

Task Summary: Basic Sales Summary from SQLite

Objective

The main objective is to use **SQL inside Python** to calculate simple sales metrics, such as the total quantity sold and total revenue, and then present these findings both textually and visually.

Tools and Dataset

- **Tools:** Python, specifically using the built-in `sqlite3` module for database connection, `pandas` for data handling, and `matplotlib` for visualization.
- **Dataset:** You must **create a small SQLite database file** named `sales_data.db` containing a single sales table.

Deliverables

The final Python script or Jupyter Notebook must include the following steps and outputs:

1. **Connection:** Code that successfully connects to the `sales_data.db` file.
2. **SQL Query:** Run 1-2 SQL queries, specifically using `SUM()` and `GROUP BY` to aggregate sales data by product (e.g., calculate revenue as `SUM(quantity * price)`).
3. **Print Output:** Display the query results using a basic `print` statement.
4. **Visualization:** Generate a simple **Matplotlib bar chart** to visualize the calculated revenue.

Outcome

By completing this task, you will learn how to write basic SQL queries, practice importing SQL data into Python using Pandas, perform simple data summaries, and create your first sales chart.