HW 4 mk07202 Part 1 Solution

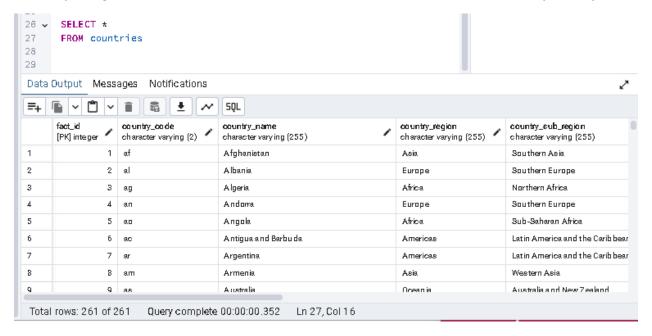
Creating the Table for Countries

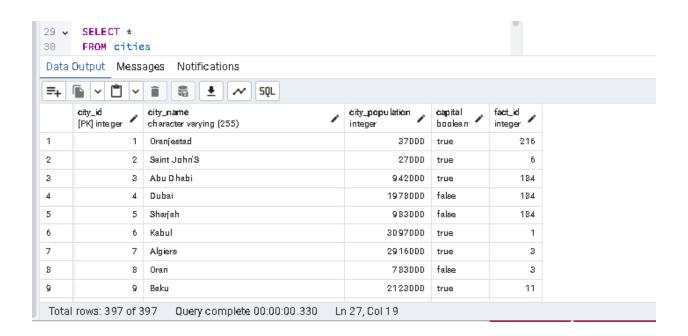
```
Query Query History
1 - CREATE TABLE countries (
      fact_id INT PRIMARY KEY,
 3
      country_code VARCHAR(2),
 4
      country_name VARCHAR(255),
      country_region VARCHAR(255),
 6
      country_sub_region VARCHAR(255),
 7
   country_area INT,
      country_area_land INT,
 8
      country_area_water INT,
9
      country_population BIGINT,
10
      country_population_growth FLOAT,
11
      country_birth_rate FLOAT,
12
Data Output Messages Notifications
CREATE TABLE
Query returned successfully in 306 msec.
```

Now I created the table for cities

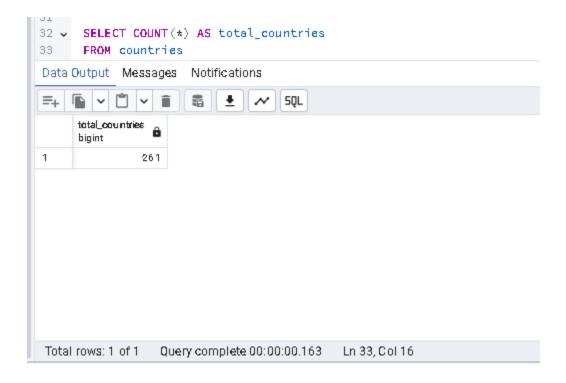
```
HW4/postgres@PostgreSQL 17
                         No limit
Query Query History
                                                                    Sei
13 -- country_death_rate FLOAT,
     -- country_migration_rate FLOAT
14
15
     -- );
16
17 v CREATE TABLE cities (
18
      city_id INT PRIMARY KEY,
19
    city_name VARCHAR(255),
20
    city_population INT,
21
   capital BOOLEAN,
22
     fact_id INT,
      FOREIGN KEY (fact_id) REFERENCES countries(fact_id)
23
24
Data Output Messages Notifications
CREATE TABLE
Query returned successfully in 239 msec.
```

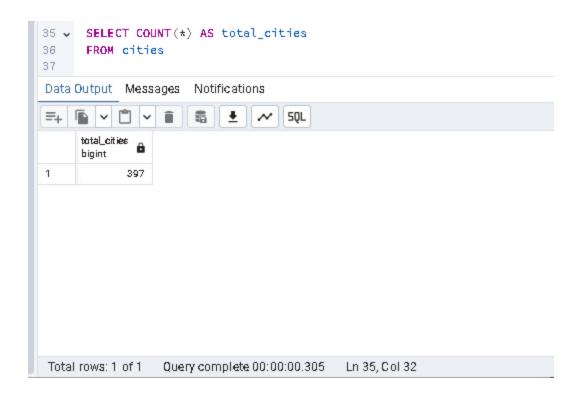
After importing data from the CSV files, the cities and countries table look like here respectively



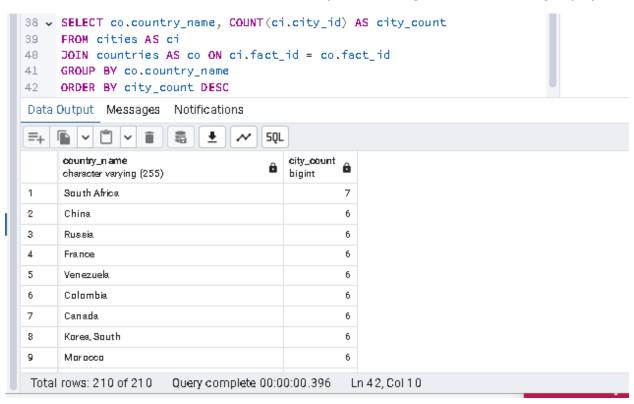


1) Count of total rows of each table

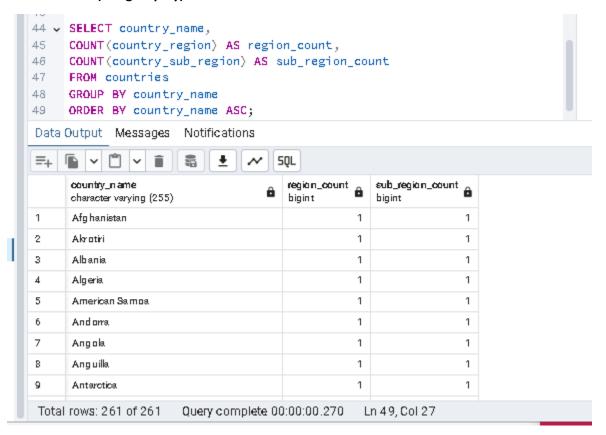




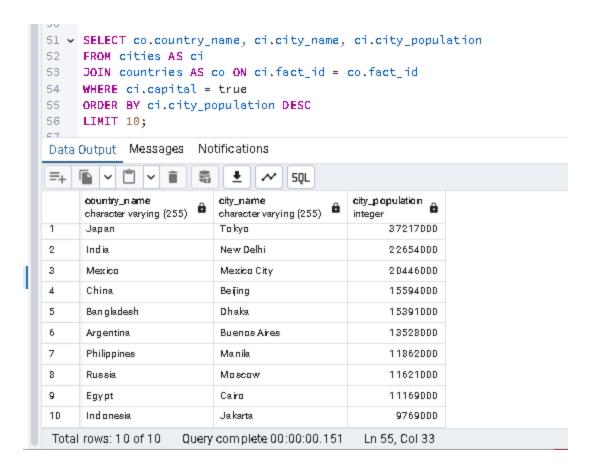
2) the count of number of cities for each country in descending order of count (use group by)



3) the count of regions and sub-regions in each country. Sort them by ascending order of country name. (use group by)



4) Top 10 most populous capital cities. Display country, city and population in descending order



5) Average city population of capital and non-capital cities. (use group by) where false indicates non capital cities and true indicates capital cities.



6) Average country birth rate for each region and sub-region (use group by), since it was not mentioned in which order to do that, so we kept it as it is.

