How did you connect Python to a database?

I connected Python to a SQLite database using the built-in sqlite3 library. This allows Python to directly communicate with .db files without any external setup.

What SQL query did you run?

I ran a query that calculated the total quantity and total revenue for each product. The query grouped data by product and used the SUM function to perform the calculations.

What does GROUP BY do?

The GROUP BY clause in SQL is used to group rows that have the same value in a particular column. It helps in performing aggregate operations, such as calculating totals for each group. In my case, it grouped sales by product.

How did you calculate revenue?

Revenue was calculated by multiplying the quantity and price of each product and then summing the result using SQL. This gave the total revenue per product.

How did you visualize the result?

I visualized the result using a bar chart created with the matplotlib library. The chart displayed revenue on the y-axis and products on the x-axis, making the comparison clear and simple.

What does pandas do in your code?

pandas was used to load the SQL query result into a DataFrame. This made it easy to display the data in a table format and also helped in plotting the chart.

What's the benefit of using SQL inside Python?

Using SQL inside Python combines the power of SQL for data extraction with Python's capabilities for data analysis and visualization. It allows you to automate tasks, generate charts, and work with data all within a single script or notebook.

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

Yes, the same SQL query can be run directly in DB Browser for SQLite. However, using Python provides additional benefits like automation, data visualization, and integration with other tools.