Performing Subqueries
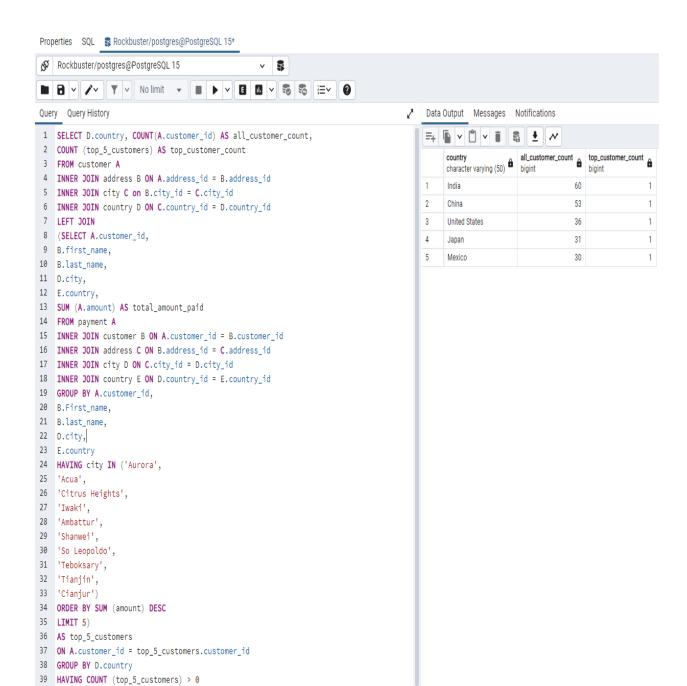Ideal Kuci

1. **Average amount paid by the top 5 customers:**


```
SELECT AVG(total_amount_paid) AS Average
FROM
(SELECT A.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
GROUP BY A.customer_id,
B.First_name,
B.last_name,
D.city,
E.country
HAVING city IN ('Aurora',
'Acua',
'Citrus Heights',
'Iwaki',
'Ambattur',
'Shanwei',
'So Leopoldo',
'Teboksary',
'Tianjin',
'Cianjur')
ORDER BY SUM (amount) DESC
LIMIT 5) AS total_amount_paid
```

2. Finding out how many of the top 5 customers I identified in step 1 are based within each country:

SELECT D.country, COUNT(A.customer_id) AS all_customer_count,
COUNT (top_5_customers) AS top_customer_count
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
LEFT JOIN
(SELECT A.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
GROUP BY A.customer_id,
B.First_name,
B.last_name,
D.city,
E.country
HAVING city IN ('Aurora',
'Acua',
'Citrus Heights',
'Iwaki',
'Ambattur',
'Shanwei',
'So Leopoldo',
'Teboksary',
'Tianjin',
'Cianjur')
ORDER BY SUM (amount) DESC
LIMIT 5)
AS top_5_customers
ON A.customer_id = top_5_customers.customer_id
GROUP BY D.country
HAVING COUNT (top_5_customers) > 0
ORDER BY (all_customer_count) DESC

Rockbuster/postgres@PostgreSQL 15 ▾

No limit ▾

Query   Query History

Data Output   Messages   Notifications

```
 1  SELECT D.country, COUNT(A.customer_id) AS all_customer_count,
 2  COUNT (top_5_customers) AS top_customer_count
 3  FROM customer A
 4  INNER JOIN address B ON A.address_id = B.address_id
 5  INNER JOIN city C on B.city_id = C.city_id
 6  INNER JOIN country D ON C.country_id = D.country_id
 7  LEFT JOIN
 8  (SELECT A.customer_id,
 9  B.first_name,
10  B.last_name,
11  D.city,
12  E.country,
13  SUM (A.amount) AS total_amount_paid
14  FROM payment A
15  INNER JOIN customer B ON A.customer_id = B.customer_id
16  INNER JOIN address C ON B.address_id = C.address_id
17  INNER JOIN city D ON C.city_id = D.city_id
18  INNER JOIN country E ON D.country_id = E.country_id
19  GROUP BY A.customer_id,
20  B.First_name,
21  B.last_name,
22  D.city,
23  E.country
24  HAVING city IN ('Aurora',
25  'Acua',
26  'Citrus Heights',
27  'Iwaki',
28  'Ambattur',
29  'Shanwei',
30  'So Leopoldo',
31  'Teboksary',
32  'Tianjin',
33  'Cianjur')
34  ORDER BY SUM (amount) DESC
35  LIMIT 5)
36  AS top_5_customers
37  ON A.customer_id = top_5_customers.customer_id
38  GROUP BY D.country
39  HAVING COUNT (top_5_customers) > 0
40  ORDER BY (all_customer_count) DESC
41
```

	country character varying (50) 🔒	all_customer_count bigint 🔒	top_customer_count bigint 🔒
1	India	60	1
2	China	53	1
3	United States	36	1
4	Japan	31	1
5	Mexico	30	1