

Query 1:

```
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(customer_id) DESC
LIMIT 10
```

India	China	U.S.	Japan	Mexico	Brazil	Russia	Philippines	Turkey	Indonesia
60	53	36	31	30	28	28	20	15	14

Let's go from top to bottom. I was trying to find out the top 10 countries our customers come from. So the only things I needed to find for this query are the countries, and the number of customers. To do this though I needed to connect 4 different tables in order to link those two values together. I then grouped the graph by country, so as to combine all the customers into defined groups. And finally I arranged the graph in descending order by the number of customers within a country, as well as limiting the query to the 10 highest results to make the top 10 list.

Query 2:

```
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
GROUP BY city, country
HAVING D.country IN('India', 'China', 'United States', 'Japan', 'Mexico', 'Brazil',
'Russian Federation', 'Philippines', 'Turkey', 'Indonesia')
```

ORDER BY COUNT(customer_id) DESC

LIMIT 10

Aurora	Atlixco	Xintai	Adoni	Dhule (Dhulia)
U.S.	Mexico	China	India	India
2	1	1	1	1

Kurashiki	Pingxiang	Sivas	Celaya	So Leopoldo
Japan	China	Turkey	Mexico	Brazil
1	1	1	1	1

For this next query of finding the top 10 cities within the top 10 countries, I decided to merely edit the query I already had instead of making a new one from scratch. First I added city into the SELECT and GROUP BY sections to add it to the graph. And then I added a HAVING IN command so that only the countries from the last query would show up for this one too. I kept everything else the same.

Query 3:

SELECT B.customer_id, B.first_name, B.last_name, E.country, D.city, COUNT(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

GROUP BY B.customer_id, B.first_name, B.last_name, E.country, D.city

HAVING D.city IN('Aurora', 'Atlixco', 'Xintai', 'Adoni', 'Dhule (Dhulia)', 'Kurashiki',
'Pingxiang', 'Sivas', 'Celaya', 'So Leopoldo')

ORDER BY COUNT(amount) DESC

LIMIT 5

Id # 84	Id # 518	Id # 537	Id # 587	Id # 34
Sara	Gabriel	Clinton	Sergio	Rebecca
Perry	Harder	Buford	Stanfield	Scott

Mexico	Turkey	U.S.	Mexico	Japan
Atlixco	Sivas	Aurora	Celaya	Kurashiki
30	25	24	24	24