

TASK 7 SUMMARY

Task Name: Basic Sales Summary from SQLite using Python

Objective:

To connect Python with an SQLite database, run SQL queries, summarize sales data, and visualize revenue using a bar chart.

Steps Completed

1. Created SQLite Database

A database file named **sales_data.db** was created using Python's built-in sqlite3 module.

2. Created Sales Table

A table called **sales** was created with three columns:

- product
- quantity
- price

3. Inserted Sample Data

Sample sales records were inserted for multiple products (Shirt, Shoes, Watch).

4. Executed SQL Query

Using SQL, the following data was extracted:

- Total quantity sold per product
- Total revenue per product
(SUM(quantity * price))

5. Loaded Data in Pandas

The SQL output was loaded into pandas using read_sql_query()

6. Printed Sales Summary

Displayed a clean table showing:

- Product
- Total Quantity
- Total Revenue

7. Created Bar Chart

A basic Matplotlib bar chart visualized revenue by product.
Saved as **sales_chart.png**.

Outcome

By completing this task, I learned:

- How to connect Python to SQLite database
- How to write and run SQL queries inside Python
- How to import SQL results into pandas
- How to summarize and visualize sales data
- How to generate bar charts with Matplotlib

This task strengthened my SQL + Python integration skills.