Walmart Business Problems

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:** This helps understand customer preferences for payment methods, aiding in payment optimization strategies.

2. Identify the Highest-Rated Category in Each Branch

- Question: Which category received the highest average rating in each branch?
- **Purpose:** This allows Walmart to recognize and promote popular categories in specific branches, enhancing customer satisfaction and branch-specific marketing.

3. Determine the Busiest Day for Each Branch

- Question: What is the busiest day of the week for each branch based on transaction volume?
- Purpose: This insight helps in optimizing staffing and inventory management to accommodate peak days.

4. Calculate Total Quantity Sold by Payment Method

- Question: How many items were sold through each payment method?
- **Purpose:** This helps Walmart track sales volume by payment type, providing insights into customer purchasing habits.

5. Analyze Category Ratings by City

- Question: What are the average, minimum, and maximum ratings for each category in each city?
- Purpose: This data can guide city-level promotions, allowing Walmart to address regional preferences and improve customer experiences.

6. Calculate Total Profit by Category

- Question: What is the total profit for each category, ranked from highest to lowest?
- **Purpose:** Identifying high-profit categories helps focus efforts on expanding these products or managing pricing strategies effectively.

7. Determine the Most Common Payment Method per Branch

- Question: What is the most frequently used payment method in each branch?
- **Purpose:** This information aids in understanding branch-specific payment preferences, potentially allowing branches to streamline their payment processing systems.

8. Analyze Sales Shifts Throughout the Day

- Question: How many transactions occur in each shift (Morning, Afternoon, Evening) across branches?
- **Purpose:** This insight helps in managing staff shifts and stock replenishment schedules, especially during high-sales periods.

9. Identify Branches with Highest Revenue Decline Year-Over-Year

- **Question:** Which branches experienced the largest decrease in revenue compared to the previous year?
- Purpose: Detecting branches with declining revenue is crucial for understanding possible local issues and creating strategies to boost sales or mitigate losses.

10. Identify the Most Profitable Product Category in Each Branch

- Question: Which product category generates the highest profit in each branch?
- Purpose: Understanding the most profitable category helps in optimizing stock, increasing promotions for high-margin products, and making data-driven business decisions.

11. Find the Month with the Highest Sales for Each Branch

- Question: What is the peak sales month for each branch?
- Purpose: Identifying peak months helps in planning inventory, promotions, and staffing to maximize sales during high-demand periods.

12. Analyze Customer Shopping Behavior - Find the Average Basket Size per Branch

- Question: What is the average number of items per transaction in each branch?
- Purpose: Analyzing basket size helps in understanding customer purchasing patterns, optimizing store layouts, and improving sales strategies.