Interview Questions and Answers

Q: How did you connect Python to a database?

A: I used the built-in sqlite3 library to connect to the SQLite database using the command: sqlite3.connect('sales_data.db').

Q: What SQL query did you run?

A: I ran a query to get total quantity and total revenue per product: SELECT product, SUM(quantity) AS total_qty, SUM(quantity * price) AS revenue FROM sales GROUP BY product.

Q: What does GROUP BY do?

A: GROUP BY groups the rows that have the same values in a specified column into summary rows, like total sales per product.

Q: How did you calculate revenue?

A: Revenue was calculated using the expression SUM(quantity * price) in the SQL query.

Q: How did you visualize the result?

A: I used the matplotlib library to plot a simple bar chart showing revenue by product.

Q: What does pandas do in your code?

A: Pandas helps in loading the SQL query result into a DataFrame, which makes it easy to display and analyze data.

Q: What's the benefit of using SQL inside Python?

A: Using SQL inside Python combines the power of SQL for querying data and Python for data analysis and visualization.

Q: Could you run the same SQL query directly in DB Browser for SQLite?

A: Yes, the same SQL query can be executed directly in DB Browser for SQLite to get the same summarized result.