Walmart Business Problem

Customer Behavior & Payment Preferences

1. **Analyze Payment Methods and Sales**
   Question: What are the different payment methods, and how many transactions and items were sold with each method?
   Purpose: Understand customer preferences for payment methods, aiding in payment optimization strategies.

2. **Determine the Most Common Payment Method per Branch**
   Question: What is the most frequently used payment method in each branch?
   Purpose: Understand branch-specific payment preferences, helping streamline payment processes.

Sales & Revenue Analysis

3. **Analyze Average Revenue per Transaction by Branch**
   Question: What is the average revenue per transaction in each Walmart branch?
   Purpose: Compare sales performance across branches and identify high/low-performing stores.

4. **Identify Top 3 Revenue-Contributing Product Categories**
   Question: Which three product categories generate the most revenue overall?
   Purpose: Focus marketing and inventory planning on high-performing categories.

5. **Analyze Monthly Sales Trends**
   Question: How do sales trends vary month-by-month across different Walmart branches?
   Purpose: Forecast demand and plan seasonal campaigns and inventory.

6. **Identify Month with Highest Average Transaction Value**
   Question: In which month did Walmart record the highest average transaction value?
   Purpose: Recognize high-spending periods to inform promotional strategies.

7. **Compare Weekend vs Weekday Sales**
   Question: How do sales and transaction volumes differ between weekdays and weekends?
   Purpose: Align staffing and inventory with customer traffic patterns.

8. **Identify Branches with Highest Revenue Decline Year-Over-Year**
   Question: Which branches experienced the largest decrease in revenue compared to the previous year?
   Purpose: Detect and respond to local issues affecting revenue.

Branch & Shift Optimization

9. **Determine the Busiest Day for Each Branch**
   Question: What is the busiest day of the week for each branch based on transaction volume?
   Purpose: Optimize staffing and inventory to meet peak-day demand.

10. **Analyze Sales Shifts Throughout the Day**
    Question: How many transactions occur in each shift (Morning, Afternoon, Evening) across branches?
    Purpose: Improve shift management and replenishment schedules.

Product Category Performance

11. **Identify the Highest-Rated Category in Each Branch**
    Question: Which category received the highest average rating in each branch?
    Purpose: Promote popular categories for better customer satisfaction.

12. **Analyze Category Ratings by City**
    Question: What are the average, minimum, and maximum ratings for each category in each city?
    Purpose: Tailor city-level promotions based on customer preferences.

13. **Analyze Average Ratings per Category**
    Question: What is the average customer rating for each product category?
    Purpose: Evaluate customer satisfaction and guide product development.

14. **Calculate Total Profit by Category**
    Question: What is the total profit for each category, ranked from highest to lowest?
    Purpose: Prioritize high-margin products in strategy.