

From the above given tables perform the following queries:

Part – A

1. Create a view that displays the top 5 countries with the highest population, along with their population figures.

```
CREATE VIEW top5country AS
SELECT TOP 5
    Country_Name,
    Population
FROM Country
ORDER BY Population DESC;
```

2. Create a view that lists countries that do not have any states.

```
CREATE VIEW List_Country_not_state AS
select Country.Country_ID, Country.Country_Name
FROM Country
INNER JOIN State
on Country.Country_ID = State.Country_ID
WHERE State.State_ID IS NULL
```

3. Create a view that displays the state with the highest population for each country, along with its population figure.

```
ALTER VIEW List_Country_not_state AS
SELECT
    Country.Country_ID,
    Country.Country_Name
FROM Country
INNER JOIN State
on Country.Country_ID = State.Country_ID
where State.State_ID IS NULL
```

4. Create a view that lists states that do not have a designated capital.

```
CREATE VIEW StatesWithoutCapital AS
SELECT
    State_ID,
    State_Name,
    Population,
    Area_sq_km,
    Country_ID
FROM State
WHERE Capital IS NULL OR Capital = '';
```

5. Create a view that displays countries with more than one capital city.

```
CREATE VIEW country_with_morethan_one_city
```

AS

```
SELECT Country_Name, Country_ID, COUNT(Capital) AS total
FROM Country
GROUP BY Country_Name, Country_ID
HAVING COUNT(Capital) > 1
```

Part – B

6. Create a view AllOrdersView to Get All Orders with customer name.

```
CREATE VIEW ge_all_order AS
SELECT
    Customer.FirstName,
    Customer.LastName,
    Orders.OrderID,
    Orders.OrderDate,
    Orders.TotalAmount
FROM Customer INNER JOIN Orders
ON Customer.CustomerID = Orders.CustomerID
```

7. Create a view to Get Customers with No Email Addresses.

```
CREATE VIEW get_customer_no_email
AS
SELECT * FROM Customer
WHERE Email IS NULL
```

8. Create a view to return sum of total amount of order as total_amount.

```
CREATE VIEW total_amount_order AS
SELECT SUM(TotalAmount) AS total_amount
FROM Orders;
```

9. Create a view to Get Customers with Their Total Order Amount.

```
CREATE VIEW customer_with_their_total_amount
AS
SELECT
    Customer.FirstName,
    Customer.LastName,
    Sum(Orders.TotalAmount) as total_amount
FROM Customer INNER JOIN Orders on
Customer.CustomerID = Orders.CustomerID
GROUP BY Customer.FirstName, Customer.LastName
```

10. Create a view to Get Customers with Their Latest Order Date.

```
CREATE VIEW Customer_with_latest_date as
SELECT
    Customer.FirstName,
    Customer.Email,
    Customer.LastName,
```

```
Customer.Phone,  
Orders.OrderDate  
FROM Customer INNER JOIN Orders  
on Customer.CustomerID = Orders.CustomerID
```

Part – C

11. Create a view to Get Customers with No Orders.

```
CREATE VIEW Customer_no_order AS  
SELECT  
Customer.CustomerID,  
Customer.FirstName,  
Customer.LastName,  
Customer.Email,  
Customer.Phone,  
Orders.OrderID  
FROM Customer LEFT JOIN Orders  
on Customer.CustomerID = Orders.CustomerID  
WHERE Orders.OrderID IS NULL
```

12. Create a view to Get Customers with Their Total Number of Orders.

```
CREATE VIEW customer_with_total_order AS  
SELECT  
Customer.CustomerID,  
Customer.FirstName,  
Customer.LastName,  
Customer.Email,  
Customer.Phone,  
count(Orders.OrderID) as totalorder  
FROM Customer LEFT JOIN Orders  
on Customer.CustomerID = Orders.CustomerID  
GROUP BY Customer.CustomerID, Customer.FirstName, Customer.LastName
```

13. Create a view to Get Customers with High-Value Orders.

```
CREATE VIEW Customer_highest_order AS  
SELECT  
Customer.CustomerID,  
Customer.FirstName,  
Customer.LastName,  
Customer.Email,  
Customer.Phone  
FROM Customer LEFT JOIN Orders  
on Customer.CustomerID = Orders.CustomerID  
WHERE Orders.TotalAmount >200
```

14. Getting Customers with more than 1 order Placed.

CREATE VIEW CustomersWithMoreThanOneOrder **AS**

SELECT

Customer.CustomerID,

Customer.FirstName,

Customer.LastName,

Customer.Email,

Customer.Phone,

COUNT(Orders.OrderID) **AS** NumberOfOrders

FROM Customer **INNER JOIN** Orders

ON Customer.CustomerID = Orders.CustomerID

GROUP BY Customer.CustomerID, Customer.FirstName, Customer.LastName

HAVING COUNT(Orders.OrderID) > 1;

15. Getting Customers with Orders in Date Range 2023-07-01 to 2023-07-04.

CREATE VIEW CustomersWithOrdersInDateRange **AS**

SELECT

Customer.CustomerID,

Customer.FirstName,

Customer.LastName,

Customer.Email,

Customer.Phone,

Orders.OrderID,

CONVERT(**VARCHAR**, Orders.OrderDate, 120) **AS** OrderDate,

– Convert DATE to VARCHAR

Orders.TotalAmount

FROM Customer **INNER JOIN** Orders

ON Customer.CustomerID = Orders.CustomerID

WHERE Orders.OrderDate **BETWEEN** '2023-07-01' **AND** '2023-07-04';