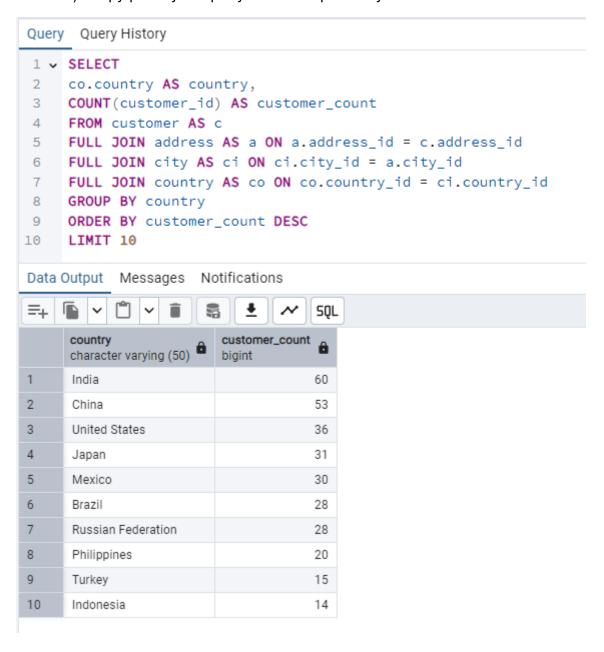
Answers 3.7

- **1.** Write a query to find the top 10 countries for Rockbuster in terms of customer numbers. (Tip: you'll have to use GROUP BY and ORDER BY, both of which follow the join.)
 - a) Copy-paste your query and its output into your answers document.

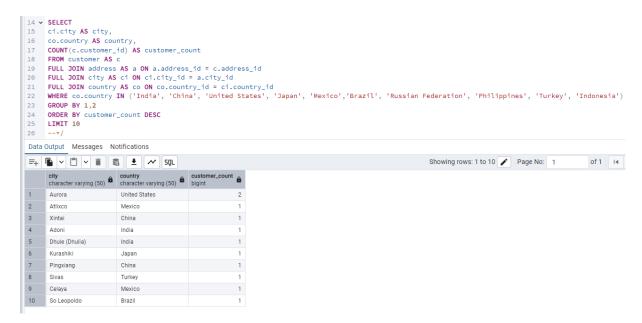


b) Write a few sentences on how you approached this query and why. You must be able to explain your thought process when writing queries, especially for future interviews.

When creating the query, I first focused on understanding the structure of the database and the relationships between tables. In this case, I knew that the data required for the analysis—customer counts grouped by country—was distributed across multiple tables (customer, address, city, and country). I used FULL JOIN to ensure no data was excluded, even if there were missing relationships between the tables.

To count the customers in each country, I grouped the data by the country column and used the COUNT(customer_id) function. This ensures that the count accurately reflects the number of customers associated with each country. Finally, I ordered the results in descending order of customer_count to identify the top countries with the most customers and limited the output to the top 10 for simplicity and clarity.

- 2. Next, write a query to identify the top 10 cities that fall within the top 10 countries you identified in step 1. (Hint: the top 10 cities can be in any of the countries identified—you don't need to create a separate list for each country.)
 - a) Copy-paste your query and its output into your answers document.



b) Write a short explanation of how you approached this query and why.

I began by identifying the relationships between the tables. The customer table links to address, which connects to city and finally to country. Using these relationships, I joined the tables to access all necessary fields such as city, country, and customer_id.

Next, I filtered the results to include only cities from the top 10 countries identified in the first query. This was achieved by using a WHERE clause with the country names.

To determine the top cities, I grouped the data by city and country and used the COUNT function to calculate the number of customers in each city.

Finally, I sorted the results in descending order of customer count and limited the output to display only the top 10 cities.

- **3.** Now write a query to find the top 5 customers from the top 10 cities who've paid the highest total amounts to Rockbuster. The customer team would like to reward them for their loyalty!
 - a) Tip: After the join syntax, you'll need to use the WHERE clause with an operator, followed by GROUP BY and ORDER BY. Your output should include the following columns: Customer ID, Customer First Name and Last Name, Country, City, and Total Amount Paid.
 - b) Copy-paste your query and its output into your answers document.

