# **Assignment 8**

# **Subqueries and Views**

Consider the Country table and Persons table:

```
4 • ⊖ create table country (id int primary key,
 5
       country_name varchar(50),
       population varchar(50),
 6
       area sqkm varchar(50));
 7
 8 •
       desc country;
       insert into country(id, country_name, population, area_sqkm)
       values(1, 'India', '900000000', '32 lakhs'),
10
       (2, 'China', '90000000', '97 lakhs'),
11
       (3, 'USA', '80000000', '93 lakhs'),
      (4, 'UK', '70000000', '2 lakhs'),
13
14
       (5, 'Canada', '60000000', '99 lakhs'),
       (6, 'Australia', '50000000', '50 lakhs'),
15
       (7, 'Netherlands', '40000000', '32 lakhs'),
16
17
       (8, 'Sweden', '30000000', '4 lakhs'),
       (9, 'Austria', '20000000', '3 lakhs'),
18
19
       (10, 'Switzerland', '10000000', '2 lakhs');
       select*from country;
20 •
```

Result Grid   1						
	id	country_name	population	area_sqkm		
•	1	India	90000000	32 lakhs		
	2	China	90000000	97 lakhs		
	3	USA	80000000	93 lakhs		
	4	UK	70000000	2 lakhs		
	5	Canada	60000000	99 lakhs		
	6	Australia	50000000	50 lakhs		
	7	Netherlands	40000000	32 lakhs		
	8	Sweden	30000000	4 lakhs		
	9	Austria	20000000	3 lakhs		
	10	Switzerland	10000000	2 lakhs		
	NULL	NULL	NULL	NULL		

```
22 • ⊖ create table persons (id int primary key,
       first_name varchar(50),
23
24
       last name varchar(50),
       population varchar(50),
25
26
       rating int,
27
       country_id int,
       country_name varchar(50));
28
29 •
       desc persons;
       insert into persons(id, first_name, last_name, population, rating, country_id, country_name)
30 0
       values(1, 'Lisha', 'Thomas', '90000000', 1, 1, 'India'),
31
       (2, 'Chaang', 'Yaang', '90000000', 2, 2, 'China'),
32
       (3, 'Thomas', 'Cook', '80000000', 3, 3, 'USA'),
33
       (4, 'Diana', 'Xavier', '90000000', 1, 1, 'India'),
34
       (5, 'Freddy', 'Dainz', '60000000', 5, 5, 'Canada'),
35
       (6, 'Hari', 'Sharma', '90000000', 1, 1, 'India'),
36
       (7, 'william', 'Blake', '40000000', 7, 7, 'Netherlands'),
37
       (8, 'Right', 'Thomas', '30000000',8, 8, 'Sweden'),
38
39
       (9, 'Cindrella', 'John', '20000000', 9, 9, 'Austria'),
       (10, 'Irene', 'Dizooza', '10000000', 10, 10, 'Iceland');
40
41 •
       select*from persons;
                                                  Edit: 🚄 🖽 🖶 Export/Import: 📺
id
           first_name
                                   population
                                                      country id
                                                                  country_name
                       last_name
                                              rating
          Lisha
                                  90000000
                                                                  India
                      Thomas
                                                      1
   1
                                              1
          Chaang
                      Yaang
                                  90000000
                                              2
                                                      2
                                                                  China
   3
          Thomas
                      Cook
                                  80000000
                                              3
                                                      3
                                                                  USA
   4
          Diana
                                  90000000
                                                      1
                                                                  India
                      Xavier
                                              1
                      Dainz
   5
          Freddy
                                  60000000
                                              5
                                                      5
                                                                  Canada
                                                                  India
   6
          Hari
                      Sharma
                                  90000000
                                              1
                                                      1
          william
                      Blake
                                              7
                                                      7
                                                                  Netherlands
                                  40000000
   8
          Right
                      Thomas
                                  30000000
                                              8
                                                      8
                                                                  Sweden
   9
          Cindrella
                       John
                                  20000000
                                                      9
                                                                  Austria
                      Dizooza
                                  10000000
                                                                  Iceland
   10
          Irene
                                              10
                                                      10
```

1. Find the number of persons in each country.

NULL

NULL

NULL

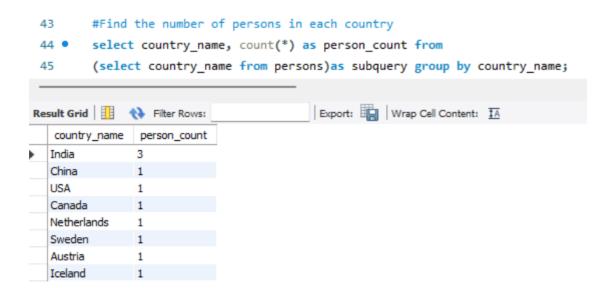
NULL

NULL

Query and Result

NULL

NULL



2. Find the number of persons in each country sorted from high to low.

# Query and Result

Query and Result



3. Find out an average rating for Persons in respective countries if the average is greater than 3.0

# 

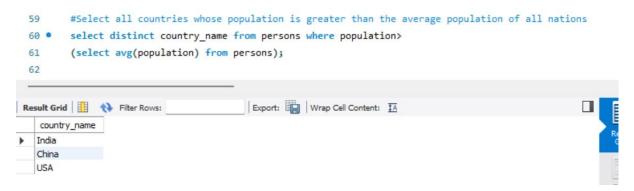


4. Find the countries with the same rating as the USA.

# Query and Result

5. Select all countries whose population is greater than the average population of all nations.

# Query and Result



Create a database named Product and create a table called Customer with the following fields in the Product database: Customer\_Id - Make PRIMARY KEY, First\_name, Last\_name, Email, Phone\_no, Address, City, State, Zip\_code, Country.

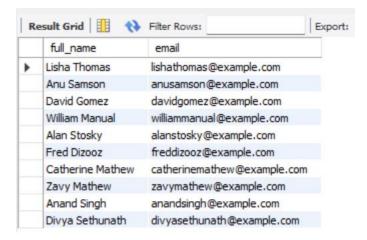
```
create database Product;
 2 .
       use Product;
 3
 4 • ⊖ create table customer (customer id int primary key,
 5
       first_name varchar(50),
       last name varchar(50),
 6
 7
       email varchar(50),
       phone_no varchar(50),
 8
9
       address varchar(50),
       city varchar(50),
10
       state varchar(50),
11
       zipcode varchar(50),
12
       country varchar(50));
13
14 •
       desc customer;
```

```
16 • ⊖ insert into customer(customer_id, first_name, last_name, email,
         phone no, address, city, state, zipcode, country)
17

→ values(1, 'Lisha', 'Thomas', 'lishathomas@example.com', 78955675,
18
                'BerlingStreet', 'Mumbai', 'Maharahtra', '1234', 'India'),
19
                (2, 'Anu', 'Samson', 'anusamson@example.com', 78955676,
20
                'AnandNagar', 'Mumbai', 'Maharahtra', '1235', 'India'),
21
                (3, 'David', 'Gomez', 'davidgomez@example.com', 78955677,
22
                'RosscotLane', 'LosAngeles', 'California', '2314', 'USA'),
23
                (4, 'William', 'Manual', 'williammanual@example.com', 78955678,
24
                '32BStreet', 'SantaAna', 'California', '2316', 'USA'),
25
                (5, 'Alan', 'Stosky', 'alanstosky@example.com', 78955679,
26
                '33CStreet', 'LosAngeles', 'California', '2315', 'USA'),
27
                (6, 'Fred', 'Dizooz', 'freddizooz@example.com', 78955680,
28
29
                '69CStreet', 'LosAngeles', 'California', '2317', 'USA'),
                (7, 'Catherine', 'Mathew', 'catherinemathew@example.com', 78955681,
30
                '72DStreet', 'LosAngeles', 'California', '2318', 'USA'),
31
                (8, 'Zavy', 'Mathew', 'zavymathew@example.com', 78955682,
32
                '87MStreet', 'LosAngeles', 'California', '2319', 'USA'),
33
                (9, 'Anand', 'Singh', 'anandsingh@example.com', 78955683,
34
35
                'DaffodilStreet', 'Dallupura', 'Delhi', '1236', 'India'),
                (10, 'Divya', 'Sethunath', 'divyasethunath@example.com', 78955684,
36
                'UdaypuramRoad', 'Trivandrum', 'Kerala', '1237', 'India');
37
         select* from customer;
38 •
| Edit: 🚄 🖶 | Export/Import: 🏭 🐻 | Wrap Cell Content: 🖽
  customer_id first_name last_name email
                                                   phone_no address
                                                                       city
                                                                                state
                                                                                          zipcode country
  1
           Lisha
                    Thomas
                             lishathomas@example.com
                                                  78955675
                                                          BerlingStreet
                                                                       Mumbai
                                                                                Maharahtra
                                                                                         1234
                                                                                                India
  2
            Anu
                             anusamson@example.com
                                                  78955676
                                                          AnandNagar
                                                                       Mumbai
                                                                                Maharahtra 1235
                                                                                                India
  3
           David
                             davidgomez@example.com
                                                  78955677
                                                          RosscotLane
                                                                       LosAngeles
                                                                                California
                                                                                         2314
                                                                                                USA
                    Gomez
  4
           William
                    Manual
                            williammanual@example.com
                                               78955678 32BStreet
                                                                       SantaAna
                                                                                California
                                                                                         2316
                                                                                                USA
  5
            Alan
                    Stosky
                             alanstosky@example.com
                                                   78955679
                                                           33CStreet
                                                                       LosAngeles
                                                                                California
                                                                                         2315
                                                                                                USA
                    Dizooz
                                                                       LosAngeles California
                                                                                                USA
  6
           Fred
                            freddizooz@example.com
                                                 78955680 69CStreet
                                                                                         2317
  7
           Catherine
                    Mathew
                             catherinemathew@example.com
                                                  78955681
                                                          72DStreet
                                                                       LosAngeles
                                                                                California
                                                                                         2318
                                                                                                USA
  8
                    Mathew
                                                  78955682
                                                           87MStreet
                                                                       LosAngeles
                                                                                California
                                                                                         2319
                                                                                                USA
           Zavy
                            zavymathew@example.com
            Anand
                    Singh
                             anandsingh@example.com
                                                  78955683
                                                          DaffodilStreet
                                                                       Dallupura
                                                                                Delhi
                                                                                         1236
                                                                                                India
  10
                                                  78955684
                                                                       Trivandrum
                                                                                         1237
                    Sethunath
                            divyasethunath@example.com
                                                          UdaypuramRoad
                                                                                Kerala
                                                                                                India
           Divva
```

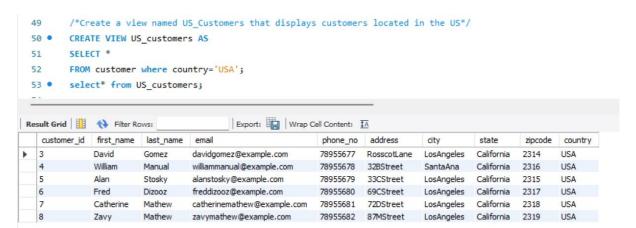
1. Create a view named customer\_info for the Customer table that displays Customer's Full name and email address. Then perform the SELECT operation for the customer\_info view.

```
40
    /* Create a view named customer_info for the Customer table that displays
       Customer's Full name and email address. Then perform the SELECT operation
41
42
      for the customer info view*/
       CREATE VIEW customer info AS
43 •
       SELECT
44
       concat(first name, ' ', last name) as full name, email
45
46
       FROM customer;
       select* from customer_info;
47 •
```



2. Create a view named US Customers that displays customers located in the US.

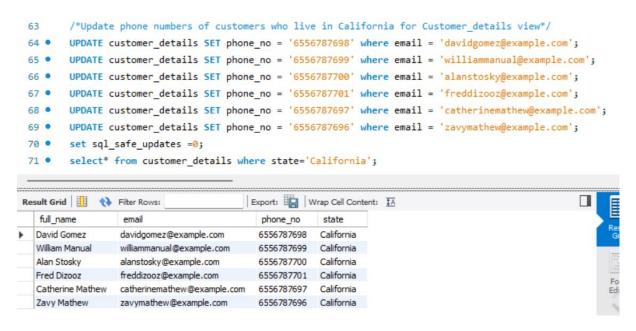
#### Query and Result



3. Create another view named Customer\_details with columns full name (Combine first\_name and last\_name), email, phone\_no, and state.

```
55
         (Combine first_name and last_name), email, phone_no, and state*/
 56
 57 •
        CREATE VIEW customer details AS
        SELECT
 58
        concat(first_name, ' ',last_name) as full_name, email, phone_no,state
 59
         FROM customer;
 61 •
         select* from customer details;
Export: Wrap Cell Content: TA
   full_name
                   email
                                             phone_no
                                                       state
  Lisha Thomas
                  lishathomas@example.com
                                            78955675
                                                      Maharahtra
  Anu Samson
                  anusamson@example.com
                                            78955676
                                                      Maharahtra
  David Gomez
                  davidgomez@example.com
                                            78955677
                                                      California
  William Manual
                  williammanual@example.com
                                            78955678
                                                      California
  Alan Stosky
                  alanstosky@example.com
                                            78955679
                                                      California
  Fred Dizooz
                  freddizooz@example.com
                                            78955680
                                                      California
  Catherine Mathew
                  catherinemathew@example.com
                                                      California
                                            78955681
                  zavymathew@example.com
                                                      California
  Zavy Mathew
                                            78955682
  Anand Singh
                  anandsingh@example.com
                                            78955683
                                                      Delhi
  Divya Sethunath
                  divyasethunath@example.com
                                            78955684
                                                      Kerala
```

4. Update phone numbers of customers who live in California for Customer details view.

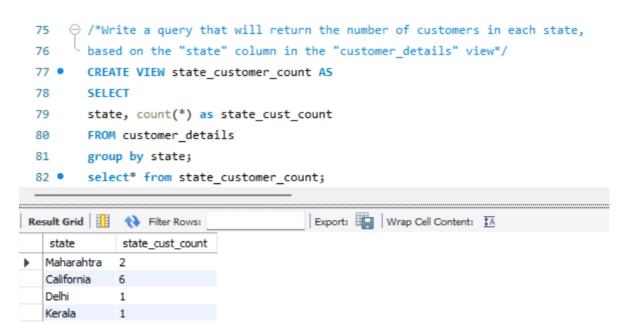


5. Count the number of customers in each state and show only states with more than 5 customers.

## Query and Result

```
/*Count the number of customers in each state and show only states with more than 5 customers*/
 68 •
        CREATE VIEW cust_count AS
 69
 70
        state, count(*) as customer_count
 71
        FROM customer
         group by state having count(*)>5;
 72
        select* from cust count;
                                       Export: Wrap Cell Content: IA
customer_count
   state
▶ California 6
```

6. Write a query that will return the number of customers in each state, based on the "state" column in the "customer details" view.



7. Write a query that returns all the columns from the "customer\_details" view, sorted by the "state" column in ascending order.

