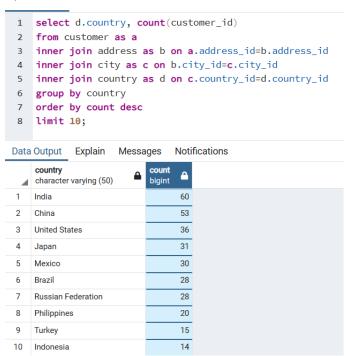
3.7: Joining Tables of Data By Rick Takeuchi

Question 1:



In this query, I used inner join because it is the most cost efficient method. I used multiple joins combining customer table, address table, city table, and country table. Next, I used alias for each table based on alphabets and joined tables using foreign keys. I used aggregate function for customer_id counts and grouping by country to get top 10 countries.

Question 2:



This query is very similar to the very first query. However, I approached this query by adding the city column from city table. Next, I grouped by country then city before ordering by unique ID count. I used inner join because it is the most cost efficient method. I used multiple joins combining customer table, address table, city table, and country table. Next, I used alias for each table based on alphabets and joined tables using foreign keys to get relevant information.

Question 3:

```
select a.customer_id, a.first_name as "customer first name", a.last_name as "customer last name", d.country, c.city, sum(e.amount) as "total amount paid"

from customer as a

inner join address as b on a.address_id=b.address_id

inner join city as c on b.city_id=c.city_id

inner join country as d on c.country_id=d.country_id

inner join payment as e on a.customer_id=e.customer_id

where city in('Aurora','Acua','Citrus Heights','Iwaki','Ambattur','Shanwei','So

Leopoldo','Teboksary','Tianjin','Cianjur')

group by a.customer_id, first_name, last_name, country, city

order by "total amount paid" desc

limit 5;
```

Data Output Explain Messages Notifications						
	customer_id integer	customer first name character varying (45)	customer last name character varying (45)	country character varying (50)	city character varying (50)	total amount paid numeric
1	225	Arlene	Harvey	India	Ambattur	111.76
2	424	Kyle	Spurlock	China	Shanwei	109.71
3	240	Marlene	Welch	Japan	lwaki	106.77
4	486	Glen	Talbert	Mexico	Acua	100.77
5	537	Clinton	Buford	United States	Aurora	98.76