CS/CE 457/464 - Homework Assignment 4: SQL Owais Aijaz – oa07610

 Create a SQL database tables for both datasets countries.csv and cities.csv separately, using a RDBMS (PostgreSQL preferred). You need to submit a create table query in the final document.

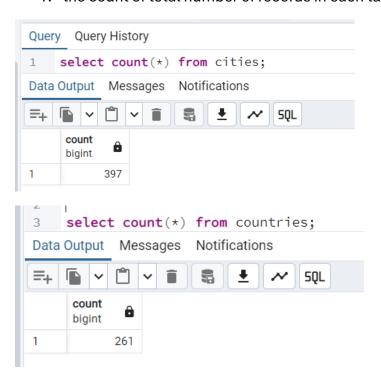
```
CREATE TABLE cities(
   city_id SERIAL PRIMARY KEY,
   city_name VARCHAR(255) NOT NULL,
   city_population BIGINT,
   capital BOOLEAN,
   fact_id INT,
   CONSTRAINT fk_country_fact_id FOREIGN KEY(fact_id) REFERENCES countries(fact_id)
);
                                                                   Z
Query Query History
 1 ➤ CREATE TABLE countries (
        fact_id SERIAL PRIMARY KEY,
 3
         country_code VARCHAR(10) NOT NULL,
         country_name VARCHAR(255) NOT NULL,
 5
         country_region VARCHAR(255),
         country_sub_region VARCHAR(255),
 6
 7
         country_area NUMERIC,
         country_area_land NUMERIC,
8
9
         country_area_water NUMERIC,
         country_population BIGINT,
10
         country_population_growth DECIMAL,
11
12
         country_birth_rate DECIMAL,
13
         country_death_rate DECIMAL,
14
         country_migration_rate DECIMAL
   );
15
16
Data Output Messages Notifications
CREATE TABLE
Query returned successfully in 67 msec.
```

Load/Import the dataset into the table.

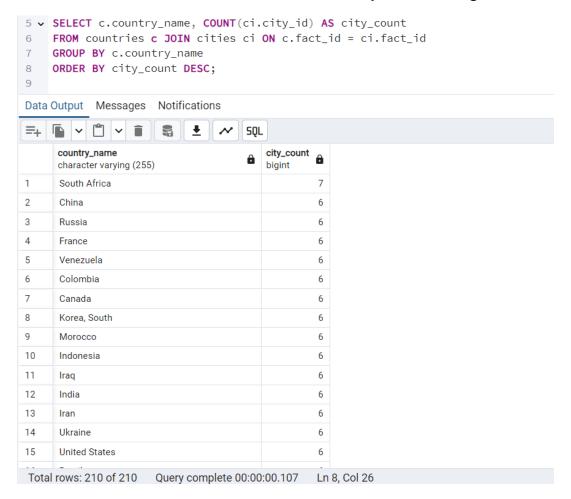
Done via pgAdmin itself.

PID	Туре	Server	Object	Start Time ~	Status
1824	Import Data	PostgreSQL 16 (loca	homework4/public.cities	9/23/2024, 8:49:33	Finished
7304	Import Data	PostgreSQL 16 (loca	homework4/public.countries	9/23/2024, 8:49:00	Finished

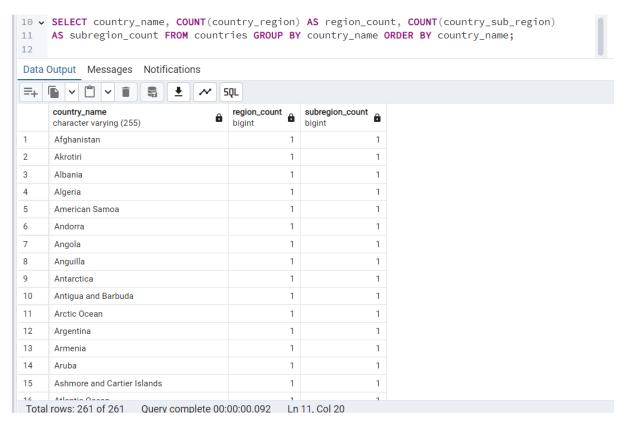
- Query the database tables and interpret the results, displaying:
- 1. the count of total number of records in each table.



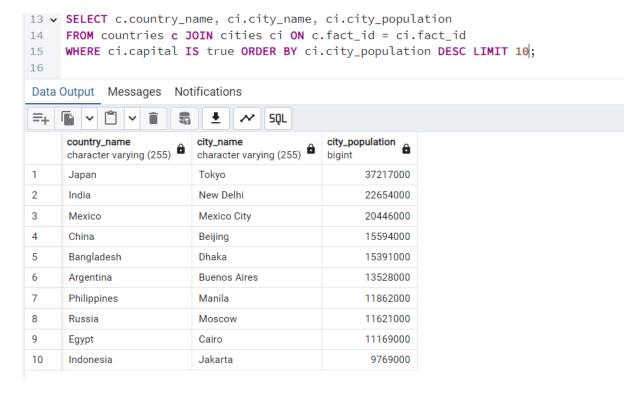
2. the count of number of cities for each country in descending order of count



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)



6. Average country birth rate for each region and sub-region (use group by)

