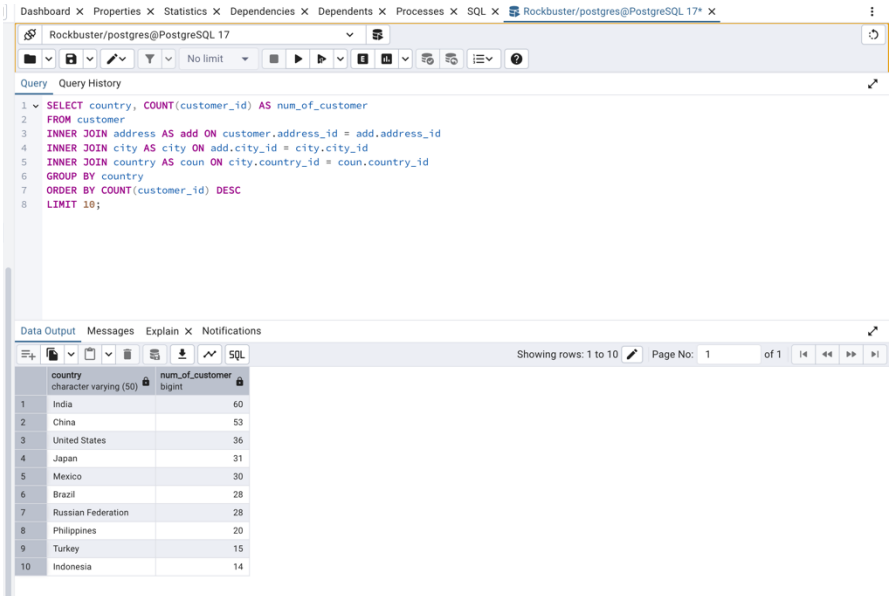
Answer 3.7 **Yaw Assensoh Opoku**

1a.

```
SELECT country, COUNT(customer_id) AS num_of_customer
FROM customer
INNER JOIN address AS add ON customer.address_id = add.address_id
INNER JOIN city AS city ON add.city_id = city.city_id
INNER JOIN country AS coun ON city.country_id = coun.country_id
GROUP BY country
ORDER BY COUNT(customer_id) DESC
LIMIT 10;
```



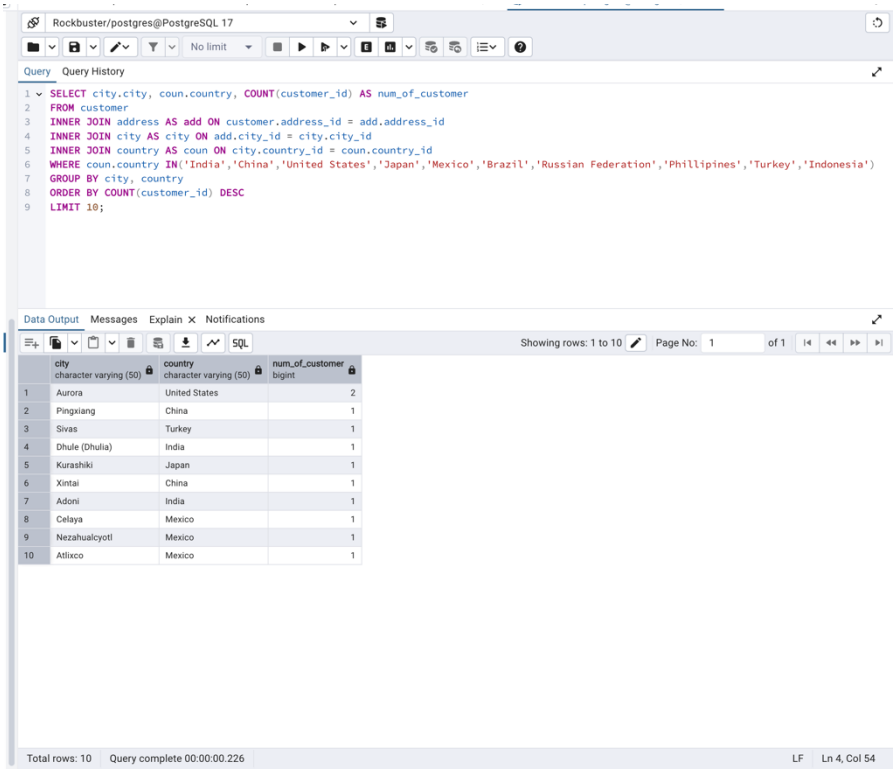
	country character varying (50)	num_of_customer bigint
1	India	60
2	China	53
3	United States	36
4	Japan	31
5	Mexico	30
6	Brazil	28
7	Russian Federation	28
8	Philippines	20
9	Turkey	15
10	Indonesia	14

1b.

I joined the customer table with the address table then the city table and then with country table. I chose INNER JOIN cause as I learnt earlier in this exercise, INNER JOIN looks for matching values in columns namely primary key and foreign key to connect tables plus it gets the job done without costs and we are looking for limited information so it works perfectly fine. Grouped and ordered them to simplify.

2.a

```
SELECT city.city, coun.country, COUNT(customer_id) AS num_of_customer
FROM customer
INNER JOIN address AS add ON customer.address_id = add.address_id
INNER JOIN city AS city ON add.city_id = city.city_id
INNER JOIN country AS coun ON city.country_id = coun.country_id
WHERE coun.country IN('India','China','United States','Japan','Mexico','Brazil','Russian Federation','Phillipines','Turkey','Indonesia')
GROUP BY city, country
ORDER BY COUNT(customer_id) DESC
LIMIT 10;
```

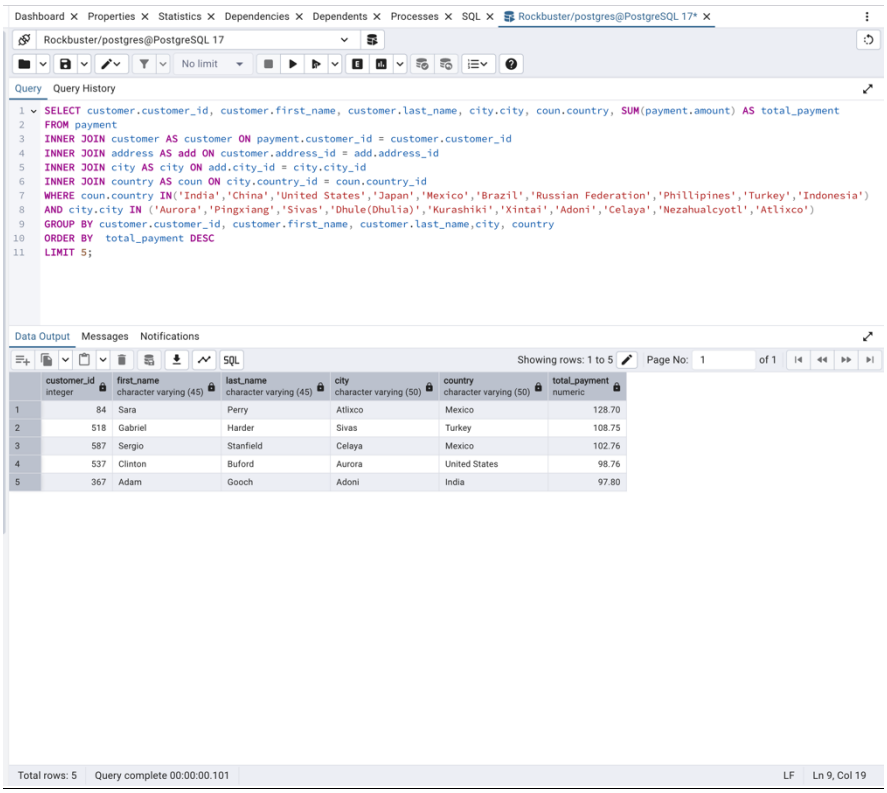


	city character varying (50)	country character varying (50)	num_of_customer bigint
1	Aurora	United States	2
2	Pingxiang	China	1
3	Sivas	Turkey	1
4	Dhule (Dhulia)	India	1
5	Kurashiki	Japan	1
6	Xintai	China	1
7	Adoni	India	1
8	Celaya	Mexico	1
9	Nezahualcyotl	Mexico	1
10	Atlixco	Mexico	1

I used the same command as I used earlier on the find the top 10 countries and since I already had the top countries, all I had to do was use the WHERE/IN command to get exactly what I was looking for and once again, INNER JOIN does the job perfectly well and saves time.

3.

```
SELECT customer.customer_id, customer.first_name, customer.last_name, city.city,
coun.country, SUM(payment.amount) AS total_payment

FROM payment

INNER JOIN customer AS customer ON payment.customer_id = customer.customer_id

INNER JOIN address AS add ON customer.address_id = add.address_id

INNER JOIN city AS city ON add.city_id = city.city_id

INNER JOIN country AS coun ON city.country_id = coun.country_id

WHERE coun.country IN('India','China','United States','Japan','Mexico','Brazil','Russian
Federation','Phillipines','Turkey','Indonesia')

AND city.city IN
('Aurora','Pingxiang','Sivas','Dhule(Dhulia)','Kurashiki','Xintai','Adoni','Celaya','Nezahualcyotl','Atl
ixco')

GROUP BY customer.customer_id, customer.first_name, customer.last_name,city, country

ORDER BY  total_payment DESC

LIMIT 5;
```


Dashboard
Properties
Statistics
Dependencies
Dependents
Processes
SQL
Rockbuster/postgres@PostgreSQL 17*
Rockbuster/postgres@PostgreSQL 17
No limit
Query
Query History
SELECT customer.customer_id, customer.first_name, customer.last_name, city.city, coun.country, SUM(payment.amount) AS total_payment
FROM payment
INNER JOIN customer AS customer ON payment.customer_id = customer.customer_id
INNER JOIN address AS add ON customer.address_id = add.address_id
INNER JOIN city AS city ON add.city_id = city.city_id
INNER JOIN country AS coun ON city.country_id = coun.country_id
WHERE coun.country IN('India','China','United States','Japan','Mexico','Brazil','Russian Federation','Phillipines','Turkey','Indonesia')
AND city.city IN ('Aurora','Pingxiang','Sivas','Dhule(Dhulia)','Kurashiki','Xintai','Adoni','Celaya','Nezahualcyotl','Atlixco')
GROUP BY customer.customer_id, customer.first_name, customer.last_name,city, country
ORDER BY total_payment DESC
LIMIT 5;
Data Output
Messages
Notifications
SQL
Showing rows: 1 to 5
Page No: 1
of 1
customer_id integer
first_name character varying (45)
last_name character varying (45)
city character varying (50)
country character varying (50)
total_payment numeric
1 84 Sara Perry Atlixco Mexico 128.70
2 518 Gabriel Harder Sivas Turkey 108.75
3 587 Sergio Stanfield Celaya Mexico 102.76
4 537 Clinton Buford Aurora United States 98.76
5 367 Adam Gooch Adoni India 97.80
Total rows: 5
Query complete 00:00:00.101
LF
Ln 9, Col 19