Task 3.7 Joining Tables of Data

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Reminder: You know by now that a database can hold multiple tables. In the Rockbuster case you have this too. If you want a reminder what tables are included in the database and how they are called, simply execute this query and look in the column “tablename”:

SELECT * FROM pg_catelog.pg_tables

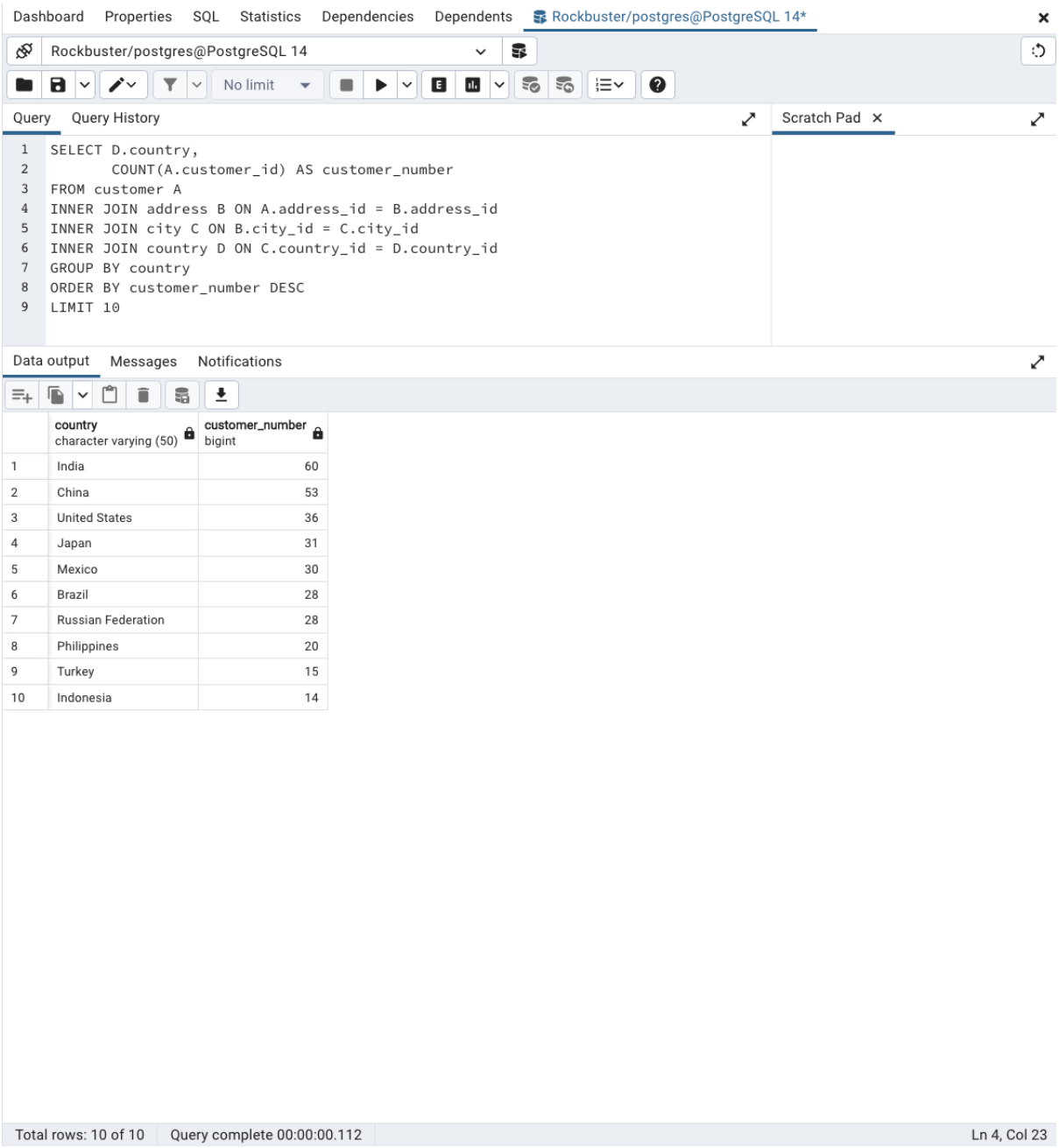
Rockbuster’s management team would like to know the top 10 countries where Rockbuster customers are based so they can focus on building a better brand image in those markets. Follow the instructions below to find out how you can help.

Directions:

In this Task you will get to practice everything you learned in the Exercise. Said simply, you will need to write a couple of queries combined with joins between the tables address, country, city, customer and payment using their common keys. Create a new text document and call it "Answer 3.7". You will save your queries, outputs and written answers in this document, as you have done in previous tasks.

1. Write a query to find the top 10 countries for Rockbuster in terms of customer numbers (Tip: you have to use GROUP BY and ORDER BY, both of which follow the join.)

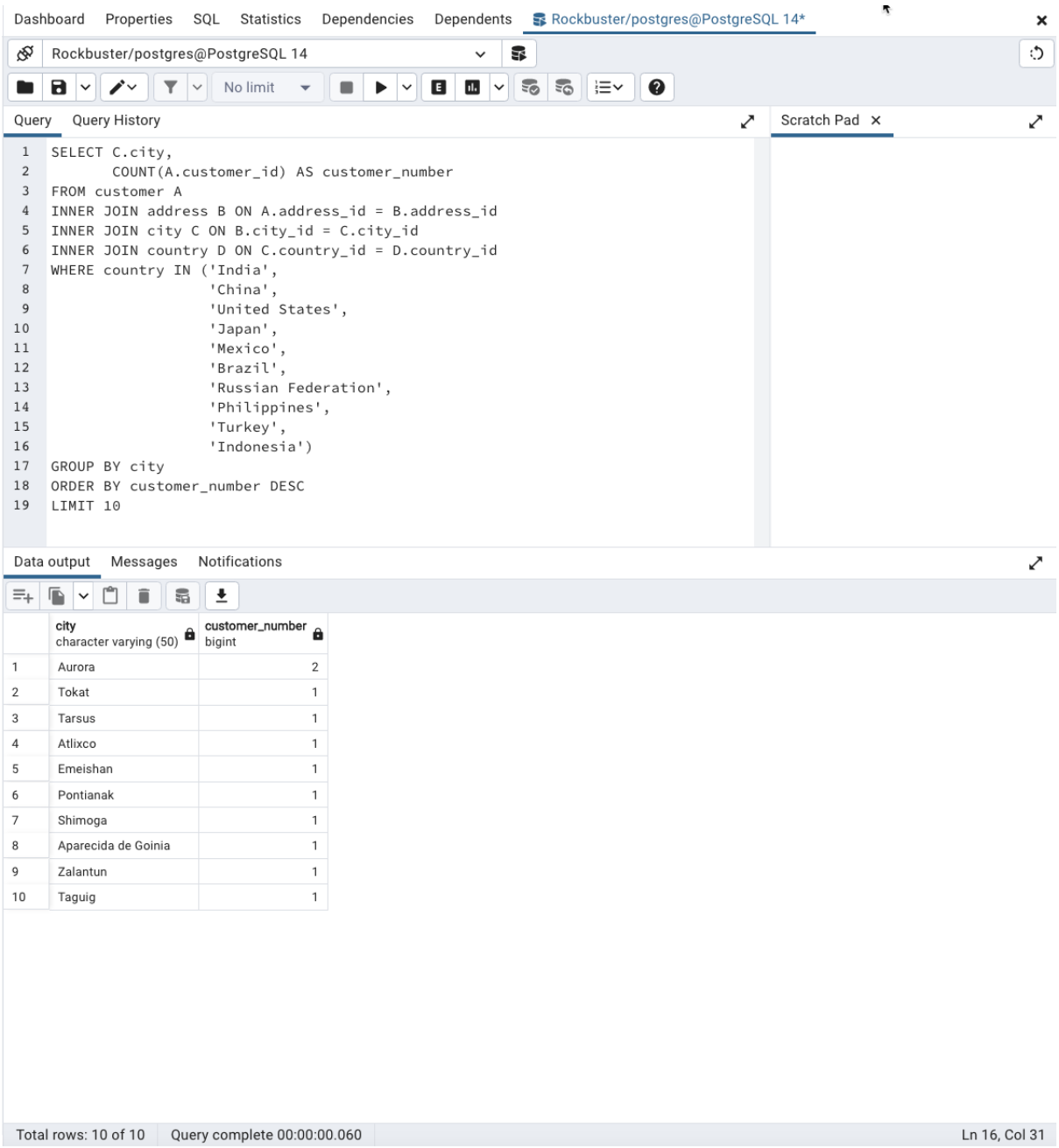
a. Copy-paste your query and its output into your answers document



b. Write a few sentences on how you approached this query and why. It is important that you can explain your thought process when writing queries, especially for future interviews.

I revisited and understood the customer, address, city, and country data. I then joined the customer data with the address, city, and country data with the inner join query. I put the GROUP BY query and counted the customer based on country. Later, I put the ORDER BY command based on customer numbers from highest to lowest and LIMIT to 10.

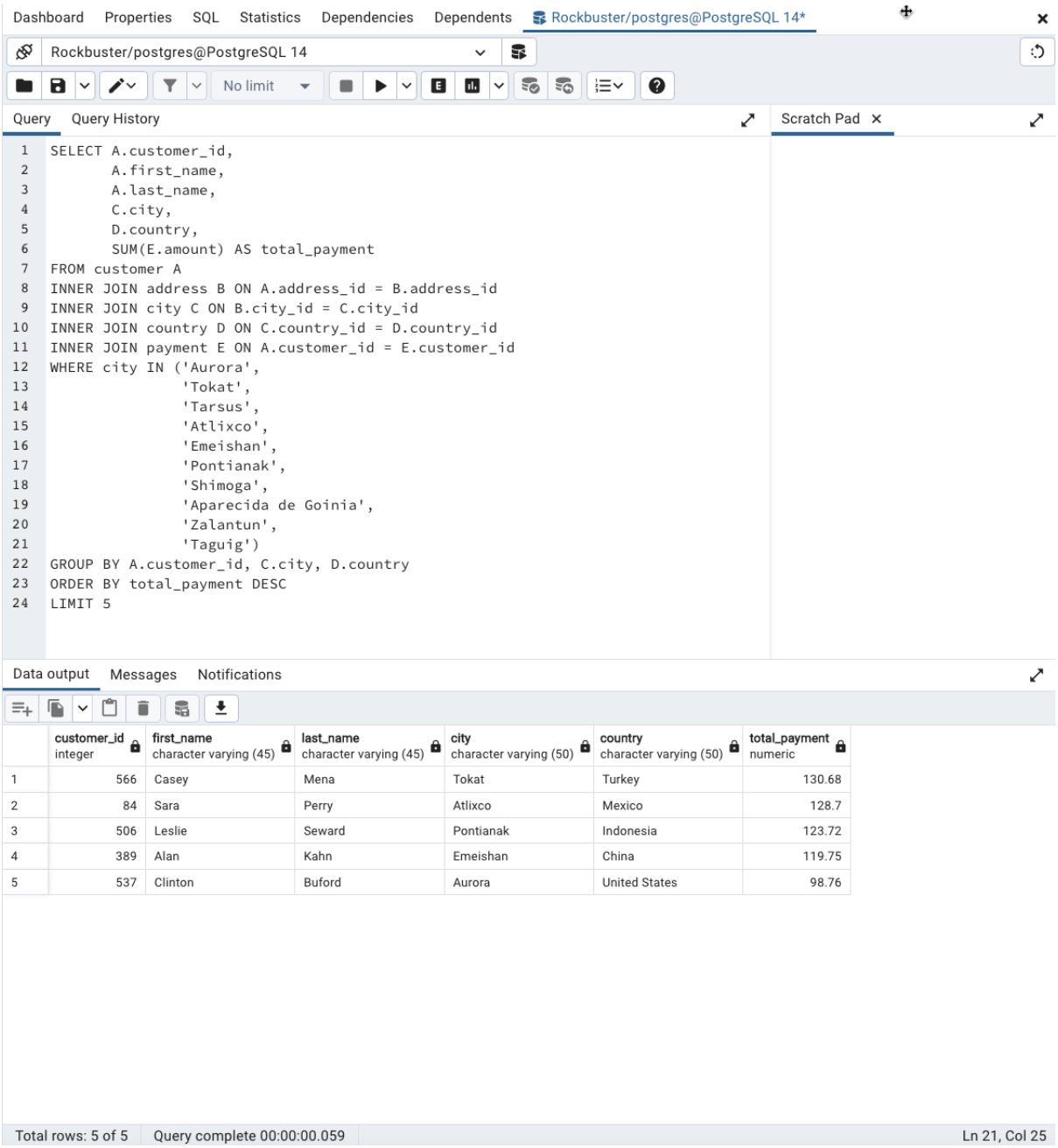
2. Write a query to find the top 10 cities within the top 10 countries identified in step 1.
    a. Copy-paste your query and its output into your answers document



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

    I revisited my existing query. I changed the SELECT from country to city. To find the top 10 cities within the top 10 countries, I listed out the top 10 countries by the WHERE query. Lastly, I changed the GROUP BY from country to city.

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.
    a. Tip: After the join syntax, you will 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, Total Amount Paid
    b. Copy-past your query and its output into your answers document



4. Save your “Answer 3.7” document as a PDF and upload it here for your tutor to review.