Project Title:
Sales Performance Analysis of Walmart Stores Using Advanced MySQL Techniques

Introduction:

Walmart, a major retail chain, operates across several cities, offering a wide range of products. The dataset provided contains detailed transaction data, including customer demographics, product lines, sales figures, and payment methods. This project will use advanced SQL techniques to uncover actionable insights into sales performance, customer behavior, and operational efficiencies.

Business Problem:
Walmart wants to optimize its sales strategies by analyzing historical transaction data across branches, customer types, payment methods, and product lines. To achieve this, advanced MySQL queries will be employed to answer challenging business questions related to sales performance, customer segmentation, and product trends.

Dataset Link:
📗 **WalmartSalesData.csv**

Task 1: Identifying the Top Branch by Sales Growth Rate (6 Marks)

Walmart wants to identify which branch has exhibited the highest sales growth over time. Analyze the total sales for each branch and compare the growth rate across months to find the top performer.

Task 2: Finding the Most Profitable Product Line for Each Branch (6 Marks)

Walmart needs to determine which product line contributes the highest profit to each branch. The profit margin should be calculated based on the difference between the

gross income and cost of goods sold.

Task 3: Analyzing Customer Segmentation Based on Spending (6 Marks)

Walmart wants to segment customers based on their average spending behavior. Classify customers into three tiers: High, Medium, and Low spenders based on their total purchase amounts.

Task 4: Detecting Anomalies in Sales Transactions (6 Marks)

Walmart suspects that some transactions have unusually high or low sales compared to the average for the product line. Identify these anomalies.

Task 5: Most Popular Payment Method by City (6 Marks)

Walmart needs to determine the most popular payment method in each city to tailor marketing strategies.

Task 6: Monthly Sales Distribution by Gender (6 Marks)

Walmart wants to understand the sales distribution between male and female customers on a monthly basis.

Task 7: Best Product Line by Customer Type (6 Marks)

Walmart wants to know which product lines are preferred by different customer types (Member vs. Normal).

Task 8: Identifying Repeat Customers (6 Marks)

Walmart needs to identify customers who made repeat purchases within a specific

time frame (e.g., within 30 days).

Task 9: Finding Top 5 Customers by Sales Volume (6 Marks)

Walmart wants to reward its top 5 customers who have generated the most sales
revenue.

Task 10: Analyzing Sales Trends by Day of the Week (6 Marks)

Walmart wants to analyze the sales patterns to determine which day of the week
brings the highest sales.

Present your analysis and findings by copying all the queries and result tables from the previous steps into a
PowerPoint presentation.
Copy and Paste SQL queries and its corresponding results for the tasks 1 to 10.
Ensure that the tables are formatted clearly, and the queries are concise.
Use charts, graphs, or tables to make your data more digestible.   (20 Marks)

Submit Guidelines

- Students can submit in SQL script files or word documents.
- Submit your PPT and SQL script after zipping those in a folder.

How to ZIP a PDF file:

● Put all of the documents/sheets you want to compress (or just one) into a new folder.
● Right click on that folder.
● Select the "Compress to ZIP file" option and then click "Compressed (Zipped) folder."
● A new .ZIP file will be created that contains your document(s).

Note:
- Plagiarism will result in a penalty, including possible project disqualification.
- The project will be evaluated based on the quality of analysis, depth of insights, and feasibility of recommendations.
- If the student sets their own criteria, they need to clearly mention and explain it.Marks will be given according to the specified criteria if they are acceptable.
- Remember to keep the video length less than 5 minutes with your face clearly visible.