Q1)

SELECT A.Country, A, D FROM

(SELECT Country, A

FROM country\_ab

ORDER BY A DESC LIMIT 10) A

LEFT JOIN

(SELECT Country, D

FROM country\_cd

ORDER BY D DESC LIMIT 10) B

ON A.Country = B.Country

UNION

SELECT B.Country, A, D FROM

(SELECT Country, A

FROM country\_ab

ORDER BY A DESC LIMIT 10) A

RIGHT JOIN

(SELECT Country, D

FROM country\_cd

ORDER BY D DESC LIMIT 10) B

ON A.Country = B.Country

ORDER BY Country

Q2)

SELECT Region, MAX(CL)

FROM country\_cl t1

JOIN country\_ab t2

ON t1.Country = t2.Country

WHERE t1.Edition = 2020

GROUP BY Region

ORDER BY MAX(CL) DESC;

Q3)

SELECT Name,SUM(Quantity) AS 'total\_quantity' FROM sales t1

JOIN product t2

ON t1.ProductID = t2.ProductID

GROUP BY t1.ProductID

ORDER BY total\_quantity DESC LIMIT 5;

Q4)

SELECT SalesPersonID, t2.FirstName, t2.LastName, SUM(Quantity) AS 'no\_of\_products'

FROM sales1 t1

JOIN employees t2

ON t1.SalesPersonID = t2.EmployeeID

GROUP BY SalesPersonID, t2.FirstName, t2.LastName

ORDER BY no\_of\_products DESC LIMIT 5

Q5)

-- COUNT(DISTINCT(CustomerID))

-- Group SalesPersonID

-- employees join

SELECT t1.SalesPersonID, t2.FirstName, t2.LastName, COUNT(DISTINCT(CustomerID)) AS 'no\_of\_unique\_customers' FROM sales1 t1

JOIN employees t2

ON t1.SalesPersonID = t2.EmployeeID

GROUP BY t1.SalesPersonID, t2.FirstName, t2.LastName

ORDER BY no\_of\_unique\_customers DESC LIMIT 5;

Q6)

-- Sales man who has generated most revenue. Show top 5.

-- GROUP by salespersonID

-- SUM(Quantity \* price)

SELECT t1.SalesPersonID, t3.FirstName, t3.LastName, ROUND(SUM(Quantity \* Price), 2) AS 'most\_revenue' FROM sales1 t1

JOIN products t2

ON t1.ProductID = t2.ProductID

JOIN employees t3

ON t1.SalesPersonID = t3.EmployeeID

GROUP BY t1.SalesPersonID, t3.FirstName, t3.LastName

ORDER BY most\_revenue DESC LIMIT 5;

Q7)

Q7)

-- List all customers who have made more than 10 purchases.

SELECT t1.CustomerID, t2.FirstName, t2.LastName, COUNT(\*) AS 'quantity' FROM sales1 t1

JOIN customers t2

ON t1.customerid = t2.customerid

GROUP BY t1.CustomerID, t2.FirstName, t2.LastName

HAVING quantity > 10;

Q8)

-- List all salespeople who have made sales to more than 5 customers.

-- COUNT(DISTINCT(customerid)) > 5

-- sales1 and employees join

SELECT t1.SalesPersonID, t2.FirstName, t2.LastName, (COUNT(DISTINCT CustomerID)) AS 'count' FROM sales1 t1

JOIN employees t2

ON t1.SalesPersonID = t2.EmployeeID

GROUP BY t1.SalesPersonID, t2.FirstName, t2.LastName

HAVING count > 5;

Q9)

-- List all pairs of customers who have made purchases with the same salesperson.

SELECT \*

FROM (SELECT DISTINCT t1.CustomerID AS 'first\_customer',

t2.CustomerID AS 'second\_customer',

t1.SalesPersonID

FROM sales1 t1

JOIN sales1 t2

ON t1.SalesPersonID = t2.SalesPersonID

AND t1.CustomerID != t2.CustomerID) A

JOIN customers B

ON A.first\_customer = B.customerID

LEFT JOIN customers C

ON A.second\_customer = C.CustomerID

LEFT JOIN employees D

ON A.SalesPersonID = D.EmployeeID