**PROJECT QUESTION**

**1. Customer and Demographic Analysis**

1. Which branch has the highest sales volume, and how does it vary by city?
2. How does the "Customer type" (e.g., Member vs. Non-member) influence purchasing patterns (e.g., average total sales or quantity purchased)?
3. Is there a significant difference in the average rating given by male vs. female customers?
4. Which gender contributes more to overall sales revenue?
5. What is the average total revenue per transaction for each branch?
6. What is the percentage distribution of customer types (Member vs. Normal)?

**2. Product and Pricing Analysis**

1. Which "Product line" generates the highest revenue across all branches?
2. What is the relationship between "Unit price" and "Rating"? Do higher-priced products receive higher ratings?
3. Which "Product line" has the highest avarage gross income and the highest avarage cogs?
4. Are any product lines associated with consistently high or low ratings?

**3. Sales and Performance Analysis**

1. During what time of day (e.g., morning, afternoon, evening, night) do customers spend the most on purchases?
2. How does the "Payment" method (e.g., Cash, Credit Card) impact the total revenue generated?
3. What is the average "Tax 5%" collected per transaction for each branch?
4. What is the most frequently used payment method?

**4. Profitability Analysis**

1. Which branch has the highest average "Gross income" per transaction?
2. What is the correlation between "Quantity" purchased and "Gross income"?

**5.** **Customer Behavior and Trends**

1. Do "Members" purchase higher quantities on average compared to "Non-members"?
2. What is the average transaction size (based on "Total") for each "Payment" method?

**6. Multivariate Analysis**

1. Are there significant differences in "Gross income" based on "City", "Customer type", and "Payment" method combined?
2. How does the "Rating" differ across combinations of "Branch" and "Product line"?
3. Is there any significant trend between "Quantity" purchased and "Total" revenue across cities?