**Guided Project – 2**

Using the given [**country database**](https://s3.amazonaws.com/grey_campus/production/system/OdinSchool/2023/Edmingle/DataSet/Countries_database.sql), solve the following:

1. Get the list of the 3 most populated cities.
2. Get the list of the 3 cities with the smallest surface.
3. Get the list of states whose department number starts with “97”.
4. Get the names of the 3 most populated cities, as well as the name of the associated state.
5. Get the list of the name of each State, associated with its code and the number of cities within these States, by sorting in order to get in priority the States which have the largest number of cities.
6. Get the list of the 3 largest States, in terms of surface area.
7. Count the number of cities whose names begin with “San”.
8. Get the list of cities whose surface is greater than the average surface.
9. Get the list of States with more than 1 million residents.
10. Replace the dashes with a blank space, for all cities beginning with “SAN-” (inside the column containing the upper case names)

-- 1) Get the list of the 3 most populated cities.

select name from cities

order by population desc

limit 3;

-- 2) Get the list of the 3 cities with the smallest surface.

select name from cities

order by surface asc

limit 3;

-- 3) Get the list of states whose department number starts with “97”.

select state\_name from states

where state\_code regexp '^97';

-- 4) Get the names of the 3 most populated cities, as well as the name of the associated state.

select c.name, s.state\_name from cities c

join states s on c.city\_state=s.state\_code

order by c.population desc

limit 3;

-- 5)Get the list of the name of each State, associated with its code and the number of cities within these States,

-- by sorting in order to get in priority the States which have the largest number of cities.

select s.state\_name, s.state\_code, count(c.name) as city

from cities c right join states s on c.city\_state=s.state\_code

group by s.state\_name,s.state\_code

order by city desc;

-- 6) Get the list of the 3 largest States, in terms of surface area.

select population from cities order by population desc limit 3;

select state\_name from states;

select \* from

(select s.state\_name,sum(c.surface) as b

from cities c join states s

on c.city\_state=s.state\_code

group by s.state\_name

order by b desc

limit 3)a;

-- 7) Count the number of cities whose names begin with “San”.

select count(name) from cities

where name regexp '^san';

select name from cities where name regexp '^san';

-- 8) Get the list of cities whose surface is greater than the average surface.

select name from cities where

surface > (select avg(surface) from cities);

select name from cities where surface > '15.445195078849792';

-- 9) Get the list of States with more than 1 million residents.

select state\_name , sum(population) from states s

join cities c on s.state\_code=c.city\_state

group by state\_name

having sum(population)>1000000;

-- 10) Replace the dashes with a blank space, for all cities beginning with “SAN-” (inside the column containing the upper case names)

select \*, replace(name, '-', ' ' ) as name

from cities

where name regexp '^san-';