

Interview Questions Answers:

Q1.How did you connect Python to a database?

- Used `sqlite3.connect()` which is part of Python's standard library

Q2.What SQL query did you run?

- One query grouped sales by product to calculate totals
- Another calculated overall summary statistics

Q3.What does GROUP BY do?

- Combines rows with identical values in specified columns
- Allows aggregate functions (like SUM) to calculate group totals

Q4.How did you calculate revenue?

- Multiplied quantity by price for each sale: `quantity * price`
- Then summed these values with `SUM()`

Q5.How did you visualize the result?

- Used `matplotlib` to create a bar chart from the pandas DataFrame

Q6.What does pandas do in your code?

- Provides DataFrame structure for easy data manipulation
- Has built-in SQL integration and plotting capabilities

Q7.What's the benefit of using SQL inside Python?

- Combines SQL's data querying strengths with Python's analysis/visualization
- Allows automation of database reporting workflows
- Enables integration with other Python data science tools

Q8.Could you run the same SQL query directly in DB Browser for SQLite?

- Yes, the same SQL queries would work in DB Browser
- You would just paste them into the "Execute SQL" tab