DATA ANALYTICS TASK 6

First I have opened Sqlite 3 in the command prompt then To complete **Task 6: Sales Trend Analysis Using Aggregations** using SQLite3, begin by opening your terminal or command prompt and creating a new database file using the command sqlite3 sales\_analysis.db. This opens the SQLite interface and creates a database file where you will store your data. Once inside the SQLite shell, create a table named online\_sales with the appropriate columns: order\_id, order\_date, amount, and product\_id. This table will store the sales records you will analyze.

After creating the table, insert sample data that reflects different orders across several months. This will allow you to perform a time-based trend analysis. Use the INSERT INTO command to add at least 10–15 rows of sample sales data.

Once your table has data, write SQL queries to analyze monthly trends. In SQLite, use the strftime('%Y', order\_date) and strftime('%m', order\_date) functions to extract the year and month from the order\_date field. Then, use the SUM(amount) function to calculate monthly revenue and COUNT(DISTINCT order\_id) to count the number of unique orders. Use GROUP BY to group the data by year and month, and ORDER BY to sort the results in chronological order.

To find the top 3 months with the highest revenue, modify your query to sort by SUM(amount) in descending order and add a LIMIT 3 clause.

After successfully executing your queries, export your SQL script using .dump if needed.

Here, I am adding the screen shot of the SQL queries.

