SQL PROJECT-RETAIL ANALYSIS

QUESTION SETS

SQL PROJECT –RETAIL ANALYSIS
QUESTIONS SET 1 -EASY

1. Write a query to identify the number of duplicates in "sales_transaction" table. Also, create a separate table containing the unique values and remove the original table from the databases and replace the name of the new table with the original name. M

2. Write a query to identify the discrepancies in the price of the same product in "sales_transaction" and "product_inventory" tables. Also, update those discrepancies to match the price in both the tables. e

3. Write a SQL query to identify the null values in the dataset and replace those by “Unknown”. E

4. Write a SQL query to clean the DATE column in the dataset.

Steps:

- *Create a separate table and change the data type of the date column as it is in TEXT format and name it as you wish to.*
- *Remove the original table from the database.*
- *Change the name of the new table and replace it with the original name of the table***.**

5. Write a SQL query to summarize the total sales and quantities sold per product by the company. (Here, the data has been already cleaned in the previous steps and from here we will be understanding the different types of data analysis from the given dataset.)

6. Write a SQL query to count the number of transactions per customer to understand purchase frequency.

7. Write a SQL query to evaluate the performance of the product categories based on the total sales which help us understand the product categories which needs to be promoted in the marketing campaigns.

8.Write a SQL query to find the top 10 products with the highest total sales revenue from the sales transactions. This will help the company to identify the High sales products which needs to be focused to increase the revenue of the company.
Hint:

- Use the "Sales_transaction" table.
- The resulting table should be limited to 10 productIDs whose TotalRevenue (Product of Price and QuantityPurchased) is the highest.
- Return the result table ordering by TotalRevenue in descending order

SQL PROJECT –RETAIL ANALYSIS
QUESTIONS SET 2 -MODERATE

1. Write a SQL query to find the ten products with the least amount of units sold from the sales transactions, provided that at least one unit was sold for those products.

2. Write a SQL query to identify the sales trend to understand the revenue pattern of the company.

3. Write a SQL query to understand the month on month growth rate of sales of the company which will help understand the growth trend of the company.

4. Write a SQL query that describes the number of transaction along with the total amount spent by each customer which are on the higher side and will help us understand the customers who are the high frequency purchase customers in the company.

Hint:

- Use the "sales_transaction" table.
- The resulting table must have number of transactions more than 10 and TotalSpent more than 1000 on those transactions by the corresponding customers.
- Return the result table on the "TotalSpent" in descending order.

SQL PROJECT –RETAIL ANALYSIS
QUESTIONS SET 3 -ADVANCE

1. Write a SQL query that describes the total number of purchases made by each customer against each productID to understand the repeat customers in the company.

2. Write a SQL query that describes the duration between the first and the last purchase of the customer in that particular company to understand the loyalty of the customer.

3. Write a SQL query that segments customers based on the total quantity of products they have purchased. Also, count the number of customers in each segment which will help us target a particular segment for marketing.

Hint:

- Use the customer_profiles and sales_transaction tables.
- Create a separate table named customer_segment and create the segments on the total quantity of the purchased products.
- To segment customers based on their purchasing behavior for targeted marketing campaigns. Create Customer segments on the following criteria.

Total Quantity of Products Purchased	Customer Segment
1-10	Low
10-30	Mid
>30	High Value