**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.

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* + 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.

**B. Explanation**

1. Review ERD

I started off by reviewing the ERD created in an earlier task (Task 3.2).

2. Identification of tables

As we need to know the top 10 countries in terms of the total number of customers, therefore I looked at the ERD to see from which table(s) can we get this information from - and in this case that would be the customer and country tables. However, to reach this step, there are some other tables that have some common keys that connect these tables which I’ll refer to in the next step.

3. Query formation

I checked the common key in the remaining tables and decided on using INNER JOIN as the type of JOIN for the query. The reason to choose this type of JOIN is that this is a query where we need only limited information from two tables.

To write the query, I assigned the following tables to the corresponding alphabet to execute this query.

A = customer , B = address, C = city, D = country

4. Correct Sequence in the Query

Applying the correct sequence for the additional requirements of the following:

● GROUP BY

● ORDER BY with the function (DESC or ASC),

● LIMIT

1. 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.

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

Keeping the steps in mind that I followed in Step 1, I added the city table to the SELECT part of the query as we want to know the top 10 cities within the top 10 countries. In the query, when using the WHERE clause, I restricted the country to the top 10 countries from Step 1 by using the IN operator and listed the countries in step 1.

1. 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: Customer ID, Customer First Name and Last Name, Country, City, Total Amount Paid.
   * Copy-paste your query and its output into your answers document.

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