## Task: [User defined functions]

Consider the Country table and Persons table that you have created earlier and perform the following:

- 1. Add a new column called DOB in Persons table with datatype as Date.
- 2. Write a user defined function to calculate age using DOB.
- 3. Write a select query to fetch Age of all persons reusing the function that has been created

```
5
        delimiter $$
        create function age (DOB DATE)
  7
            returns int deterministic
  8
            begin
                return year(sysdate()) - year(dob);
  9
            end $$
 10
        delimiter;
 11
 12
 13 •
        select age(dob) as AGE from persons;
Export: Wrap Cell Co
   AGE
  22
  23
  24
  25
  26
  27
  28
  29
  30
  31
Result 4 ×
```

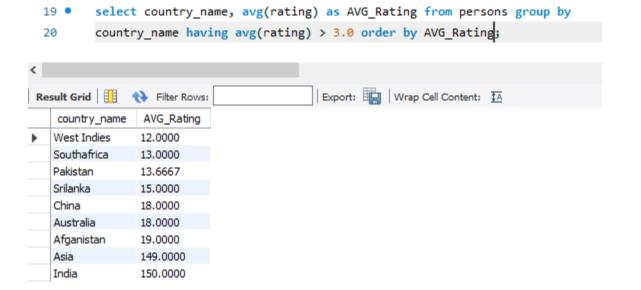
## Task:[Subqueries]

Consider the Country table and Persons table that you have created earlier and perform the following:

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



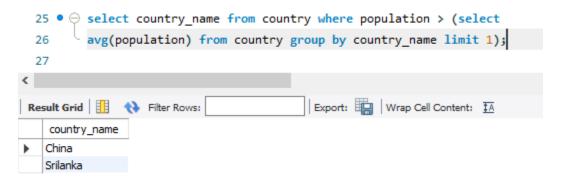
3. Find out average rating for Persons in respective countries if average is greater than 3.0



4. Find the countries with same rating as pakistan. (Use Subqueries)



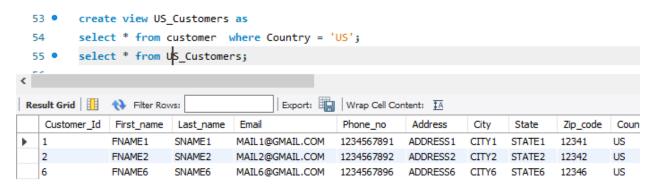
5. Select all countries whose population is greater than the average population of all countries



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

```
create view customer_info as
 49 •
         select concat(First_name," ",Last_name) as Full_Name, Email from customer;
 50
         select * from customer_info;
 51 •
Result Grid
              Filter Rows:
                                            Export: Wrap Cell Content: IA
   Full_Name
                    Email
  FNAME1 SNAME1
                    MAIL1@GMAIL.COM
  FNAME2 SNAME2
                    MAIL2@GMAIL.COM
  FNAME3 SNAME3
                    MAIL3@GMAIL.COM
  FNAME4 SNAME4
                    MAIL4@GMAIL.COM
  FNAME5 SNAME5
                    MAIL5@GMAIL.COM
  FNAME6 SNAME6
                    MAIL6@GMAIL.COM
  FNAME7 SNAME7
                    MAIL7@GMAIL.COM
  FNAME8 SNAME8
                    MAIL8@GMAIL.COM
  FNAME9 SNAME9
                    MAIL9@GMAIL.COM
  FNAME10 SNAME10
                    MAIL 10@GMAIL.COM
```

2) Create a view named US\_Customers that displays customers located in US.



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

```
create view Customer_details as
 58
         select concat(First_name," ",Last_name) as Full_Name,Email,Phone_no,State from customer;
         select * from Customer details;
 59 •
Result Grid H N Filter Rows:
                                          Export: Wrap Cell Content: IA
   Full_Name
                                                 State
                   Email
                                     Phone_no
  FNAME1 SNAME1
                   MAIL1@GMAIL.COM
                                     1234567891
                                                STATE1
   FNAME2 SNAME2 MAIL2@GMAIL.COM 1234567892 STATE2
  FNAME3 SNAME3
                   MAIL3@GMAIL.COM
                                     1234567893 STATE3
  FNAME4 SNAME4 MAIL4@GMAIL.COM 1234567894 STATE4
   FNAME5 SNAME5
                   MAIL5@GMAIL.COM
                                    1234567895 STATE5
  FNAME6 SNAME6 MAIL6@GMAIL.COM 1234567896 STATE6
  FNAME7 SNAME7
                   MAIL7@GMAIL.COM 1234567897 STATE7
   FNAME8 SNAME8 MAIL8@GMAIL.COM 1234567898 STATE8
   FNAME9 SNAME9
                   MAIL9@GMAIL.COM
                                                STATE9
                                     1234567899
  FNAME10 SNAME10
                   MAIL10@GMAIL.COM 1234567810
                                                STATE 10
Customer details 6 V
```

4) Update phone numbers of customers who live in STATE7 for Customer\_details view.

MAIL5@GMAIL.COM

MAIL7@GMAIL.COM

MAIL9@GMAIL.COM

MAIL 10@GMAIL.COM

MAIL6@GMAIL.COM

MAIL8@GMAIL.COM

FNAME5 SNAME5

FNAME6 SNAME6

FNAME7 SNAME7

FNAME8 SNAME8

FNAME9 SNAME9

Customer\_details 8 ×

FNAME10 SNAME10

```
set sql_safe_updates = 0;
 61 •
        update Customer_details set Phone_no = '1234567811'
 62 •
        where State = 'STATE7';
 63
Export: Wrap Cell Co
   Full_Name
                   Email
                                    Phone_no
                                               State
  FNAME1 SNAME1
                  MAIL1@GMAIL.COM
                                    1234567891
                                               STATE1
  FNAME2 SNAME2
                  MAIL2@GMAIL.COM
                                    1234567892
                                               STATE2
  FNAME3 SNAME3
                  MAIL3@GMAIL.COM
                                    1234567893
                                               STATE3
  FNAME4 SNAME4
               MAIL4@GMAIL.COM
                                    1234567894
                                               STATE4
```

1234567895

1234567896

1234567811

1234567898

1234567899

1234567810

STATE5

STATE6

STATE7

STATE8

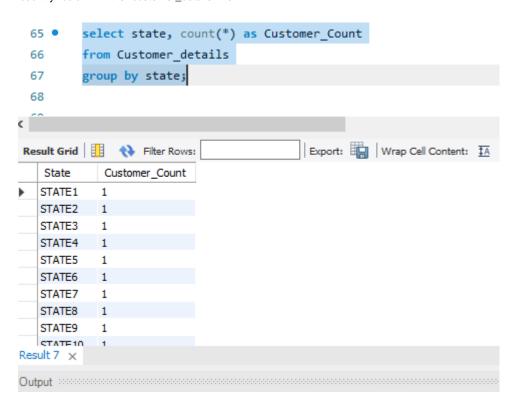
STATE9

STATE 10

5)Count the number of customers in each state and show only country  $\,$  that have more than 3 customers



6)Write a query that will return the number of customers in each country, based on the "country" column in the "customer\_details" view



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

