Request:-1

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

```
SELECT market FROM dim_customer

WHERE customer = "Atliq Exclusive" AND  region="APAC"
```

Request:-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.

```
WITH  X AS

(SELECT COUNT(DISTINCT  product_code)  AS unique_products_2020

 FROM fact_sales_monthly  WHERE  fiscal_year  = 2020),

 Y AS

(SELECT COUNT(DISTINCT product_code)   AS unique_products_2021

 FROM fact_sales_monthly  WHERE  fiscal_year  = 2021)


SELECT X.unique_products_2020, Y.unique_products_2021,

round(((Y.unique_products_2021-X.unique_products_2020)/X.unique_products_2020)*100,2)

AS Percentage_chg  FROM  X,  Y;
```

Request:-3

Provide a report with the all unique product count for each segment and sort them in descending order of product count.The final output contains 2 fields product count and segment.

```
select segment ,count(distinct (product_code)) as  product_count  from dim_product

group by segment order by product_count  desc;
```

Request:-4

Follow up:- Which segment had the most increase in unique product in 2021 vs. 2020.The final output contains these fields segment,product_count_2020 , product_count_2021 and its difference.

```
With x as(selectp.segment,count(distincts.product_code) as product_count_2020

from dim_product p

join fact_sales_monthly s  on p.product_code = s.product_code

where s.fiscal_year = 2020

group by p.segment), y as (select p.segment,count(distincts.product_code) as product_count_2021

from dim_product p

join fact_sales_monthly s on p.product_code = s.product_code

where s.fiscal_year = 2021 group by p.segment)


select  x.segment , product_count_2020 ,product_count_2021,abs(x.product_count_2020-
y.product_count_2021) as difference
from x join y on x.segment = y.segment order by difference desc;
```

Request 5:-

Get the products that have the highest and lowest manufacturing costs. The final output should contain these fields product_code, product and manufacturing_cost.

```
select m.product_code, p.product, m.manufacturing_cost

from fact_manufacturing_cost  m

join dim_product  p

using  (product_code)

where  m.manufacturing_cost  =  (select max(manufacturing_cost)  from fact_manufacturing_cost)

or m.manufacturing_cost  =  (select min(manufacturing_cost)  from fact_manufacturing_cost)

order by m.manufacturing_cost  desc;
```

Request 6:-

Generate a report which contains top 5 customers who received an average high pre_invoice_discount_pct for fiscal year 2021 and in the Indian market. The final output contains these fields customer_code, customer and Average_discount_percentage.

```
Select  i.customer_code, c.customer, round(avg(i.pre_invoice_discount_pct)*100,2)  as avg_dis_pct
from  fact_pre_invoice_deductions i
join dim_customercusing(customer_code)
where  fiscal_year  = 2021 and c.market = "india"
group by i.customer_code,c.customer
order by avg_dis_pct  desc limit 5;
```

Request 7:-

Get complete report of 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 and Gross_sale_amount.

```
select monthname (s.date) as month,
s.fiscal_year,round(sum(g.gross_price*sold_quantity),2) as
gross_sales_amt from fact_sales_monthly s join dim_customer c
using(customer_code) join fact_gross_price g using(product_code)
where customer = "atliq exclusive"
group by monthname(s.date) ,s.fiscal_year order by fiscal_year
```

Request 8:-

In which quarter of 2020 got maximum total_sold_quantity ?.The final output contains these fields quarter total_sold_quantity and sorted by total_sold_quantity .

```
SELECT CASE
WHEN month(date) in (9,10,11) then'Q1'
WHEN month(date) in(12,01,02)then'Q2'
WHEN month(date) in(03,04,05)then'Q3'
ELSE 'Q4'
END AS Quarters,
SUM(sold_quantity) AS total_sold_qty
FROM fact_sales_monthly
WHERE fiscal_year  = 2020
GROUP BY Quarters ORDER BY total_sold_qty  DESC;
```

Request 9:-

Which channel helped to bring more gross sale in the fiscal year and percentage of contribution?.The final output contains these fields channel,gross_sales and percentage.

```
with x as (select c.channel, round(sum(g.gross_price*s.sold_quantity)/100000,2) as gross_sales
from fact_sales_monthly s
join dim_customer c using(customer_code)
join fact_gross_price g using(product_code)
where s.fiscal_year = 2021
group by c.channel)
select channel,gross_sales,
round((gross_sales/(select sum(gross_sales) from x))*100,2) as pct
from x  order by gross_sales desc;
```

Request 10:-

Get the Top 3 product in each division that have high total_sold_quantity in the fiscal_year 2021.The final output contain these fields division ,product_code and product .

```
WITH x AS (SELECT P.division,S.product_code,P.product,SUM(S.sold_quantity) AS
Total_sold_quantity,

RANK() OVER(PARTITION BY P.division ORDER BY SUM(S.sold_quantity)DESC) AS
Rank_Order

FROM dim_product P

JOIN fact_sales_monthly S

ON P.product_code = S.product_code

WHERE S.fiscal_year = 2021

GROUP BY P.division,S.product_code,P.product)

SELECT * FROM x

WHERE Rank_Order IN (1,2,3) ORDER BY division, Rank_Order;
```