#1. provide the list of markets in which customer "Atliq Exclusive" operates its business in the APAC region

select distinct market

from dim\_customer

where customer ='Atliq Exclusive' and region='APAC'



2. What is the percentage of unique product increase in 2021 vs. 2020? The

final output contains these fields,

unique\_products\_2020 ,unique\_products\_2021, percentage\_chg

SELECT X.A AS unique\_product\_2020, Y.B AS unique\_products\_2021, ROUND((B-A)\*100/A, 2) AS percentage\_chg

FROM

(

(SELECT COUNT(DISTINCT(product\_code)) AS A FROM fact\_sales\_monthly

WHERE fiscal\_year = 2020) X,

(SELECT COUNT(DISTINCT(product\_code)) AS B FROM fact\_sales\_monthly

WHERE fiscal\_year = 2021) Y

)



/\*3. Provide a report with all the unique product counts for each segment and

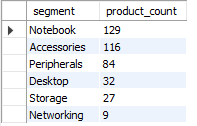
sort them in descending order of product counts. The final output contains

2 fields, Segment ,product\_count\*/

SELECT segment, COUNT(DISTINCT(product\_code)) AS product\_count FROM dim\_product

GROUP BY segment

ORDER BY product\_count DESC ;



/\*4. Follow-up: Which segment had the most increase in unique products in

2021 vs 2020? The final output contains these fields,

Segment, product\_count\_2020, product\_count\_2021, difference\*/

WITH CTE1 AS

(SELECT P.segment AS A , COUNT(DISTINCT(FS.product\_code)) AS B

FROM dim\_product P, fact\_sales\_monthly FS

WHERE P.product\_code = FS.product\_code

GROUP BY FS.fiscal\_year, P.segment

HAVING FS.fiscal\_year = "2020"),

CTE2 AS

(

SELECT P.segment AS C , COUNT(DISTINCT(FS.product\_code)) AS D

FROM dim\_product P, fact\_sales\_monthly FS

WHERE P.product\_code = FS.product\_code

GROUP BY FS.fiscal\_year, P.segment

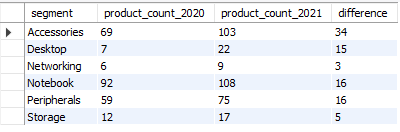
HAVING FS.fiscal\_year = "2021"

)

SELECT CTE1.A AS segment, CTE1.B AS product\_count\_2020, CTE2.D AS product\_count\_2021, (CTE2.D-CTE1.B) AS difference

FROM CTE1, CTE2

WHERE CTE1.A = CTE2.C ;



/\*5.Get the products that have the highest and lowest manufacturing costs.

The final output should contain these fields, product\_code product manufacturing\_cost\*/

select product,p.product\_code,manufacturing\_cost

from fact\_manufacturing\_cost mc join dim\_product p

on mc.product\_code=p.product\_code

WHERE manufacturing\_cost=(SELECT MAX(manufacturing\_cost) FROM fact\_manufacturing\_cost)

OR manufacturing\_cost=(SELECT MIN(manufacturing\_cost) FROM fact\_manufacturing\_cost)



/\*6.Generate a report which contains the top 5 customers who received an average high pre\_invoice\_discount\_pct for the fiscal year 2021 and in the Indian market.

The final output contains these fields

customer\_code ,customer, average\_discount\_percentage\*/

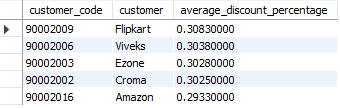
SELECT c.customer\_code ,customer, avg(pre\_invoice\_discount\_pct) as average\_discount\_percentage

FROM dim\_customer C JOIN fact\_pre\_invoice\_deductions pid on c.customer\_code=pid.customer\_code

where fiscal\_year=2021 and market='India'

group by c.customer\_code ,customer

order by average\_discount\_percentage desc limit 5



/\*7. Get the complete report of the Gross sales amount for the customer “Atliq

Exclusive” for each month. This analysis helps to get an idea of low and

high-performing months and take strategic decisions.

The final report contains these columns:

Month, Year, Gross sales Amount\*/

SELECT CONCAT(MONTHNAME(FS.date), ' (', YEAR(FS.date), ')') AS 'Month', FS.fiscal\_year,

ROUND(SUM(G.gross\_price\*FS.sold\_quantity), 2) AS Gross\_sales\_Amount

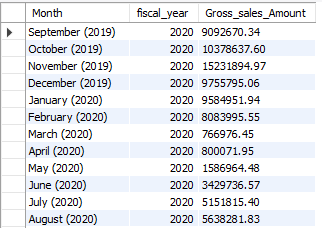
FROM fact\_sales\_monthly FS JOIN dim\_customer C ON FS.customer\_code = C.customer\_code

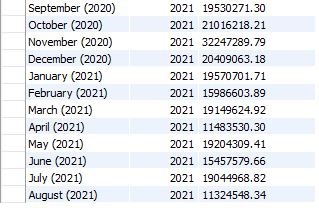
JOIN fact\_gross\_price G ON FS.product\_code = G.product\_code

WHERE C.customer = 'Atliq Exclusive'

GROUP BY Month, FS.fiscal\_year

ORDER BY FS.fiscal\_year ;





8. /\*8. In which quarter of 2020, got the maximum total\_sold\_quantity? The final

output contains these fields sorted by the total\_sold\_quantity,

Quarter, total\_sold\_quantity\*/

SELECT

CASE

WHEN date BETWEEN '2019-09-01' AND '2019-11-01' then 1

WHEN date BETWEEN '2019-12-01' AND '2020-02-01' then 2

WHEN date BETWEEN '2020-03-01' AND '2020-05-01' then 3

WHEN date BETWEEN '2020-06-01' AND '2020-08-01' then 4

END AS Quarters,

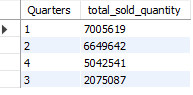
SUM(sold\_quantity) AS total\_sold\_quantity

FROM fact\_sales\_monthly

WHERE fiscal\_year = 2020

GROUP BY Quarters

ORDER BY total\_sold\_quantity DESC



/\*9. Which channel helped to bring more gross sales in the fiscal year 2021

and the percentage of contribution? The final output contains these fields,

channel, gross\_sales\_mln, percentage\*/

WITH Output AS

(

SELECT C.channel,

ROUND(SUM(G.gross\_price\*FS.sold\_quantity/1000000), 2) AS Gross\_sales\_mln

FROM fact\_sales\_monthly FS JOIN dim\_customer C ON FS.customer\_code = C.customer\_code

JOIN fact\_gross\_price G ON FS.product\_code = G.product\_code

WHERE FS.fiscal\_year = 2021

GROUP BY channel

)

SELECT channel, CONCAT(Gross\_sales\_mln,' M') AS Gross\_sales\_mln , CONCAT(ROUND(Gross\_sales\_mln\*100/total , 2), ' %') AS percentage

FROM

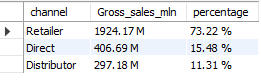
(

(SELECT SUM(Gross\_sales\_mln) AS total FROM Output) A,

(SELECT \* FROM Output) B

)

ORDER BY percentage DESC



10 /\*10. Get the Top 3 products in each division that have a high

total\_sold\_quantity in the fiscal\_year 2021? The final output contains these

fields,

division, product\_code, product, total\_sold\_quantity, rank\_order\*/

WITH Output1 AS

(

SELECT P.division, FS.product\_code, P.product, SUM(FS.sold\_quantity) AS Total\_sold\_quantity

FROM dim\_product P JOIN fact\_sales\_monthly FS

ON P.product\_code = FS.product\_code

WHERE FS.fiscal\_year = 2021

GROUP BY FS.product\_code, division, P.product

),

Output2 AS

(

SELECT division, product\_code, product, Total\_sold\_quantity,

RANK() OVER(PARTITION BY division ORDER BY Total\_sold\_quantity DESC) AS 'Rank\_Order'

FROM Output1

)

SELECT Output1.division, Output1.product\_code, Output1.product, Output2.Total\_sold\_quantity, Output2.Rank\_Order

FROM Output1 JOIN Output2

ON Output1.product\_code = Output2.product\_code

WHERE Output2.Rank\_Order IN (1,2,3)

