**1)Provide the list of markets in which customer "Atliq Exclusive" operates its business in the APAC region.**

select market,customer,region

from gdb023.dim\_customer where customer = "Atliq Exclusive" and region ="APAC";

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

WITH products\_join AS(

SELECT \*

FROM dim\_product p

INNER JOIN fact\_gross\_price g

USING (product\_code)

),

product\_counts AS(

SELECT

SUM(CASE WHEN fiscal\_year="2020" THEN 1 ELSE 0 END) AS unique\_products\_2020,

SUM(CASE WHEN fiscal\_year="2021" THEN 1 ELSE 0 END) AS unique\_products\_2021

FROM products\_join

)

SELECT

unique\_products\_2020,

unique\_products\_2021,

ROUND(100\*(unique\_products\_2021-unique\_products\_2020)/unique\_products\_2020,2) AS percentage\_chg

FROM product\_counts;

**3) Provide a report with all the unique product counts for each segment and sort them in descending order of product counts.**

SELECT segment, count(product) as product\_count

FROM dim\_product group by segment order by product\_count desc;

4)Which segment had the most increase in unique products in 2021 vs 2020?

WITH products AS(

SELECT \*

FROM dim\_product p

INNER JOIN fact\_gross\_price g

USING (product\_code)

),

segment\_product AS(

SELECT

segment,

SUM(IF(fiscal\_year="2020", 1,0)) AS unique\_products\_2020,

SUM(IF(fiscal\_year="2021", 1,0)) AS unique\_products\_2021

FROM products

GROUP BY segment

)

SELECT \*,

unique\_products\_2021 - unique\_products\_2020 AS difference

FROM segment\_product;

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

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

from dim\_product p

join fact\_manufacturing\_cost f

on p.product\_code = f.product\_code

where

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

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

order by manufacturing\_cost desc;

**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.**

WITH customercode\_average AS

(

SELECT

customer\_code,

AVG(pre\_invoice\_discount\_pct) AS average\_discount\_percentage

FROM fact\_pre\_invoice\_deductions

WHERE fiscal\_year = 2021

GROUP BY customer\_code

)

SELECT

ca.customer\_code,

customer,

ROUND(cca.average\_discount\_percentage, 3) AS average\_discount\_percentage

FROM customercode\_average ca

JOIN dim\_customer c ON c.customer\_code = ca.customer\_code

where market LIKE 'India'

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.**

Select

monthname(s.date) as month,

s.fiscal\_year,c.customer, SUM(s.sold\_quantity) AS total\_sold\_quantity,

ROUND(SUM(s.sold\_quantity \* g.gross\_price)/1000000, 2) AS 'Gross Sales Amount'

from fact\_gross\_price g

join fact\_sales\_monthly s on g.product\_code = s.product\_code

join dim\_customer c on s.customer\_code = c.customer\_code

where customer ="Atliq Exclusive" and s.fiscal\_year = 2021

group by month(date),year(date)

order by month;

**8) In which quarter of 2020, got the maximum total\_sold\_quantity?**

select

case

when month(date) in (9,10,11) Then "Q1"

when month(date) in (12,1,2) Then "Q2"

when month(date) in (3,4,5) Then "Q3"

ELSE "Q4"

End as Quaters,

sum(sold\_quantity) as total\_sold\_quantity,fiscal\_year from fact\_sales\_monthly where fiscal\_year= 2020

group by Quaters

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?**

WITH percentage AS

(

SELECT

c.channel,

ROUND(SUM(s.sold\_quantity \* g.gross\_price)/1000000, 2) AS gross\_sales\_mln

FROM fact\_sales\_monthly s

JOIN fact\_gross\_price g ON g.product\_code = s.product\_code AND g.fiscal\_year = s.fiscal\_year

JOIN dim\_customer c ON c.customer\_code = s.customer\_code

WHERE s.fiscal\_year = 2021

GROUP BY c.channel

)

SELECT

\*,

(gross\_sales\_mln\*100)/SUM(gross\_sales\_mln) OVER() AS percentage

FROM percentage

ORDER BY percentage DESC;

**10. Get the Top 3 products in each division that have a high total\_sold\_quantity in the fiscal\_year 2021?**

WITH cte1 as (

select

p.division,p.product,s.product\_code,sum(sold\_quantity) as total\_qty,

rank() over(partition by p.division order by sum(sold\_quantity) desc) as 'rank\_order'

from

fact\_sales\_monthly s

join dim\_product p

on p.product\_code = s.product\_code

where s.fiscal\_year = 2021

group by p.division,p.product,s.product\_code)

select \* from cte1 WHERE rank\_order in (1,2,3) order by division,rank\_order;