

Project 2

Analytical Questions

1. **Total Expenditure:** What is the total expenditure over the given period?
2. **Expenditure by Category:** What is the total expenditure for each category?
3. **Average Daily Expenditure:** What is the average expenditure per day?
4. **Top Spending Items:** What are the top 5 items by total expenditure?
5. **Expenditure by Day:** How does expenditure vary by day of the week?
6. **Time of Day Analysis:** What are the peak times for spending?
7. **Expenditure by Social Context:** How does spending differ when alone versus with a friend?
8. **Item Frequency:** Which items are purchased most frequently?
9. **Expenditure Trends:** Are there any trends in spending over the month?
10. **Category vs. Time:** How does spending in different categories vary by time of day?

Visualization Questions

1. **Expenditure Over Time:** Create a line chart showing total daily expenditure.
2. **Expenditure by Category:** Create a bar chart showing expenditure across different categories.
3. **Top Spending Items:** Create a bar chart for the top 5 items by total expenditure.
4. **Expenditure by Day of the Week:** Create a bar chart showing average expenditure for each day of the week.
5. **Time of Day Analysis:** Create a heatmap showing expenditure by time of day and day of the week.
6. **Category Breakdown:** Create a pie chart showing the proportion of total expenditure for each category.
7. **Expenditure Distribution:** Create a histogram showing the distribution of transaction amounts.
8. **Expenditure by Social Context:** Create a bar chart comparing expenditure when alone versus with a friend.
9. **Item Purchase Frequency:** Create a bar chart showing the frequency of each item purchased.
10. **Daily Spending Trends:** Create a line chart showing cumulative expenditure over the month.
11. **Correlation Matrix**