-- 1. Find out top 10 countries which have maximum A and D values.

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;

- -- 2. Find out highest CL value for 2020 for every region.
- -- Also sort the result in descending order.

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;

-- 3. Find top-5 most sold products.

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;

-- 4. Find sales man who sold most no of products.

SELECT t1.SalesPersonID,FirstName,LastName,SUM(Quantity) AS 'num\_sold' FROM sales t1

JOIN employee t2

ON t1.SalesPersonID = t2.EmployeeID

GROUP BY t1.SalesPersonID

ORDER BY num sold DESC LIMIT 5;

-- 5. Sales man name who has most no of unique customer.

SELECT t1.SalesPersonID,FirstName,LastName,COUNT(DISTINCT CustomerID) AS 'unique\_customers' FROM sales t1

JOIN employee t2

ON t1.SalesPersonID = t2.EmployeeID

GROUP BY t1.SalesPersonID

ORDER BY unique customers DESC LIMIT 5;

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

SELECT t1.SalesPersonID,t3.FirstName,t3.LastName,

ROUND(SUM(t1.Quantity \* t2.Price)) AS 'total revenue'

FROM sales t1

JOIN product t2

ON t1.ProductID = t2.ProductID

JOIN employee t3

ON t1.SalesPersonID = t3.EmployeeID

GROUP BY t1.SalesPersonID

ORDER BY total\_revenue DESC LIMIT 5;

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

SELECT t1.CustomerID,t2.FirstName,t2.LastName,COUNT(\*) FROM sales t1

JOIN customer t2

ON t1.CustomerID = t2.CustomerID

**GROUP BY t1.CustomerID** 

HAVING COUNT(\*) > 10;

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

SELECT t1.SalesPersonID,FirstName,LastName,COUNT(DISTINCT CustomerID) AS 'unique customers' FROM sales t1

JOIN employee t2

ON t1.SalesPersonID = t2.EmployeeID

GROUP BY t1.SalesPersonID

HAVING unique customers > 5;

- -- 9. 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 sales t1

JOIN sales t2

ON t1.SalesPersonID = t2.SalesPersonID

AND t1.CustomerID != t2.CustomerID) A

JOIN customer B

ON A.first\_customer = B.customerID

LEFT JOIN customer C
ON A.second\_customer = C.CustomerID
LEFT JOIN employee D
ON A.SalesPersonID = D.EmployeeID