**1. How did you connect Python to a database?**

I used Python’s built-in sqlite3 module to connect to the sales\_data.db file:

conn = sqlite3.connect('sales\_data.db')

**2. What SQL query did you run?**

I ran a query to calculate total revenue per product:

SELECT product, SUM(quantity \* price) as total\_sales

FROM sales

GROUP BY product;

**3. What does GROUP BY do?**

GROUP BY groups rows that have the same value in a specified column—in this case, product—so that aggregate functions like SUM() can be applied to each group.

**4. How did you calculate revenue?**

Revenue was calculated using quantity \* price inside the SQL query:

SUM(quantity \* price) as total\_sales

**5. How did you visualize the result?**

I used the matplotlib library to create a bar chart:

plt.bar(products, sales)

**6. What does pandas do in your code?**

**In this specific code, pandas is not used.**  
However, pandas is commonly used for loading query results into a DataFrame, making data manipulation and analysis easier.

**7. What’s the benefit of using SQL inside Python?**

Using SQL inside Python lets you:

* Automate queries and analysis
* Integrate SQL results with visualization tools like matplotlib or pandas
* Combine business logic and data access in one place

**8. Could you run the same SQL query directly in DB Browser for SQLite?**

Yes, absolutely. The SQL query used in the script can be run directly in **DB Browser for SQLite**'s "Execute SQL" tab to get the same result.