Assignment 7

Functions

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

Query and Result

5

6

7

8

9

10

NULL

Canada

Australia

Sweden

Austria

Netherlands

Switzerland

60000000

50000000

40000000

30000000

20000000

10000000

NULL

```
4 • ⊖ create table country (id int primary key,
 5
        country_name_varchar(50),
        population varchar(50),
 6
 7
       area sqkm varchar(50));
 8 •
       desc country;
        insert into country(id, country_name, population, area_sqkm)
 9 •
       values(1, 'India', '90000000', '32 lakhs'),
10
11
        (2, 'China', '90000000', '97 lakhs'),
        (3, 'USA', '80000000', '93 lakhs'),
12
        (4, 'UK', '70000000', '2 lakhs'),
13
        (5, 'Canada', '60000000', '99 lakhs'),
14
        (6, 'Australia', '50000000', '50 lakhs'),
15
        (7, 'Netherlands', '40000000', '32 lakhs'),
16
        (8, 'Sweden', '30000000', '4 lakhs'),
17
        (9, 'Austria', '20000000', '3 lakhs'),
18
        (10, 'Switzerland', '10000000', '2 lakhs');
19
20 •
        select*from country;
Result Grid
              Filter Rows:
                                           Edit:
         country_name
                      population
                                area_sqkm
                                32 lakhs
  1
        India
                      90000000
        China
                                97 lakhs
  2
                      90000000
  3
        USA
                      80000000
                                93 lakhs
                      70000000
  4
        UK
                                2 lakhs
```

99 lakhs 50 lakhs

32 lakhs

4 lakhs

3 lakhs

2 lakhs

NULL

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

1. Add a new column called DOB in Persons table with data type as Date.

10

10

Iceland

10000000

Query and Result

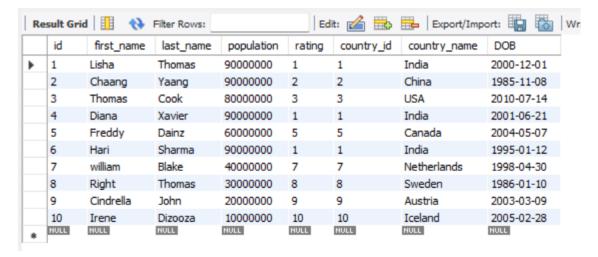
Irene

Dizooza

10

NULL

```
43
       #Add a new column called DOB in Persons table with data type as Date
44 .
       alter table persons add column DOB DATE;
45 •
       select*from persons;
46
47 •
       update persons set DOB='2000-12-01' where id=1;
48 •
       update persons set DOB='1985-11-08' where id=2;
49 •
       update persons set DOB='2010-07-14' where id=3;
50 •
       update persons set DOB='2001-06-21' where id=4;
       update persons set DOB='2004-05-07' where id=5;
51 •
       update persons set DOB='1995-01-12' where id=6;
52 •
53 •
       update persons set DOB='1998-04-30' where id=7;
54 •
       update persons set DOB='1986-01-10' where id=8;
55 .
       update persons set DOB='2003-03-09' where id=9;
56 •
       update persons set DOB='2005-02-28' where id=10;
57 •
       select*from persons;
```



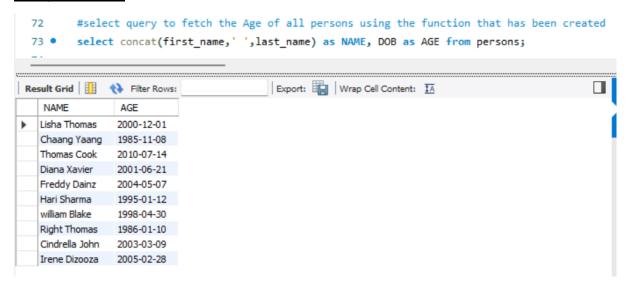
2. Write a user-defined function to calculate age using DOB.

Query and Result

```
#user-defined function to calculate age using DOB
 59
        DELIMITER $$
 60
 61
 62 •
        CREATE FUNCTION age cal(DOB DATE)
        RETURNS int
 63
        DETERMINISTIC
 64
 65
            RETURN datediff(yy,DOB,getdate());
 66
 67
        END $$
 68
 69
        DELIMITER;
        SELECT age_cal(1990);
Export: Wrap Cell Content: TA
   age_cal(1990)
▶ 34
```

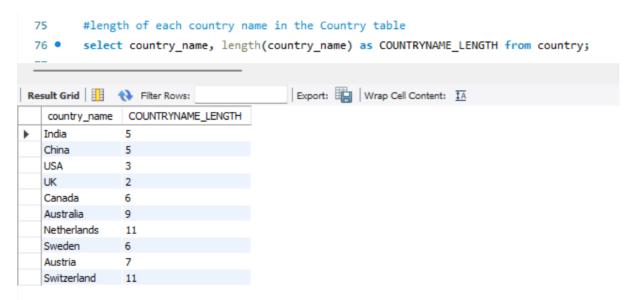
3. Write a select query to fetch the Age of all persons using the function that has been created.

Query and Result



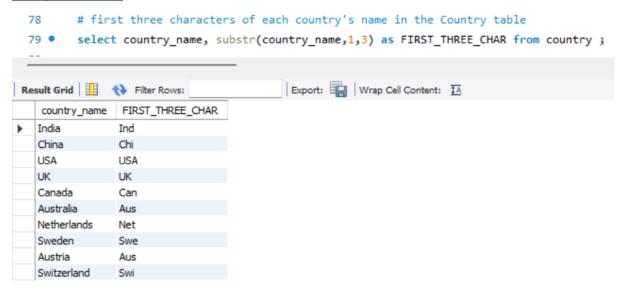
4. Find the length of each country name in the Country table.

Query and Result



5. Extract the first three characters of each country's name in the Country table.

Query and Result



6. Convert all country names to uppercase and lowercase in the Country table.

Query and Result

