## 3.7: Joining Tables of Data

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Philippines

Indonesia

Turkey

## 1: Top 10 Countries in terms of customer numbers

```
Query Editor
             Query History
1
    SELECT D.country,
             COUNT(customer_id) AS number_of_customers
 2
    FROM customer A
 3
    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
 6
    GROUP BY country
 7
    ORDER BY number_of_customers DESC
 8
    LIMIT 10
 9
Data Output
             Explain
                     Messages
                                 Notifications
                         number_of_customers
    country
 character varying (50)
                          bigint
1
    India
                                            60
2
    China
                                            53
    United States
                                            36
3
4
    Japan
                                            31
5
    Mexico
                                            30
    Brazil
                                            28
7
    Russian Federation
                                            28
```

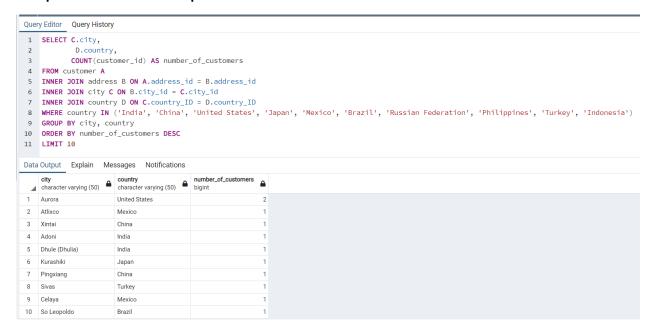
I started out by looking at what was asked of me. I needed to find the top 10 countries by customer numbers which means I needed a count of customer ids, grouped by the country, I only needed 10 records as I want the top 10 and I needed to order it largest to smallest. Then I looked for the link between customers and countries: customer table was linked to address table, which linked to city table and then country table. I used inner join as I only needed select information from the two tables and not all columns from any of the tables.

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## 2. Top 10 Cities within the top 10 countries



I approached this query the same as the previous but adding a where syntax as I knew we were only concerned with the top 10 cities in the top 10 countries we had just found. Then I grouped by city and country.

## 3. Top 5 Customers in top 10 Cities with highest paid total amount

