MySQL Assignment 8

Subqueries and Views

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

-- 1. Find the number of persons in each country.

use world\_population;

select country\_name, count(id) as No\_of\_persons from persons

group by country\_name;

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

select country\_name, count(id) as No\_of\_persons

from persons

group by country\_name

order by count(id);

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

select country\_name, avg(rating) as Average\_rating

from persons

group by country\_name

having avg(rating) > 3

order by avg(rating);

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

select country\_name

from persons

where rating = (select rating from persons where country\_name = 'USA');

select rating from persons where country\_name = 'USA';

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

select avg(population) from country;

select country\_name, population

from country

where population > (select avg(population) from country)

order by population;

-- 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;

use Product;

create table Customer(

Customer\_Id int Primary key,

First\_name varchar(30) not null,

Last\_name varchar(30),

Email varchar(30) unique,

Phone\_no bigint unique,

Address varchar(100),

City varchar(30),

State varchar(30),

Zip\_code varchar(20),

Country varchar(30)

);

desc customer;

INSERT INTO Customer (Customer\_Id, First\_name, Last\_name, Email, Phone\_no, Address, City, State, Zip\_code, Country)

VALUES

(1, 'John', 'Doe', 'john.doe@example.com', '5551234', '123 Elm St', 'Los Angeles', 'California', '90001', 'USA'),

(2, 'Jane', 'Smith', 'jane.smith@example.com', '5552345', '456 Oak St', 'New York', 'New York', '10001', 'UK'),

(3, 'Michael', 'Johnson', 'michael.johnson@example.com', '5553456', '789 Pine St', 'Chicago', 'Illinois', '60601', 'Sweden'),

(4, 'Emily', 'Davis', 'emily.davis@example.com', '5554567', '101 Maple St', 'San Francisco', 'California', '94101', 'USA'),

(5, 'Chris', 'Brown', 'chris.brown@example.com', '5555678', '102 Birch St', 'Houston', 'Texas', '77001', 'India'),

(6, 'Olivia', 'Wilson', 'olivia.wilson@example.com', '5556789', '103 Cedar St', 'Seattle', 'Washington', '98101', 'USA'),

(7, 'William', 'Taylor', 'william.taylor@example.com', '5557890', '104 Redwood St', 'Miami', 'Florida', '33101', 'Russia'),

(8, 'Sophia', 'Anderson', 'sophia.anderson@example.com', '5558901', '105 Palm St', 'Dallas', 'Texas', '75201', 'India'),

(9, 'James', 'Moore', 'james.moore@example.com', '5559012', '106 Cypress St', 'Austin', 'Texas', '73301', 'India'),

(10, 'Ava', 'Jackson', 'ava.jackson@example.com', '5550123', '107 Spruce St', 'Boston', 'Massachusetts', '02101', 'USA'),

(11, 'Liam', 'Harris', 'liam.harris@example.com', '5551230', '108 Fir St', 'San Diego', 'California', '92101', 'USA'),

(12, 'Mason', 'Martin', 'mason.martin@example.com', '5552340', '109 Magnolia St', 'Denver', 'Colorado', '80201', 'USA'),

(13, 'Isabella', 'Lee', 'isabella.lee@example.com', '5553450', '110 Ash St', 'Phoenix', 'Arizona', '85001', 'USA'),

(14, 'Charlotte', 'Perez', 'charlotte.perez@example.com', '5554560', '111 Cherry St', 'Las Vegas', 'Nevada', '89101', 'USA'),

(15, 'Lucas', 'Thompson', 'lucas.thompson@example.com', '5555670', '112 Apple St', 'Portland', 'Oregon', '97201', 'USA'),

(16, 'Amelia', 'White', 'amelia.white@example.com', '5556780', '113 Orange St', 'Philadelphia', 'Pennsylvania', '19101', 'USA'),

(17, 'Logan', 'Garcia', 'logan.garcia@example.com', '5557891', '114 Plum St', 'San Antonio', 'Texas', '78201', 'India'),

(18, 'Mia', 'Martinez', 'mia.martinez@example.com', '5558902', '115 Lemon St', 'Orlando', 'Florida', '32801', 'Russia'),

(19, 'Ethan', 'Rodriguez', 'ethan.rodriguez@example.com', '5559013', '116 Peach St', 'Atlanta', 'Georgia', '30301', 'USA'),

(20, 'Abigail', 'Lopez', 'abigail.lopez@example.com', '5550124', '117 Pear St', 'Salt Lake City', 'Utah', '84101', 'USA');

select \* from customer;

-- 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.

create view Customer\_Info as

select concat(First\_name, ' ', last\_name) as Customer\_name, Email

from customer;

select \* from customer\_info;

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

create view US\_Customers as

select \* from customer

where country = 'USA';

select \* from US\_Customers;

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

create view Customer\_Details as

select concat(first\_name,' ',last\_name) as Customer\_name, Email, Phone\_no, State

from customer;

select \* from customer\_details;

-- 4. Update phone numbers of customers who live in California for Customer\_details view.

update customer\_details

set Phone\_no = 9876543

where state = 'California';

select \* from customer\_details where state = 'California';

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

select State, count(customer\_id)

from customer

group by state

having count(customer\_id) > 2;

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

select State, count(\*) as Number\_of\_customers

from customer\_details

group by state

order by count(\*);

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

select \* from customer\_details

order by state;