Rockbuster/postgres@PostgreSQL 13

Query Editor | Query History

```sql
SELECT COUNT (A.customer_id) AS customer_count,
 D.country
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 customer_count DESC
LIMIT 10
```

Data Output | Explain | Messages | Notifications

| | customer_count bigint | country character varying (50) |
|---|---|---|
| 1 | 60 | India |
| 2 | 53 | China |
| 3 | 36 | United States |
| 4 | 31 | Japan |
| 5 | 30 | Mexico |
| 6 | 28 | Brazil |
| 7 | 28 | Russian Federation |
| 8 | 20 | Philippines |
| 9 | 15 | Turkey |
| 10 | 14 | Indonesia |

I used DbVisualizer to create a roadmap from how to get to “customer” table to the “country” table. From there it was just a matter of connecting the primary keys and using Inner Join to make them all fit together.

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Query Editor | Query History

```sql
SELECT COUNT (A.customer_id) AS customer_count,
 C. city,
 D. country
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',
                  'Phillippines',
                  'Turkey',
                  'Indonesia')
GROUP BY city, country
ORDER BY customer_count DESC
LIMIT 10
```

Data Output | Explain | Messages | Notifications

| | customer_count bigint | city character varying (50) | country character varying (50) |
|---|---|---|---|
| 1 | 2 | Aurora | United States |
| 2 | 1 | Pingxiang | China |
| 3 | 1 | Sivas | Turkey |
| 4 | 1 | Dhule (Dhulia) | India |
| 5 | 1 | Kurashiki | Japan |
| 6 | 1 | Xintai | China |
| 7 | 1 | Adoni | India |
| 8 | 1 | Celaya | Mexico |
| 9 | 1 | Nezahualcyotl | Mexico |
| 10 | 1 | Atlixco | Mexico |

Using the IN statement in order to limit the number of countries that were scanned. Was surprised to find that there was only one city that had multiple customers. Tinkered with the code a bit and just got different cities with a population of 1. Aurora was always at the top.

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Query Editor | Query History

```
SELECT  A. customer_id,
        B. first_name,
        B. last_name,
        D. city,
        SUM (A.amount) AS total_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
WHERE city IN ('Aurora','Pingxiang','Silvas','Dhule', 'Kurashiki', 'Xintai', 'Adoni', 'Celaya','Nezahualcyoti','Atilixco')
GROUP BY A. customer_id, B.first_name, B.last_name, D. city, A.amount
ORDER BY total_amount DESC
LIMIT 5
```

Data Output | Explain | Messages | Notifications

| | customer_id smallint | first_name character varying (45) | last_name character varying (45) | city character varying (50) | total_amount numeric |
|---|---|---|---|---|---|
| 1 | 537 | Clinton | Buford | Aurora | 39.92 |
| 2 | 367 | Adam | Gooch | Adoni | 34.93 |
| 3 | 587 | Sergio | Stanfield | Celaya | 34.93 |
| 4 | 169 | Erica | Matthews | Pingxiang | 29.94 |
| 5 | 34 | Rebecca | Scott | Kurashiki | 29.94 |

Same as the previous question, but had to insert the SUM( function in order to get the total amount each person paid.