantity?
6. **Average Order Value:** What is the average order value for each customer?
7. **Frequent Buyers:** Which customers made the most frequent purchases?
8. **Sales on Weekdays vs. Weekends:** How do sales compare between weekdays and weekends?
9. **Repeat Purchase Rate:** What percentage of customers made repeat purchases?
10. **High-Value Orders:** What are the highest-value orders in the dataset?

Visualization Questions

1. **Revenue Over Time:** Create a line chart showing total monthly revenue.
2. **Sales Distribution by Country:** Create a bar chart showing sales distribution across different countries.
3. **Top Products by Sales:** Create a bar chart for the top 10 best-selling products.
4. **Customer Segmentation:** Create a scatter plot showing customer segmentation based on their total revenue and frequency of purchases.
5. **Sales Heatmap:** Create a heatmap showing sales by day of the week and time of day.
6. **Product Sales Trends:** Create a line chart showing the sales trends of the top 5 products over time.
7. **Revenue Distribution:** Create a histogram showing the distribution of order values.
8. **Top Customers:** Create a bar chart for the top 10 customers by total revenue.
9. **Sales Performance:** Create a dashboard combining multiple visualizations (e.g., revenue over time, top products, and sales by country).
10. **Customer Lifetime Value:** Create a box plot showing the distribution of customer lifetime values.
11. **Show correlation matrix.**