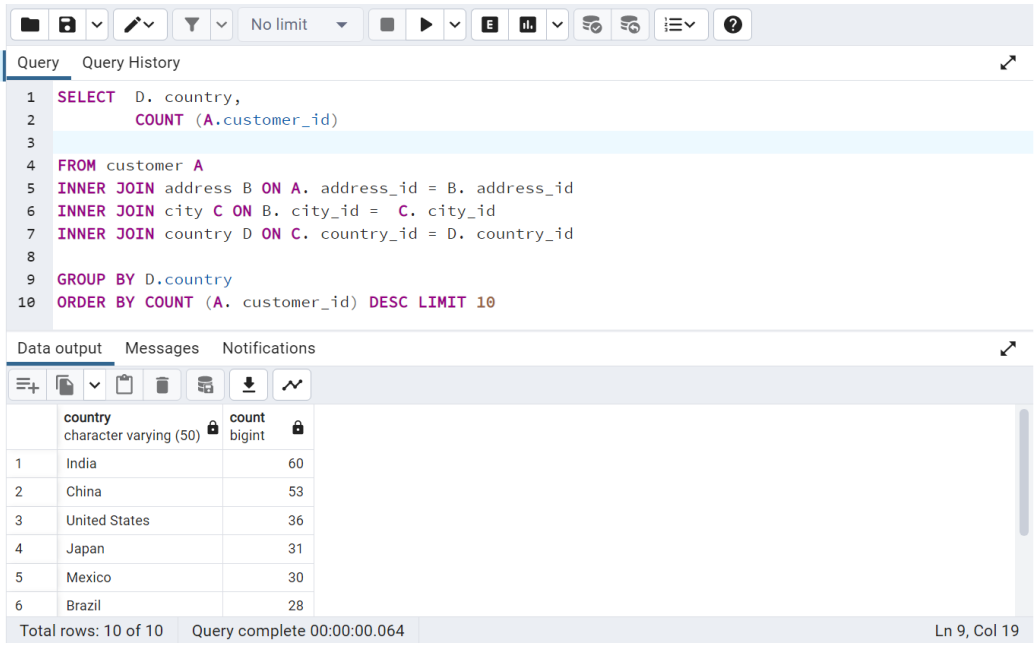
3.7: Joining Tables of Data

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.)
   Copy-paste your query and its output into your answers document.
   Write a few sentences on how you approached this query and why. It's important that you can explain your thought process when writing queries, especially for future interviews.

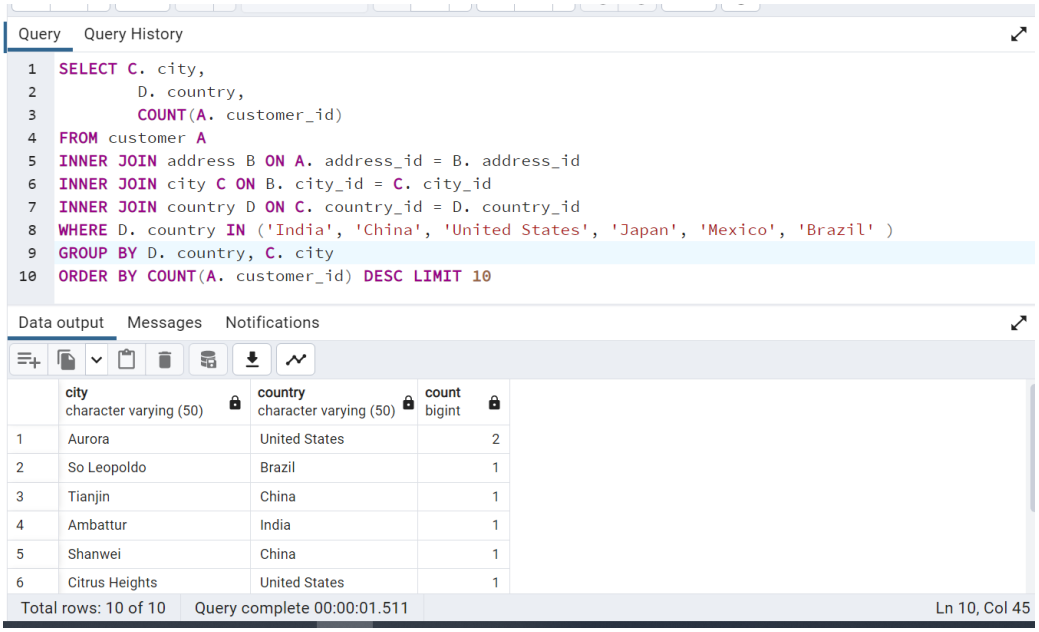


I found some difficulties to start doing this kind of joins from cero. I think I needed to read and see some more examples to get used to the structure and the links between different tables. Once I have understood the structure and the link, it´s going to be easier for sure, but we need to practice and practice and practice as you say Dana, to get some skills and velocity
On this case, I´ve chosen customer as the main table, and I´ve joined it to country through two steps: address and city, so four tables have been used with their correspondent identification key

Customer → address → city → country

Then I have write to count the number of Ids as a way of identifying on which country we have more customers (just the count, it doesn´t mean anything about the rentals)

2. Write a query to find the top 10 cities within the top 10 countries identified in step 1. Copy-paste your query and its output into your answers document.
Write a short explanation of how you approached this query and why.

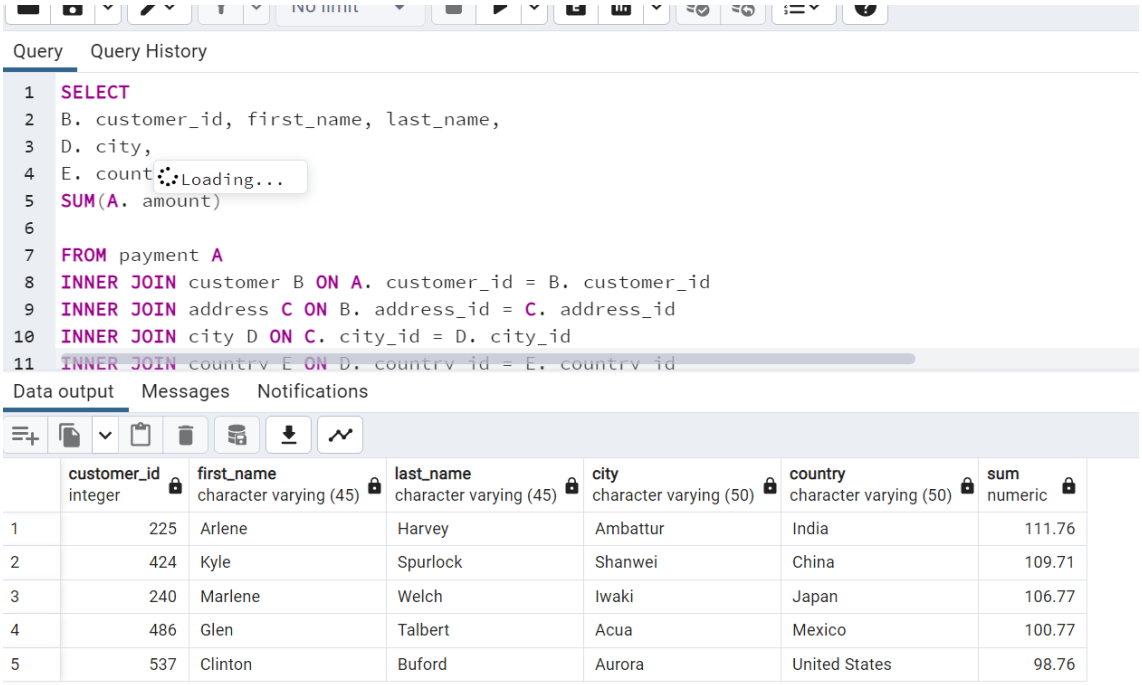


Here I have done more or less the same exercise as on the first one, because the tables related has been the same
Customer → address → city → country
I just ask for another column (city), and introduce a filter to just make the consult with a limit number of countries, so the answer should be faster

3. Write a query to find the top 5 customers in the top 10 cities who have paid the highest total amounts to Rockbuster. The customer team would like to reward them for their loyalty!

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:

Total Amount Paid.
Customer ID,
Customer First Name and Last Name,
Country,
City,



	customer_id integer	first_name character varying (45)	last_name character varying (45)	city character varying (50)	country character varying (50)	sum numeric
1	225	Arlene	Harvey	Ambattur	India	111.76
2	424	Kyle	Spurlock	Shanwei	China	109.71
3	240	Marlene	Welch	Iwaki	Japan	106.77
4	486	Glen	Talbert	Acua	Mexico	100.77
5	537	Clinton	Buford	Aurora	United States	98.76

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SELECT
B. customer_id, first_name, last_name,
D. city,
E. country,
SUM(A. amount)

FROM payment A
INNER JOIN customer B ON A. customer_id = B. customer_id
INNER JOIN address C ON B. address_id = C. address_id
INNER JOIN city D ON C. city_id = D. city_id
INNER JOIN country E ON D. country_id = E. country_id
WHERE D. city IN ('Aurora', 'So Leopoldo', 'Tianjin', 'Ambattur', 'Shanwei', 'Citrus Heights',
'Iwaki', 'Hami', 'Laredo', 'Acua' )

GROUP BY B. customer_id, first_name, last_name, D. city, E. country
ORDER BY SUM(A. amount) DESC LIMIT 5
```

Copy-paste your query and its output into your answers document.

4. Save your "Answers 3.7" document as a PDF and upload it here for your tutor to review.