



CUSTOMER GOODS INSIGHTS ANALYSIS



Question 1:- Provide the list of markets in which customer "Atliq Exclusive" operates its business in the APAC region.

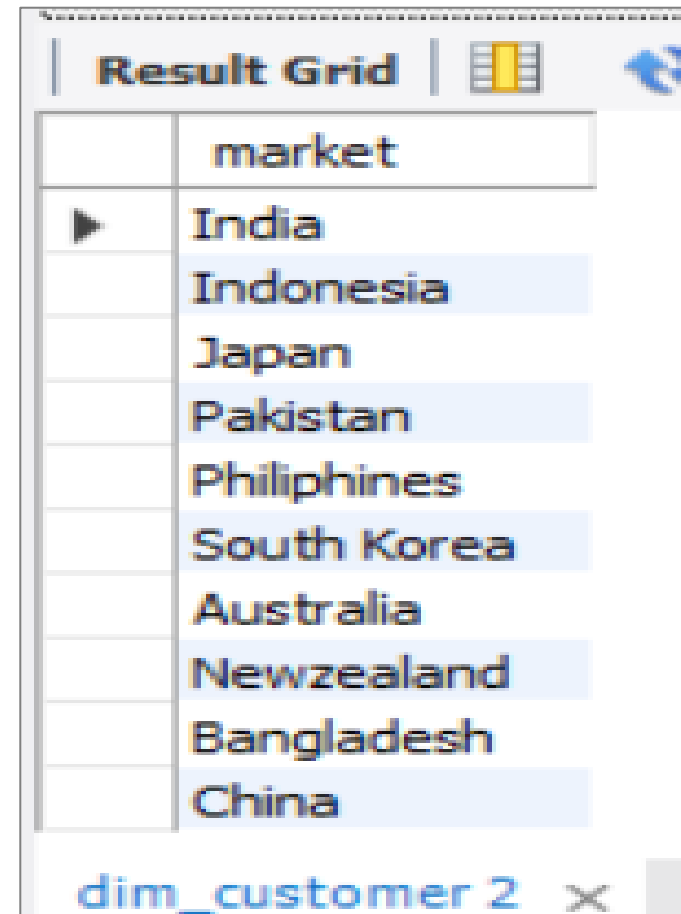
Query-

```
SELECT
    market
FROM
    dim_customer
WHERE
    region = 'APAC'
GROUP BY market;

-- OR

SELECT
    distinct(market)
FROM
    dim_customer
WHERE
    region = 'APAC';
```

Output result-



	market
▶	India
	Indonesia
	Japan
	Pakistan
	Philippines
	South Korea
	Australia
	Newzealand
	Bangladesh
	China



dim_customer 2

Question 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.

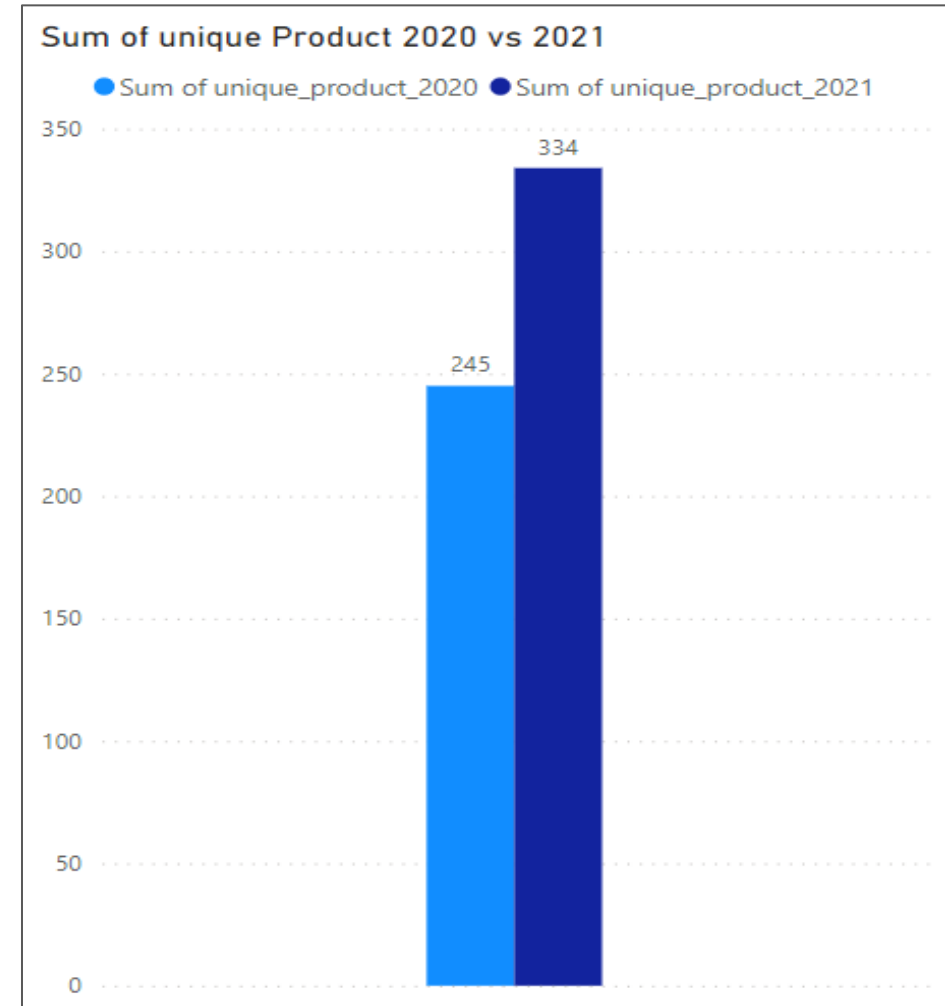
Query-:

```
• With unique_2020 As (SELECT
    COUNT(DISTINCT product_code) AS unique_product_2020
FROM
    fact_sales_monthly
WHERE
    fiscal_year = 2020),
unique_2021 As
    (select
        count(distinct product_code) as
        unique_product_2021 from fact_sales_monthly where fiscal_year = 2021)
select
    a.unique_product_2020,
    b.unique_product_2021,
    Round(((b.unique_product_2021-a.unique_product_2020)/a.unique_product_2020*100),2) as Percentage_chg
    from
    unique_2020 as a
    join
    unique_2021 as b;
```

Output-

Result Grid			
Filter Rows: <input type="text"/>			
Export:  Wrap Cell Content: 			
	unique_product_2020	unique_product_2021	Percentage_chg
▶	245	334	36.33

Visual



Question 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

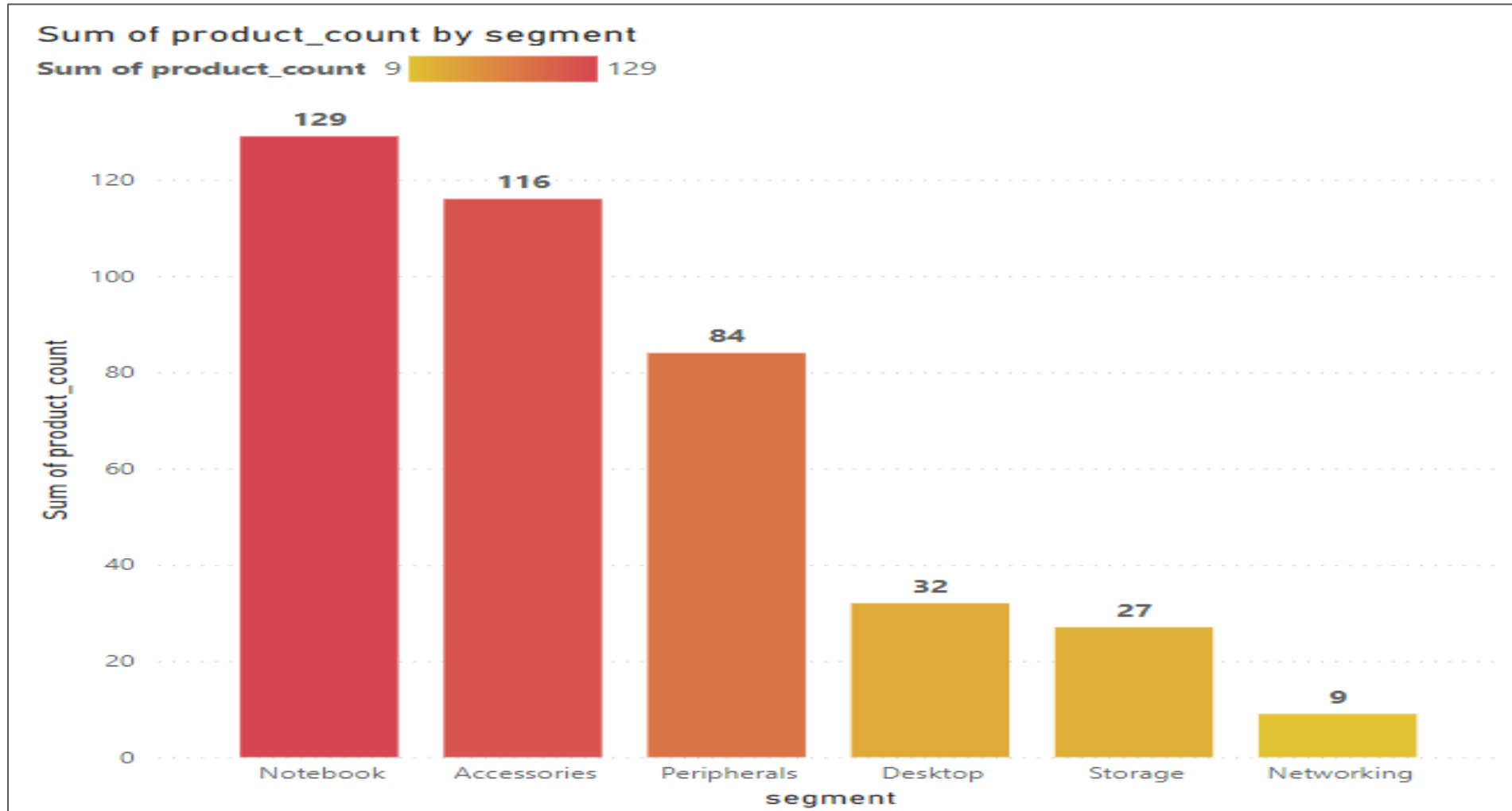
Query-

```
SELECT
    segment, COUNT(DISTINCT product_code) AS product_count
FROM
    dim_product
GROUP BY segment
ORDER BY product_count DESC;
```

Output-

Result Grid			Filter Rows:
	segment	product_count	
▶	Notebook	129	
	Accessories	116	
	Peripherals	84	
	Desktop	32	
	Storage	27	
	Networking	9	

Visual



Question 4-: Which segment had the most increase in unique products in 2021 vs 2020?

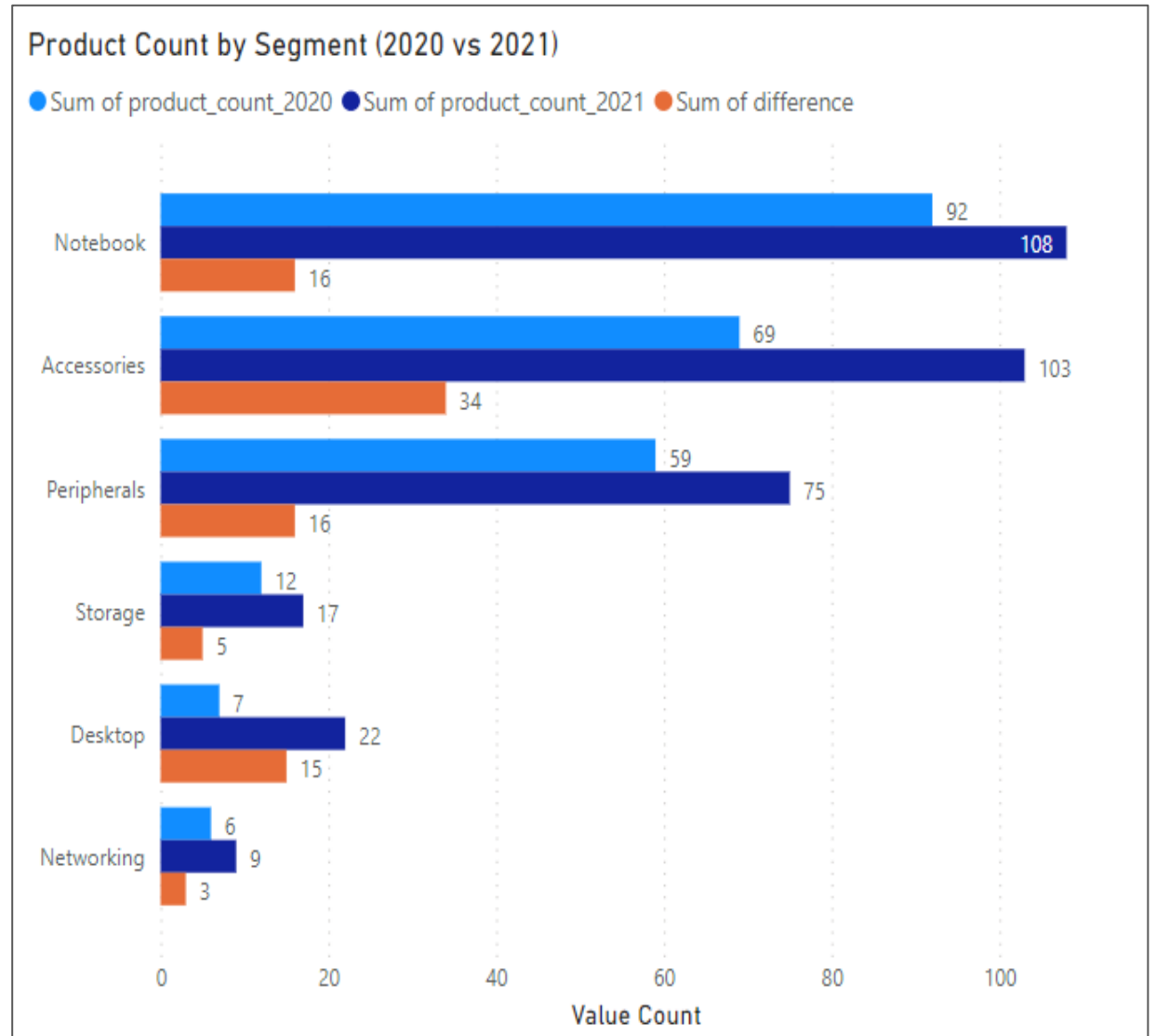
Query-:

```
With Product_2020 As
(SELECT
    p.segment,
    COUNT(DISTINCT s.product_code) AS product_count_2020
FROM
    dim_product p
    INNER JOIN
    fact_sales_monthly s ON p.product_code = s.product_code
WHERE
    fiscal_year = 2020
GROUP BY segment
ORDER BY product_count_2020 DESC),
Product_2021 As
(SELECT
    p.segment,
    COUNT(DISTINCT s.product_code) AS product_count_2021
FROM
    dim_product p
    INNER JOIN
    fact_sales_monthly s ON p.product_code = s.product_code
WHERE
    fiscal_year = 2021
GROUP BY segment
ORDER BY product_count_2021 DESC)
SELECT
    a.segment,
    a.product_count_2020,
    b.product_count_2021,
    (b.product_count_2021 - a.product_count_2020) AS difference
FROM
    product_2020 AS a
    INNER JOIN
    product_2021 AS b ON a.segment = b.segment;
```

Output-

Result Grid Filter Rows: Export: Wrap Cell Content				
	segment	product_count_2020	product_count_2021	difference
▶	Notebook	92	108	16
	Accessories	69	103	34
	Peripherals	59	75	16
	Storage	12	17	5
	Desktop	7	22	15
	Networking	6	9	3

Visual



Question 5-: Get the products that have the highest and lowest manufacturing costs.

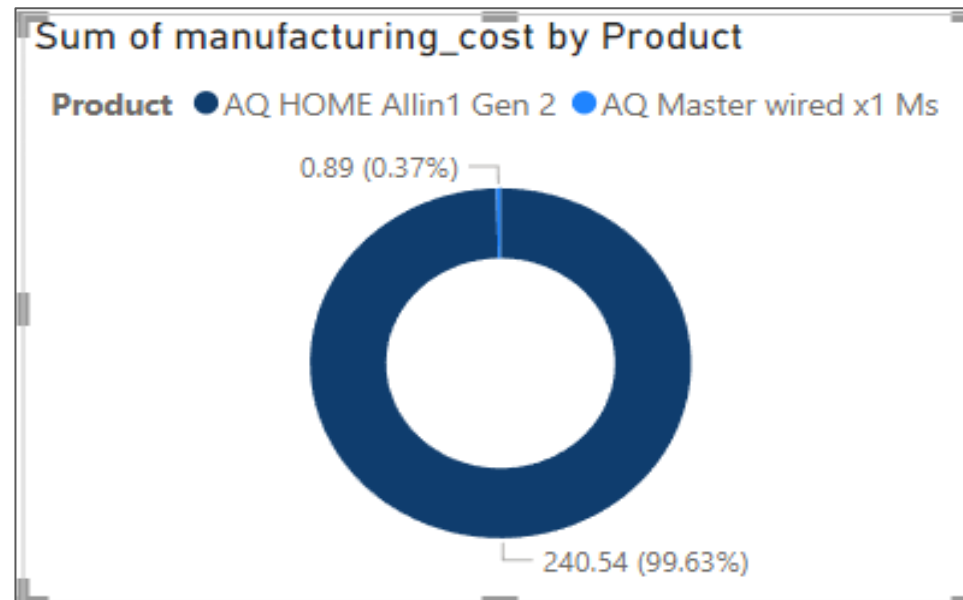
Query-:

```
SELECT
    p.product, p.product_code, m.manufacturing_cost
FROM
    dim_product p
    INNER JOIN
    fact_manufacturing_cost m ON p.product_code = m.product_code
WHERE
    manufacturing_cost = (SELECT
        MAX(manufacturing_cost)
        FROM
        fact_manufacturing_cost)
UNION SELECT
    p.product, p.product_code, m.manufacturing_cost
FROM
    dim_product p
    INNER JOIN
    fact_manufacturing_cost m ON p.product_code = m.product_code
WHERE
    manufacturing_cost = (SELECT
        MIN(manufacturing_cost)
        FROM
        fact_manufacturing_cost);
```

Output-

Result Grid	Filter Rows:	Export:
product	product_code	manufacturing_cost
AQ HOME Allin1 Gen 2	A6120110206	240.5364
AQ Master wired x1 Ms	A2118150101	0.8920

Visual



Question 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 .

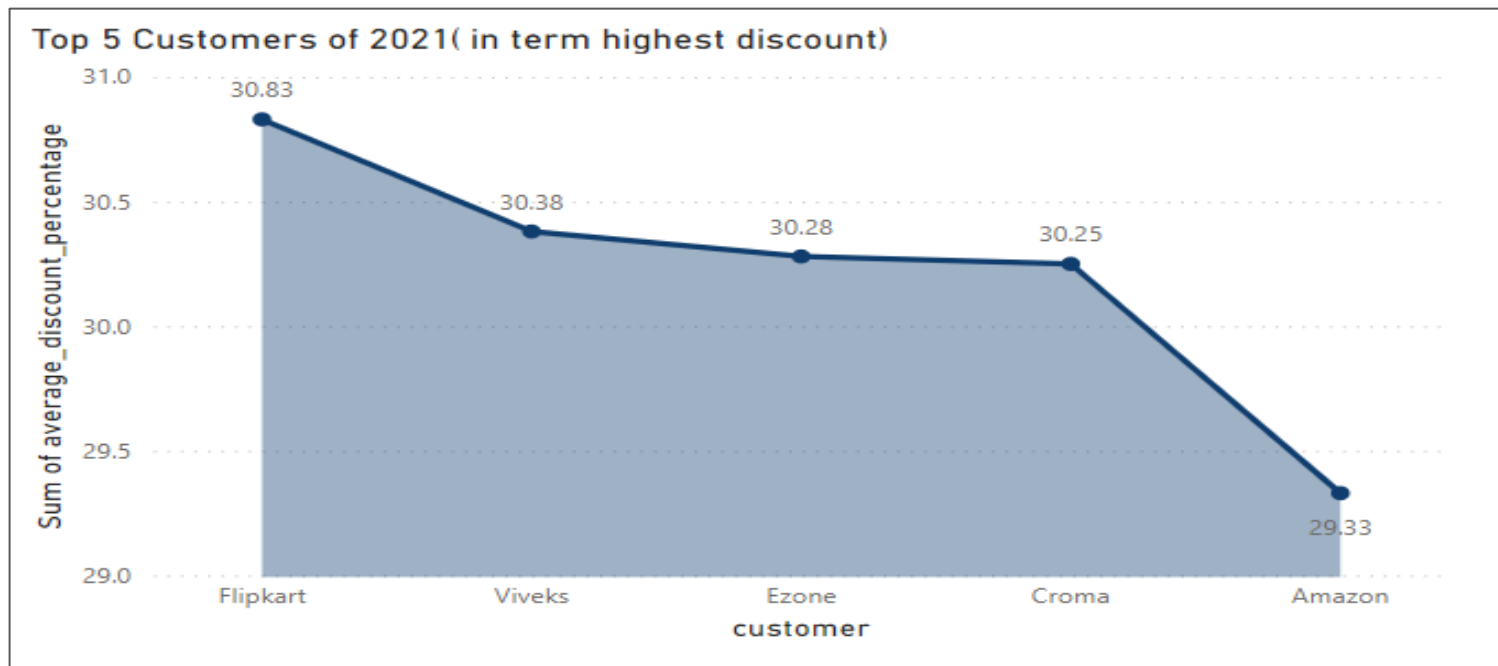
Query-:

```
SELECT
    c.customer_code,
    c.customer,
    round(AVG(f.pre_invoice_discount_pct)*100,2) AS average_discount_percentage
FROM
    dim_customer c
    INNER JOIN
    fact_pre_invoice_deductions f ON c.customer_code = f.customer_code
WHERE
    fiscal_year = 2021 and market = 'India'
GROUP BY customer_code, customer
ORDER BY average_discount_percentage DESC
LIMIT 5;
```

Output

Result Grid	Filter Rows:	Export:
customer_code	customer	average_discount_percentage
90002009	Flipkart	30.83
90002006	Viveks	30.38
90002003	Ezone	30.28
90002002	Croma	30.25
90002016	Amazon	29.33

Visual





Question 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.

Query-:

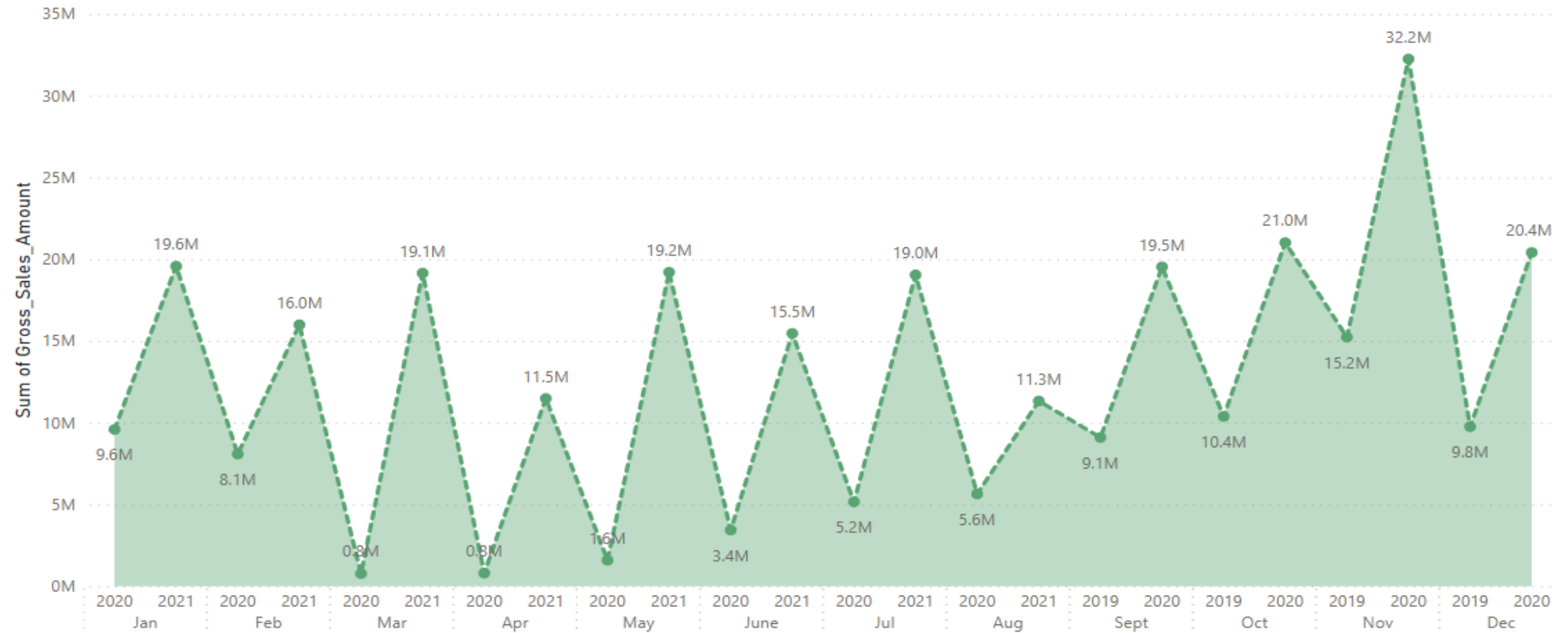
```
SELECT
    MONTH(m.date) AS month,
    YEAR(m.date) AS year,
    Round(SUM(g.gross_price * m.sold_quantity),2) AS Gross_Sales_Amount
FROM
    fact_sales_monthly m
    INNER JOIN
    fact_gross_price g ON m.product_code = g.product_code
    INNER JOIN
    dim_customer c ON m.customer_code = c.customer_code
WHERE
    customer = 'Atliq Exclusive'
GROUP BY month , year
ORDER BY month;
```

Query Output

Result Grid   Filter Rows: <input type="text"/>			
	month	year	Gross_Sales_Amount
▶	1	2020	9584951.94
	1	2021	19570701.71
	2	2020	8083995.55
	2	2021	15986603.89
	3	2020	766976.45
	3	2021	19149624.92
	4	2020	800071.95
	4	2021	11483530.30
	5	2020	1586964.48
	5	2021	19204309.41
	6	2020	3429736.57
	6	2021	15457579.66
	7	2020	5151815.40
	7	2021	19044968.82
	8	2020	5638281.83
	8	2021	11324548.34
	9	2019	9092670.34
	9	2020	19530271.30
	10	2019	10378637.60
	10	2020	21016218.21
	11	2019	15231894.97
	11	2020	32247289.79
	12	2019	9755795.06
	12	2020	20409063.18

Visualization

Sum of Gross_Sales_Amount by Month and Year



Question 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(case statement)

Query-:

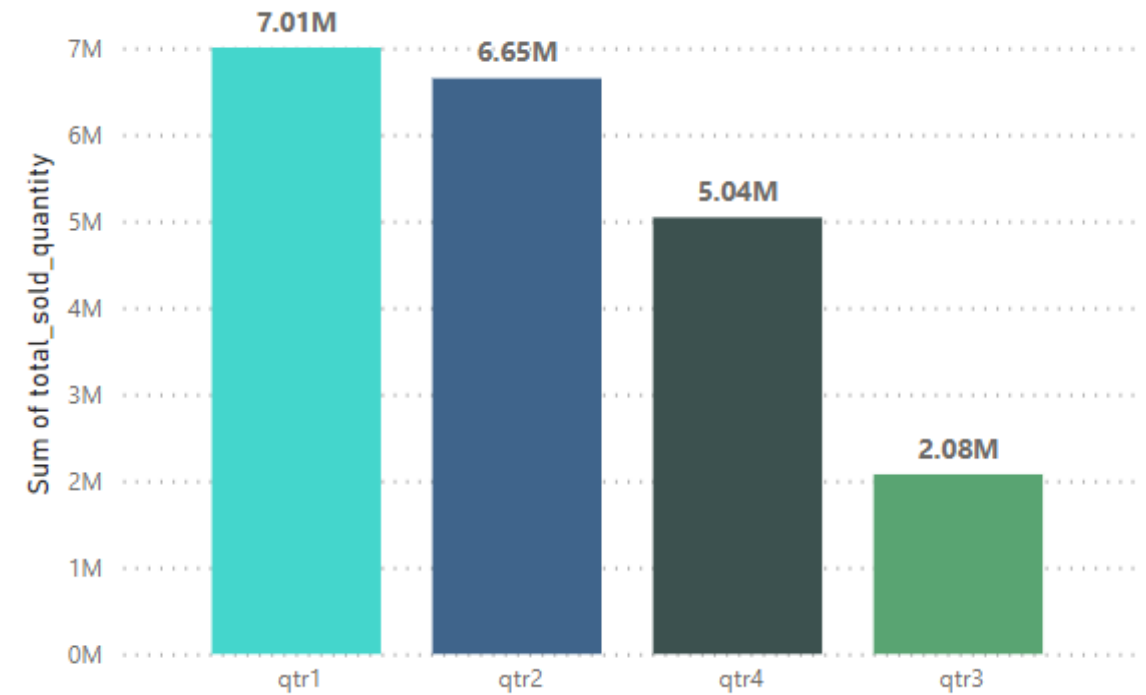
```
SELECT
CASE
    WHEN MONTH(date) IN (9 , 10, 11) THEN 'qtr1'
    WHEN MONTH(date) IN (12 , 1, 2) THEN 'qtr2'
    WHEN MONTH(date) IN (3 , 4, 5) THEN 'qtr3'
    WHEN MONTH(date) IN (6 , 7, 8) THEN 'qtr4'
END AS Quarter,
SUM(sold_quantity) AS total_sold_quantity
FROM
    fact_sales_monthly
WHERE
    fiscal_year = 2020
GROUP BY Quarter
ORDER BY total_sold_quantity DESC;
```


Output

Result Grid			Filter Rows:
	Quarter	total_sold_quantity	
▶	qtr1	7005619	
	qtr2	6649642	
	qtr4	5042541	
	qtr3	2075087	

Visual

Total Sold Quantity in 2020



Question 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_mlnpercentage

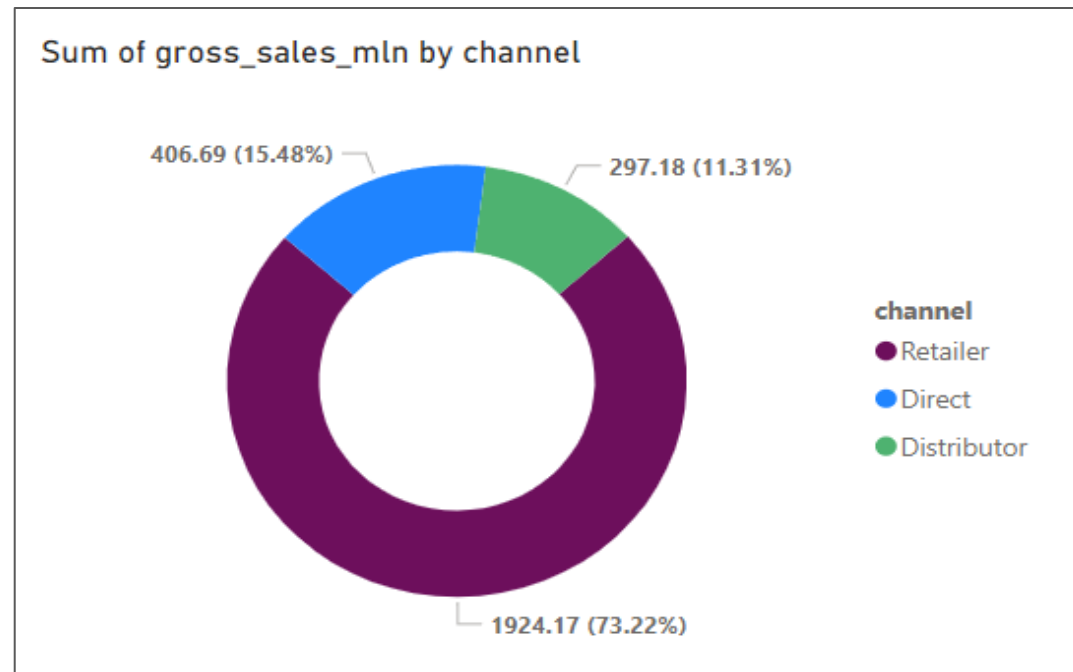
• Query-:

```
with gross_sale as(
select c.channel,
round(sum(g.gross_price*m.sold_quantity)/1000000,2) as gross_sales_mln
from dim_customer c
inner join
fact_sales_monthly m on c.customer_code = m.customer_code
inner join
fact_gross_price g on m.product_code = g.product_code
where m.fiscal_year = 2021
group by channel
order by gross_sales_mln desc)
select *,
gross_sales_mln*100/sum(gross_sales_mln) over() as percentage
from gross_sale;
```

Output-:

Result Grid				Filter Rows:	Export
	channel	gross_sales_mln	percentage		
▶	Retailer	1924.17	73.216922		
	Direct	406.69	15.475031		
	Distributor	297.18	11.308047		

Visual



Question 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.

• Query-:

```
with total_sold as
(select
p.division,p.product_code,p.product,sum(s.sold_quantity) as total_sold_quantity
from
dim_product p
join
fact_sales_monthly s on p.product_code = s.product_code
where fiscal_year = 2021
group by p.division,p.product_code,p.product),

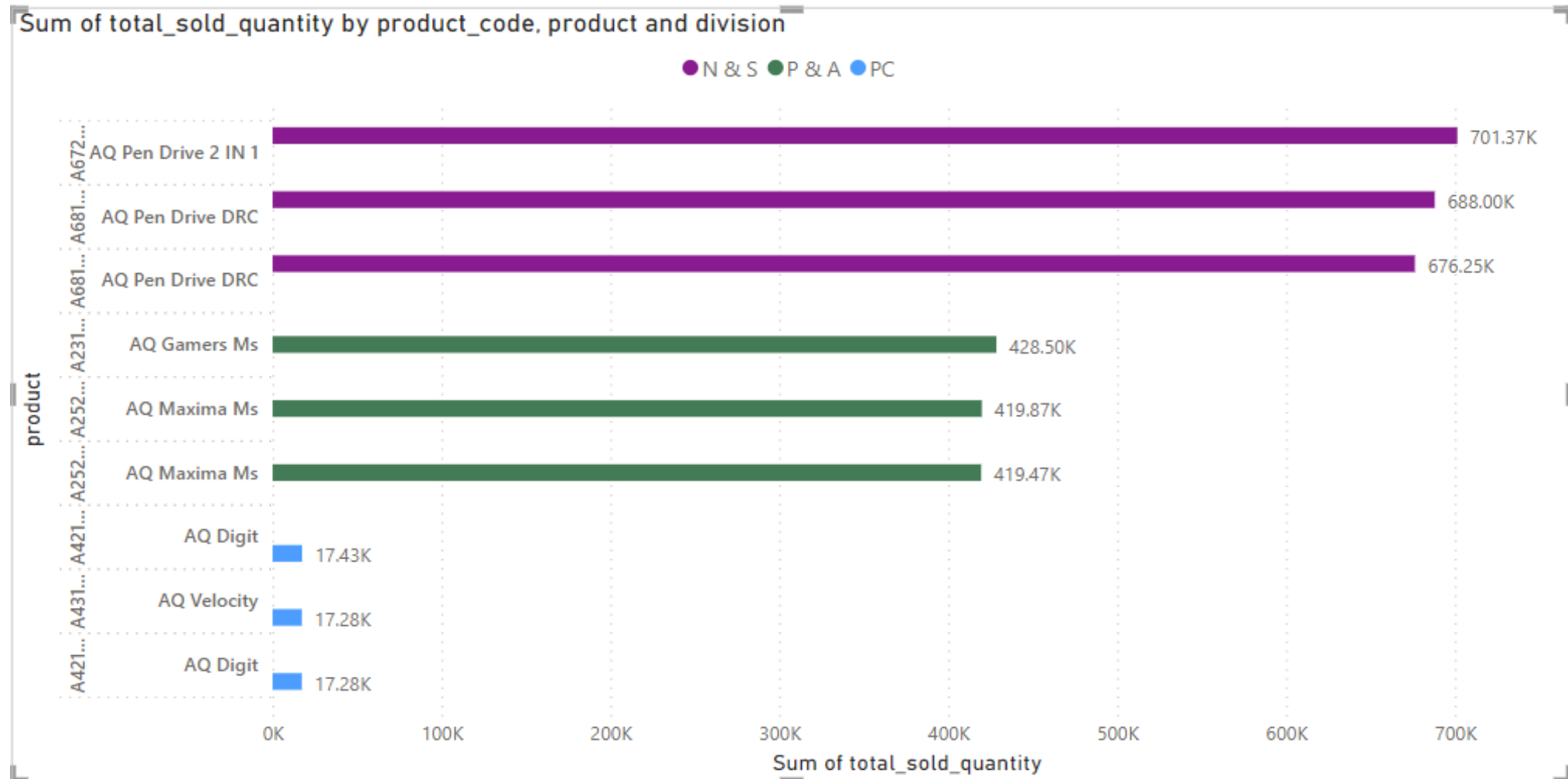
rank_top as (select *, rank() over(partition by division
order by total_sold_quantity desc) as rnk from total_sold)

select * from rank_top where rnk <=3;
```

Output

Result Grid						Filter Rows:	Export:	Wrap Cell Content:
	division	product_code	product	total_sold_quantity	rnk			
▶	N & S	A6720160103	AQ Pen Drive 2 IN 1	701373	1			
	N & S	A6818160202	AQ Pen Drive DRC	688003	2			
	N & S	A6819160203	AQ Pen Drive DRC	676245	3			
	P & A	A2319150302	AQ Gamers Ms	428498	1			
	P & A	A2520150501	AQ Maxima Ms	419865	2			
	P & A	A2520150504	AQ Maxima Ms	419471	3			
	PC	A4218110202	AQ Digit	17434	1			
	PC	A4319110306	AQ Velocity	17280	2			
	PC	A4218110208	AQ Digit	17275	3			

Visualization



Insights Summary

- In Request 1 The list of markets in which customer "Atliq Exclusive" operates its business in the APAC region are:- India, Indonesia, Japan, Philippines, South Korea, Australia, New Zealand, Bangladesh.
- Insights of request 2 on basis of Unique product are.....
 - ❑ Total 245 Unique Products their in 2020 and 334 Unique Products are their in 2021
 - ❑ No. of new Products added in 2021 are 89 , As per percentage 2021 36.33 percent more than year 2020
- In request 3 we found the insights of unique product over different segments,
 - ❑ We found that segment Notebook have highest count with 129 Unique product and Networking have low count with 9 unique products
 - ❑ Peripherals and Desktop are at settle at middle with the unique product count 84 and 32

➤ Insights of request 4 on basis of Segments over unique product in 2020 and 2021 years are.....

❑ We found the Accessories have highest difference in Unique Product Code compare to previous year with the difference of 34

❑ Networking have the lowest difference compare to previous year.

➤ In request 5 we found out the Highest and Lowest Manufacturing of Products

❑ AQ HOME Allin 1 Gen 2 Product have the highest Manufacturing cost value 240.54 and Product code 'A6120110206'

❑ AQ Master Wired x 1 MS Product have the lowest Manufacturing cost value 0.89 and Product code 'A2118150101'.

➤ Insights of request 6 on basis of Customer who received highest average Pre invoice discount percentage in 2021

❑ Filpkart have received the highest average pre invoice discount of 0.3803 , Followed by Viveks, Ezone, Crome and Amazon.

➤ In request 7 we found Gross sales amount of Atliq Exclusive Customer over different Months

❑ Highest Gross sales are occurs in the Month of November in 2020 and gross sales amount value 32.24 Millions

❑ Lowest Gross sales are occurs in the Month of March in 2020 and gross sales amount value 0.76 Millions.

➤ Insights of request 8 on the Quarter which have highest Total sold Quantity in year 2020.....

❑ Quarter 1 have the highest total sold quantity value 7.01 Millions ❑ Quarter 3 have the lowest total sold quantity value 2.07 Million.

➤ In request 9 we found out Channel which have highest gross sales in the fiscal year 2021

❑ Retailers have the highest gross sales percentage of 73.22%

❑ Direct channel have gross sales percentage of 15.48%

❑ Distributor channel have gross sales percentage of 11.30%.

- Request 10, We have to draw the insights of Top 3 Products in each division that have highest sold quantity in the fiscal year 2021
- ❑ The Product AQ Pen Drive 2 IN 1 Ranks Top in N & S Division with value 0.70 Millions and the Product Code 'A6720160103'
 - ❑ The Product AQ Gamers Ms Ranks Top in P & A Division with value 0.42 Millions and the Product Code 'A2319150302'
 - ❑ The Product AQ Digit Ranks Top in PC Division with value 0.017 Millions and the Product Code 'A4218110202'.