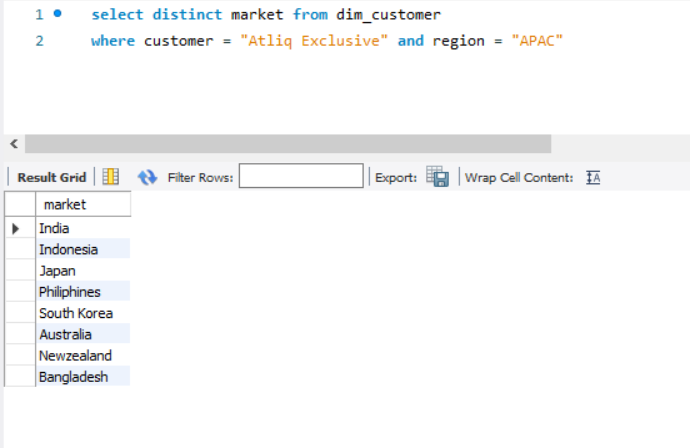
**ATLIQ-HARDWARES-CONSUMER-GOODS-Ad-Hoc-INSIGHTS**

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\_product\_2021, ROUND((B-A)\*100/A, 2) AS percentage\_chg

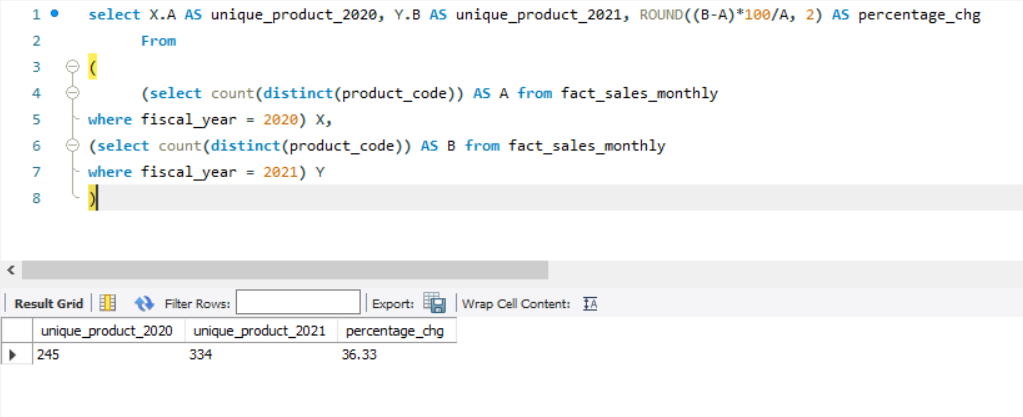
From  
(

(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

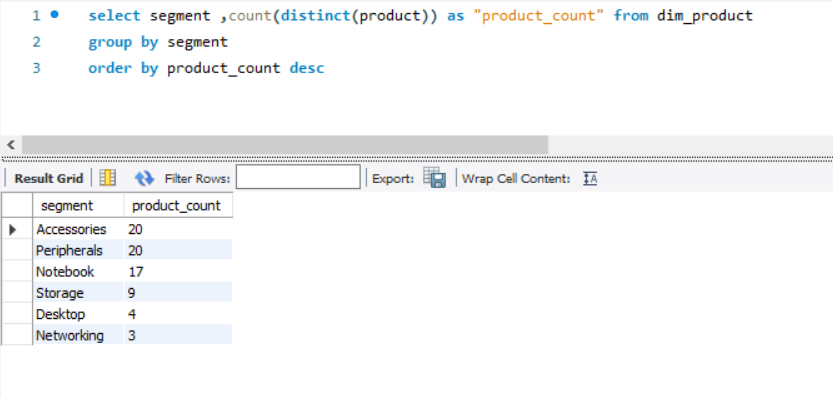
where fiscal\_year = 2021) Y

)  


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)) 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

join fact\_sales\_monthly FS

on FS.product\_code = P.product\_code

where FS.fiscal\_year = "2020"

group by P.segment),

CTE2 AS

(select P.segment AS C , count(distinct(FS.product\_code)) AS D from dim\_product P

join fact\_sales\_monthly FS

on FS.product\_code = P.product\_code

where FS.fiscal\_year = "2021"

group by P.segment)

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 P.product, P.product\_code, manufacturing\_cost from dim\_product P

join fact\_manufacturing\_cost FM

on FM.product\_code = P.product\_code

where manufacturing\_cost in (

select min(manufacturing\_cost) as manufacturing\_cost from fact\_manufacturing\_cost

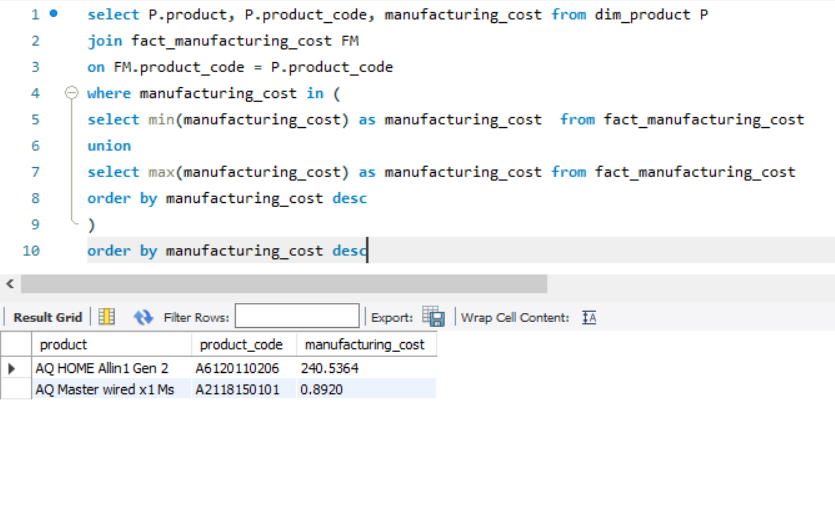
union

select max(manufacturing\_cost) as manufacturing\_cost from fact\_manufacturing\_cost

order by manufacturing\_cost desc

)

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. The final output contains these fields, customer\_code customer average\_discount\_percentage

select FI.customer\_code, DI.customer, concat(round(avg(pre\_invoice\_discount\_pct)\*100,2), "%") as avg\_discount\_percentage

from fact\_pre\_invoice\_deductions FI

JOIN dim\_customer DI

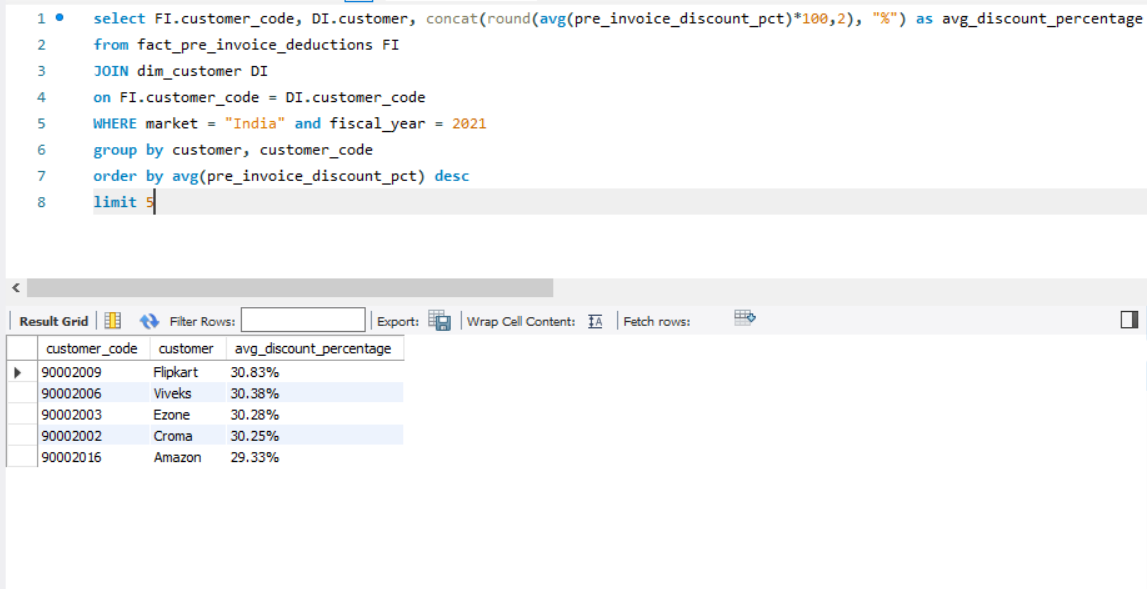
on FI.customer\_code = DI.customer\_code

WHERE market = "India" and fiscal\_year = 2021

group by customer, customer\_code

order by avg(pre\_invoice\_discount\_pct) 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 monthname(date) as Month\_name, year(date) as year\_name, round(sum(FG.gross\_price \* FS.sold\_quantity) / 10000000,2) as Gross\_sales\_amount\_millions

from fact\_sales\_monthly FS

join fact\_gross\_price FG

on FS.product\_code = FG.product\_code

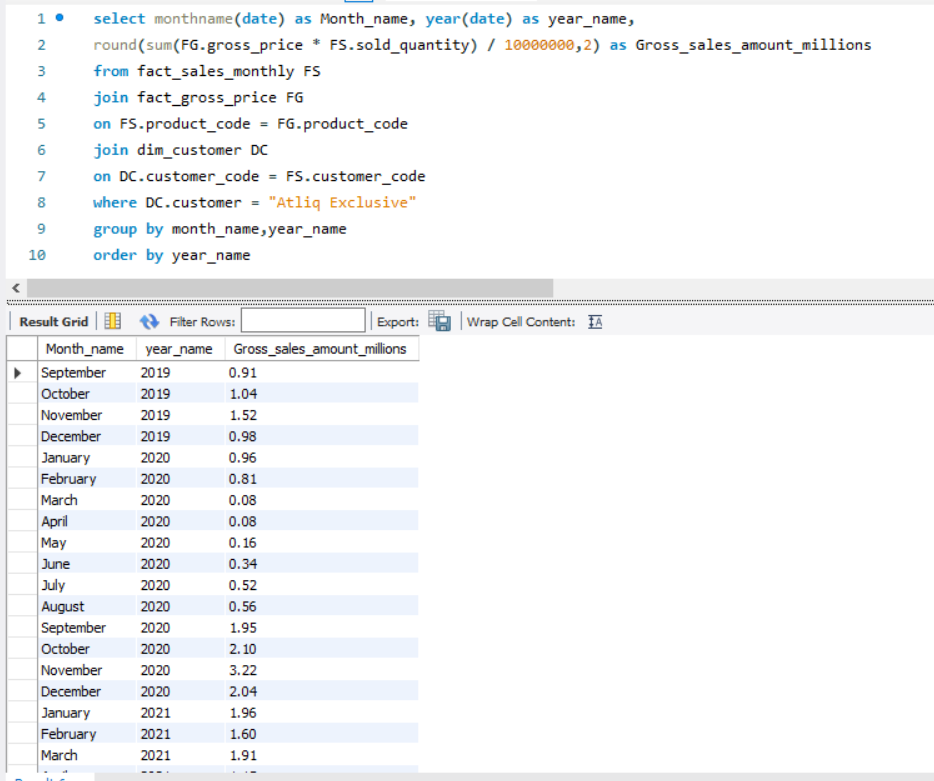
join dim\_customer DC

on DC.customer\_code = FS.customer\_code

where DC.customer = "Atliq Exclusive"

group by month\_name,year\_name

order by year\_name



# 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 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"

when month(date) in (6,7,8) then "Q4"

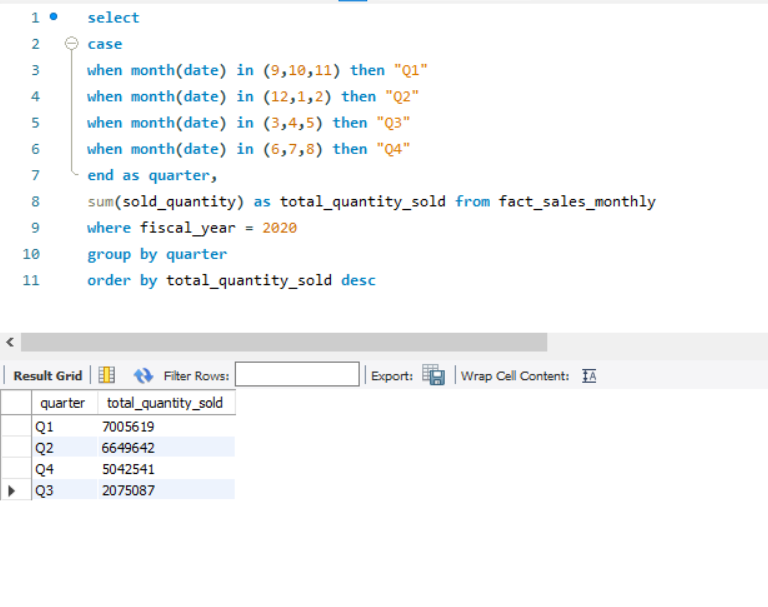
end as quarter,

sum(sold\_quantity) as total\_quantity\_sold from fact\_sales\_monthly

where fiscal\_year = 2020

group by quarter

order by total\_quantity\_sold 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 gross\_sales as (

select DC.channel, round(sum(FG.gross\_price \* FS.sold\_quantity)/1000000,2) as gross\_sales\_mln

from fact\_sales\_monthly FS

join fact\_gross\_price FG

on FS.product\_code = FG.product\_code

and FS.fiscal\_year = FG.fiscal\_year

join dim\_customer DC

ON DC.customer\_code = FS.customer\_code

where FG.fiscal\_year = 2021

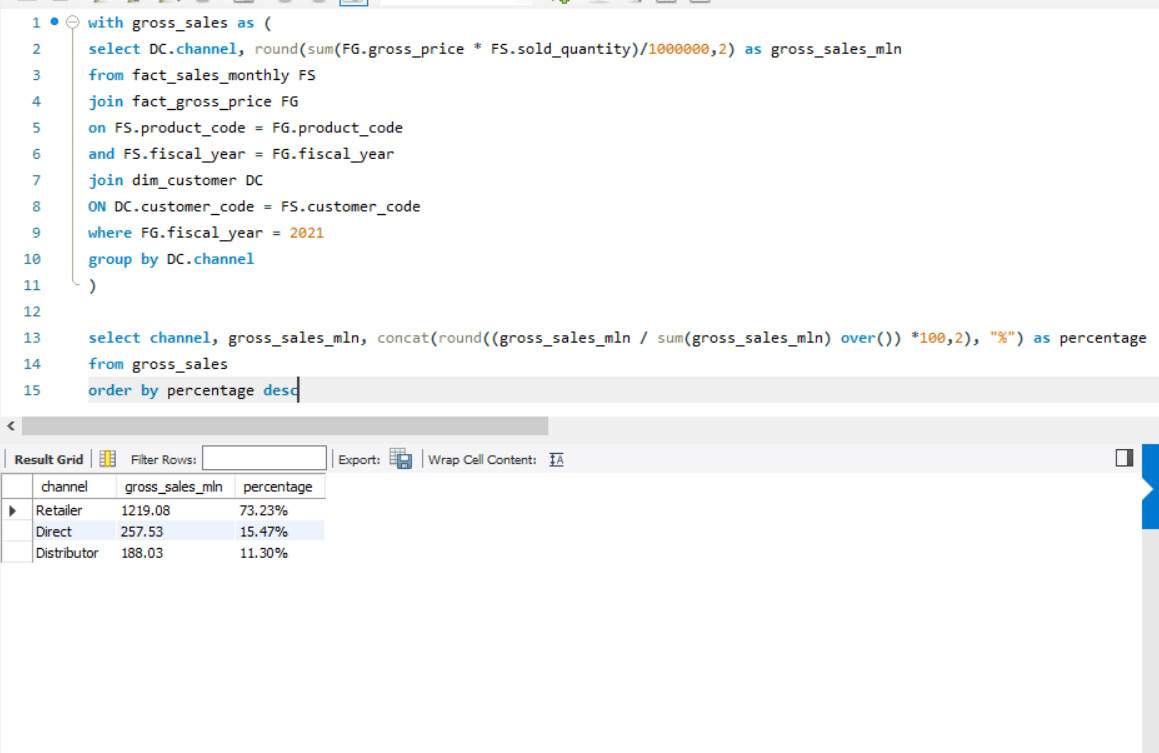
group by DC.channel

)

select channel, gross\_sales\_mln, concat(round((gross\_sales\_mln / sum(gross\_sales\_mln) over()) \*100,2), "%") as percentage

from gross\_sales

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? The final output contains these fields, division product\_code product total\_sold\_quantity rank\_order

with top\_sold\_product as (

select DP.division, DP.product\_code, DP.product, sum(sold\_quantity) as total\_sold\_quantity

from dim\_product DP

join fact\_sales\_monthly FS

on DP.product\_code = FS.product\_code

where fiscal\_year = 2021

group by DP.division, DP.product\_code, DP.product

order by total\_sold\_quantity desc

),

top\_sold\_per\_division\_rank\_order as (

select division,

product\_code,

product,

total\_sold\_quantity,

rank() over(partition by division order by total\_sold\_quantity desc) as rank\_order

from top\_sold\_product

)

select \* from top\_sold\_per\_division\_rank\_order

where rank\_order <=3

