

# 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.

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## **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  
 $(\text{SUM}(\text{quantity} * \text{price}))$

### **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**.

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### 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.