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Career Foundry Data Immersion

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3.7: Joining Tables of Data (Answers 3.7)

1a)Query

SELECT D.country,

COUNT(customer\_id) AS Count\_of\_customers

FROM customer A

INNER JOIN address B ON A.address\_id = B.address\_id

INNER JOIN city C ON B.city\_id = C.city\_id

INNER JOIN country D ON C.country\_ID = D.country\_ID

GROUP BY country

ORDER BY Count\_of\_customers DESC

LIMIT 10

Graphical user interface, application

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1b)

When finding the top 10 countries for Rockstar by customer count, I had to link multiple tables together by column names. The customer and address tables were linked by address\_id, the address and city tables were linked by city\_id, and the city and country tables were linked by country\_id. The tables are labeled letters A (customer table),B(address table),C(city table) and D (country table). The query starts with SELECT D. country, COUNT (customer\_id) AS Count\_of\_Customers FROM customer A which means I am trying to link the country table with the customer table and count the number of customer\_id’s. Then the INNER JOINS in the middle connects each table from A to D by column. The query is GROUPED by country since we are trying to see where the customers are from and ORDERED BY the alias we crated earlier Count\_of\_customers in decending order. Then the decending count of customers is limited by 10 to show the top 10 count of customers by country.

2a)

SELECT C.city,D.country,

COUNT(customer\_id) AS Count\_of\_customers

FROM customer A

INNER JOIN address B ON A.address\_id = B.address\_id

INNER JOIN city C ON B.city\_id = C.city\_id

INNER JOIN country D ON C.country\_ID = D.country\_ID

WHERE country IN ('India', 'China', 'United States','Japan',

'Mexico','Brazil','Russian Federation',

'Philippines','Turkey','Indonesia')

GROUP BY city,country

ORDER BY Count\_of\_customers DESC

LIMIT 10

Graphical user interface, application

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2b)

The query for step 2 had a similar structure to step one since I am basing the top 10 cities off the top 10 countries. To start, I added SELECT C.city and D.country since I am utilizing both tables for the results. The query is the exact same from COUNT, FROM, and INNER JOIN(S) as step 1. I then added a WHERE country IN command where I listed the top 10 countries for customer count in step 1 since I am not looking for top countries in this step but rather top cities within the already identified top countries. I then GROUP BY both city and country to show both columns in the results. Finally, I ORDER BY count\_of\_customers DESC and LIMIT 10 like in step 1 but for the top 10 cities this time.

3)

SELECT B.customer\_id,

B.first\_name,

B.last\_name,

D.city,

E.country,

SUM(A.amount) AS Total\_Amount\_Paid

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 city IN ('Aurora', 'Atlixco', 'Xintai', 'Adoni', 'Dhule (Dhulia)', 'Kurashiki', 'Pingxiang',

'Sivas', 'Celaya', 'So Leopoldo')

GROUP BY B.customer\_id,B.first\_name, B.last\_name,D.city,E.country

ORDER BY Total\_Amount\_Paid DESC

LIMIT 5

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