Consumer Goods Ad-hoc Insights

-presented by Anusha Talari
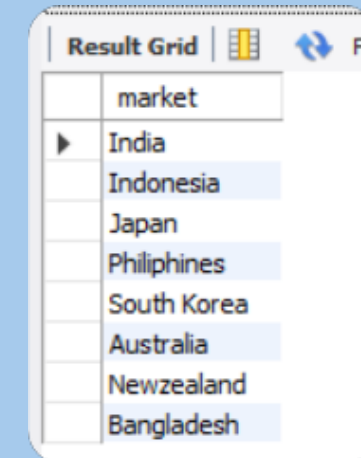
Provide the list of markets in which customer "AtliQ Exclusive" operates its business in the "APAC" region
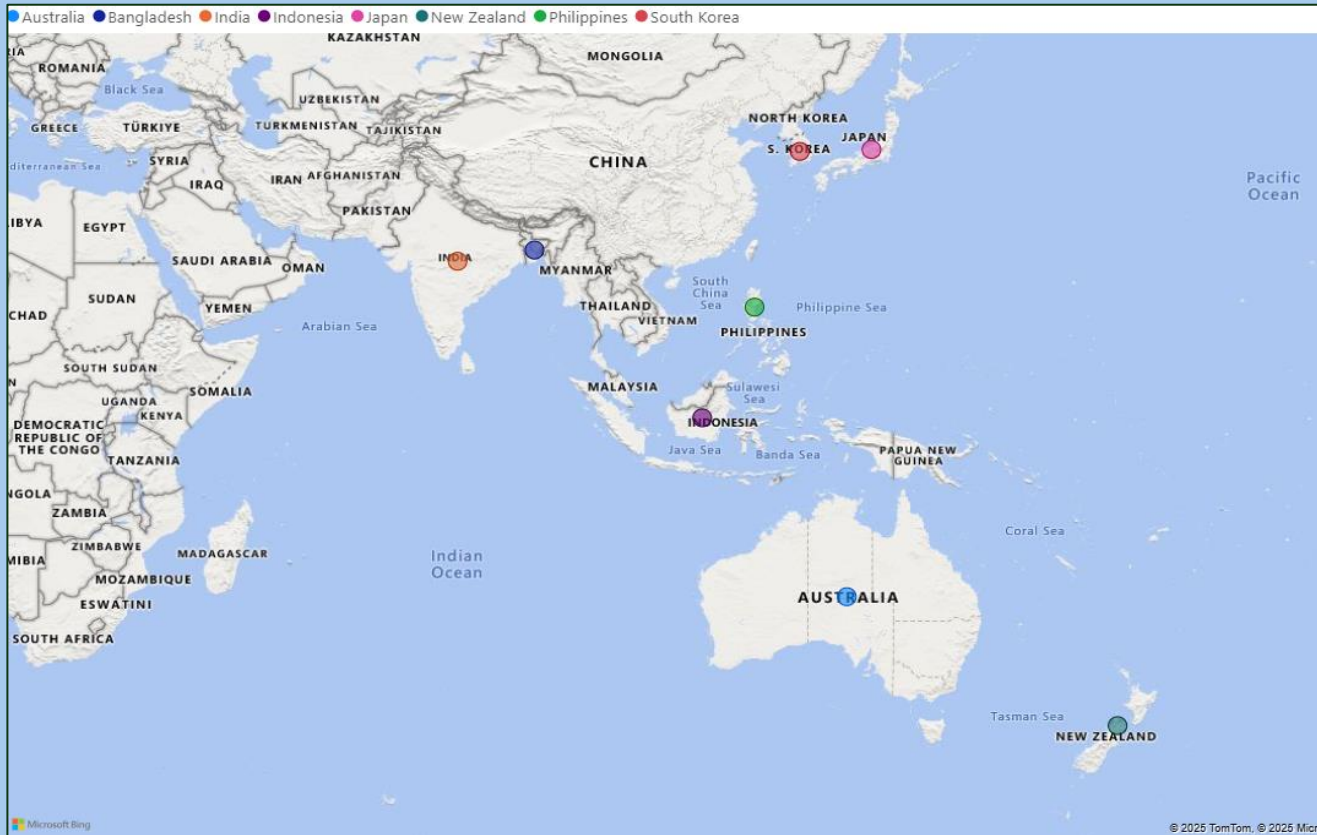
SQL Query

Output

```
1        -- 1 --
2  ●     SELECT distinct market
3        from dim_customer
4        WHERE customer="Atliq Exclusive"
5        and region="APAC";
```

Result Grid		Fil
market
▶ India
Indonesia
Japan
Philiphines
South Korea
Australia
Newzealand
Bangladesh

Visual and Insights

Atliq companies have a strong presence in the APAC region, covering both emerging markets like India, Indonesia, and Bangladesh and developed economies like Japan, South Korea, and Australia.

This strategic mix helps balance high-growth opportunities with stable revenue streams.

The company can leverage technological advancements in developed markets and tap into rising consumer demand in emerging economies.

AD-HOC 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**

SQL Query

Output

```
-- 2 --
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)*100/x.unique_products_2020),2) as percentage_chg
FROM x,y
 ;
```

unique_products_2020	unique_products_2021	percentage_chg
245	334	36.33

Visual and Insights

Unique products **surged by 36.3%** from 245 to 334 in 2021, signifying **robust expansion**. This implies **rising demand, market progression, or an enhanced product strategy**.
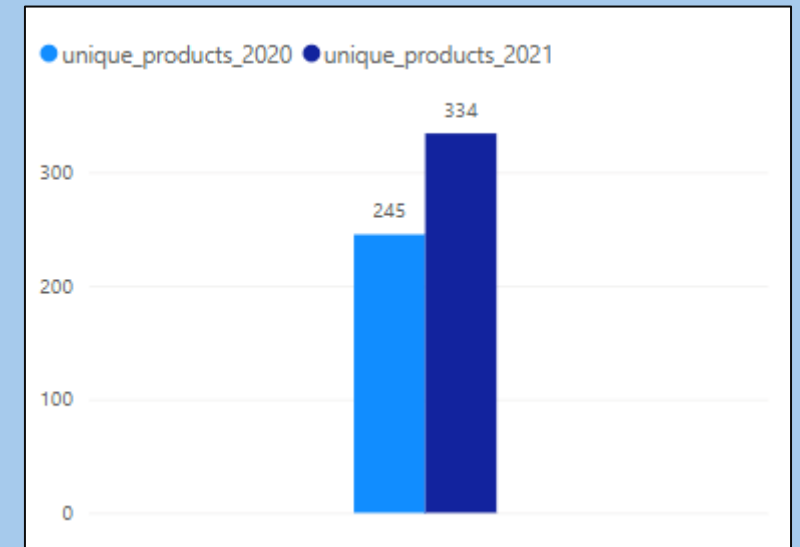
AD-HOC Request-3

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

SQL Query

```
-- 3 --
SELECT segment,
        count(distinct(product_code)) as product_count
from dim_product
group by segment
ORDER BY product_count desc;
```
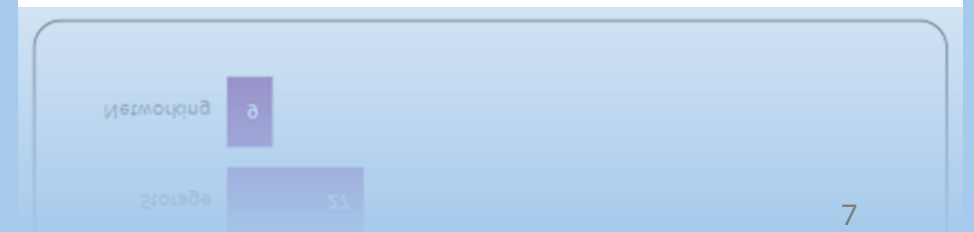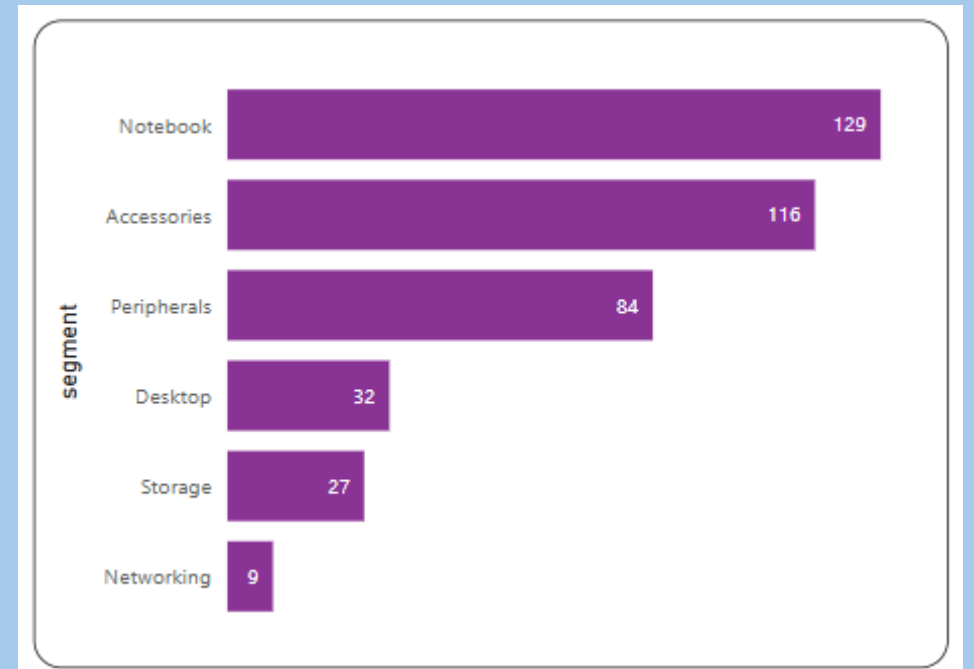
Output

segment	product_count
Notebook	129
Accessories	116
Peripherals	84
Desktop	32
Storage	27
Networking	9

6

Visual and Insights

✓ Notebooks and accessories are lead sales, indicating strong manufacturing demand. Storage and networking lag, suggesting potential market saturation or niche focus.

✓ **Focusing on high-performing categories** while improving weaker segments could optimize sales and strategy.

✓ Notebooks, accessories, and peripherals make up **83%** of the total manufactured products.

AD-HOC Request-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

SQL Query

```
-- 4 --
WITH x as(
SELECT p.segment,count(distinct(s.product_code)) as products_count_2020
from fact_sales_monthly s
join dim_product p on p.product_code=s.product_code
WHERE s.fiscal_year=2020
group by p.segment ),
y as(
SELECT p.segment,count(distinct(s.product_code)) as  products_count_2021
from fact_sales_monthly s
join dim_product p on p.product_code=s.product_code
WHERE s.fiscal_year=2021
group by p.segment)
select x.segment,products_count_2020,products_count_2021,
        abs(y.products_count_2021-x.products_count_2020) as difference
FROM x join y using(segment)
order by difference desc ;
```

Output

segment	products_count_2020	products_count_2021	difference
Accessories	69	103	34
Notebook	92	108	16
Peripherals	59	75	16
Desktop	7	22	15
Storage	12	17	5
Networking	6	9	3

8

Visual and Insights

❑ **Notebook** +17% and **Accessories** +49% are the
highest contributors to growth, indicating strong customer demand.

❑ **Storage and Networking** show minimal variation,
indicating potential stagnation.
The business should explore new product innovations,
competitive pricing, or targeted promotions to boost
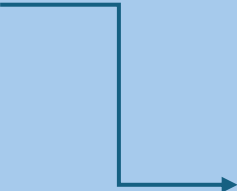these categories.
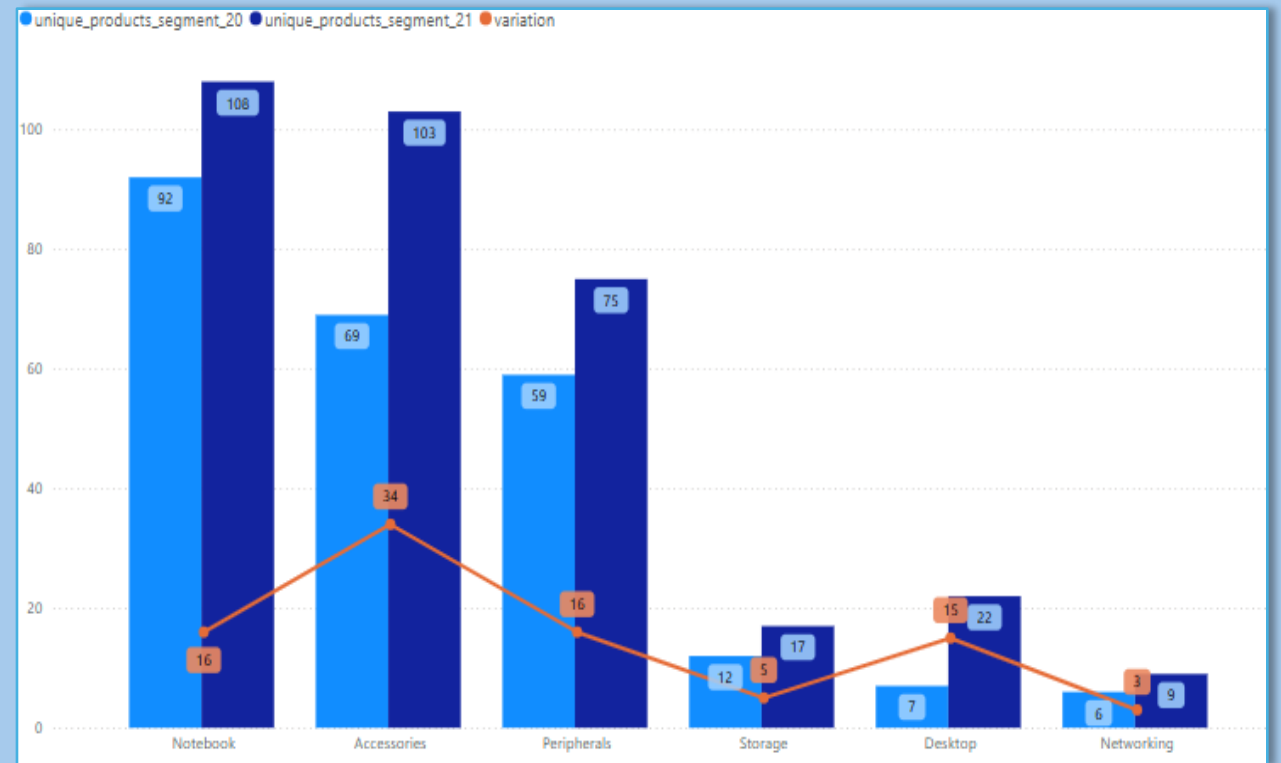
Get the products that have the highest and lowest manufacturing costs.The final output should contain these fields,
   product_code
   product manufacturing_cost

SQL Query

Output

```
-- 5--
SELECT p.product_code,
       p.product,
       m.manufacturing_cost
from dim_product p
join fact_manufacturing_cost m
     on p.product_code=m.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;
```

product_code	product	manufacturing_cost
A6120110206	AQ HOME Allin1 Gen 2	240.5364
A2118150101	AQ Master wired x1 Ms	0.8920

AD-HOC Request-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

SQL Query

Output

```sql
-- 6 --
select c.customer_code,
       c.customer,
       round(avg(i.pre_invoice_discount_pct)*100,2) as average_discount_percentage
from fact_pre_invoice_deductions i
join dim_customer c
using (customer_code)
WHERE i.pre_invoice_discount_pct>(select avg(pre_invoice_discount_pct) from fact_pre_invoice_deductions) and
      i.fiscal_year=2021 and
      c.market="India"
group by c.customer_code,
         c.customer
order by average_discount_percentage desc
LIMIT 5;
```

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 and Insights

- Flipkart offers the **highest average pre-invoice discount (30.83%)**, but the difference across retailers is minimal (just **1.5%** between Flipkart and Amazon).
- All top 5 retailers are offering around **30%** discounts, meaning they rely heavily on **price-based strategies** to attract customers.
- Amazon, despite being a dominant player, is offering the **lowest average discount**.
- This could mean they focus more on **customer loyalty programs, subscription benefits (Amazon Prime), and exclusive deals**, rather than direct discounts.
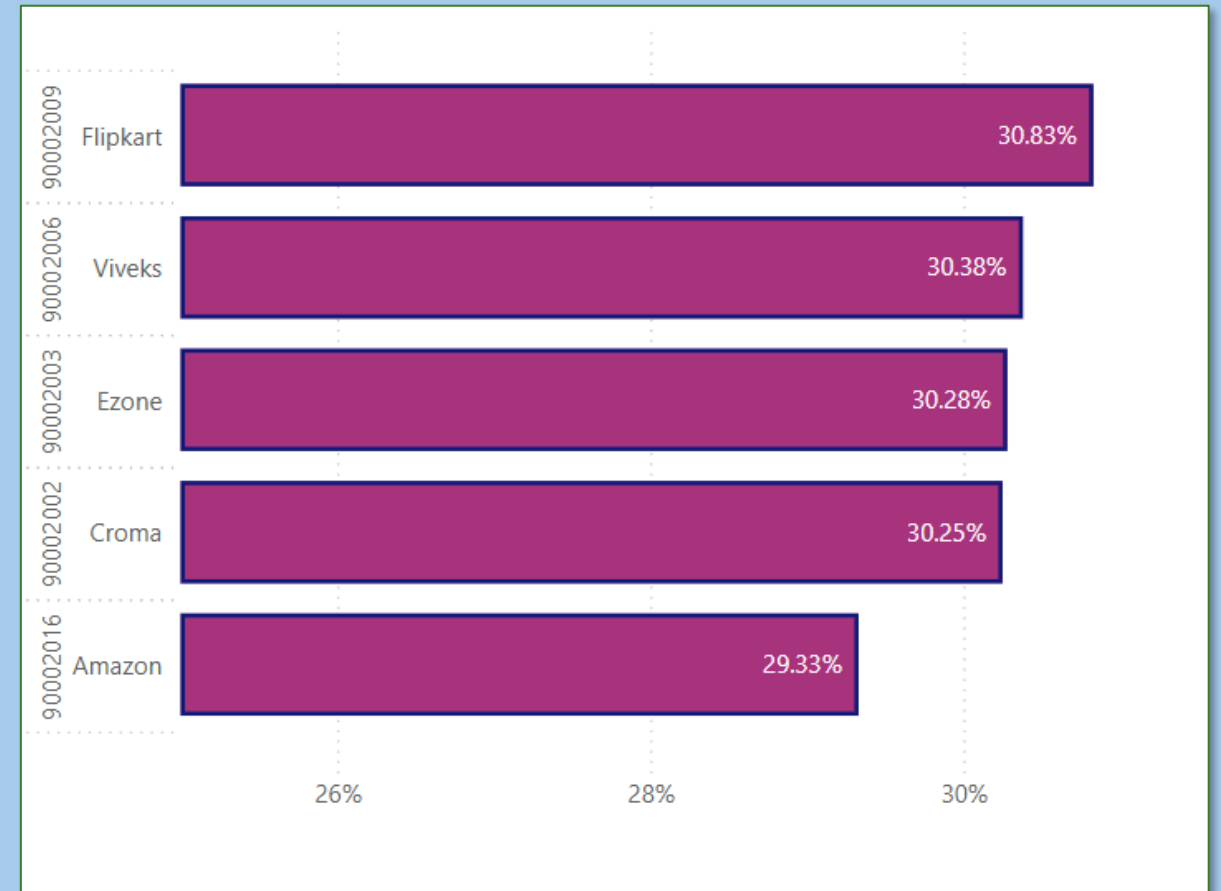
AD-HOC Request-7

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 make strategic decisions. The final report contains these columns: Month, Year, Gross sales Amount
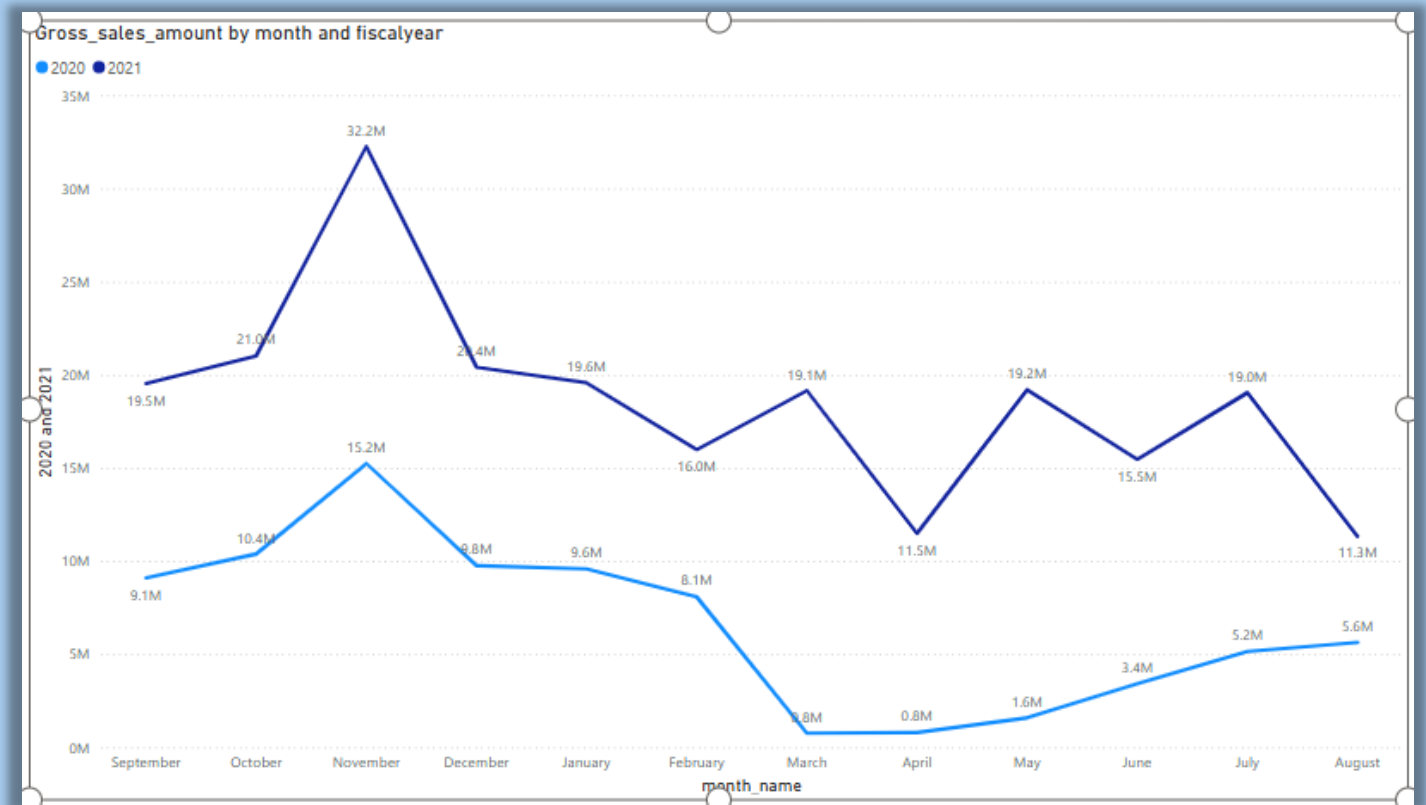
SQL Query

```sql
• select
        monthname(s.date) as month,
        s.fiscal_year ,
        sum(round(g.gross_price*s.sold_quantity,2)) as Gross_price_Amount
from fact_gross_price g
join fact_sales_monthly s
        on s.product_code=g.product_code
join dim_customer c
        on c.customer_code=s.customer_code
where customer="Atliq Exclusive"
group by month,s.fiscal_year;
```

Output

month	fiscal_year	Gross_price_Amount
September	2020	9092670.85
October	2020	10378637.79
November	2020	15231895.21
December	2020	9755795.21
January	2020	9584951.90
February	2020	8083995.87
March	2020	766976.28
April	2020	800072.08
May	2020	1586963.98
June	2020	3429736.75
July	2020	5151815.71
August	2020	5638281.79
September	2021	19530271.90
October	2021	21016218.96
November	2021	32247290.68
December	2021	20409063.68
January	2021	19570702.79
February	2021	15986605.01
March	2021	19149625.28
April	2021	11483530.74
May	2021	19204310.02
June	2021	15457580.57
July	2021	19044969.71
August	2021	11324548.87

Visual and Insights

- In **both 2020 and 2021**, sales peaked in **November**, suggesting a seasonal impact
- This could be due to holiday shopping, promotions, or end-of-year demand surges.
- Sales dropped from March to August because of **COVID-19**. But now, things are looking up. Sales have been going up and are even better than they were in 2020.

Gross_sales_amount by month and fiscalyear

● 2020 ● 2021

AD-HOC Request-8

In which quarter of 2020, get the maximum total_sold_quantity? The final output contains these fields sorted by the total_sold_quantity,
Quarter
total_sold_quantity _mln

SQL Query

```
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 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

Quarter	total_sold_quantity
Q1	7005619
Q2	6649642
Q4	5042541
Q3	2075087

Visual and Insights

o **Q1** contributed **33.82%** of the total sales in 2020.

o The Highest total quantity is in Q1 with 7,005,619 units

o This could indicate strong demand at the beginning of the year, possibly due to seasonal trends, promotions, or new product launches.

o The data suggests that Q1 and Q2 were the peak sales periods, while Q3 experienced a major slump.

Total sold Quantity in FY 2020 by Quarters

7.0M	Q1
6.6M	Q2
5.0M	Q4
2.1M	Q3

AD-HOC Request-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

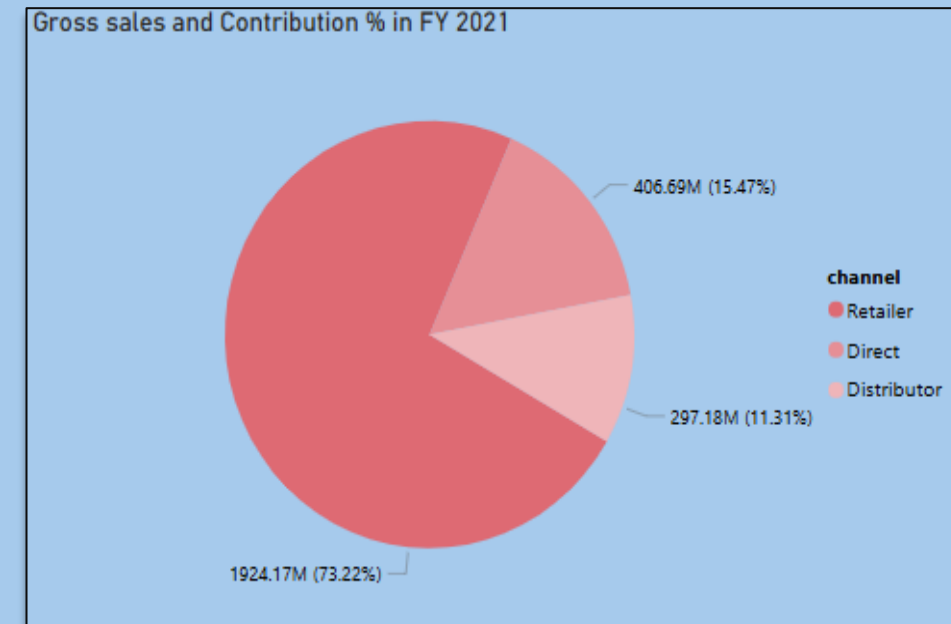| SQL Query	Output

```
-- 9 --
with x as(
select
    c.channel,
    round((sum(s.sold_quantity*g.gross_price)/1000000),2) as gross_sales_mln
from dim_customer c
join fact_sales_monthly s
    on c.customer_code=s.customer_code
join fact_gross_price g
    on g.product_code=s.product_code
where s.fiscal_year=2021
group by c.channel)
select channel,
    gross_sales_mln,
    round(gross_sales_mln*100/sum(gross_sales_mln) over(),2) as percentage
from x
order by percentage desc;
```

channel	gross_sales_mln	percentage
Retailer	1924.17	73.22
Direct	406.69	15.48
Distributor	297.18	11.31

Visual and Insights

- The **Retail channel** contributed **73.22% (1924.17M)** of total sales, making it the primary revenue driver.

- This indicates strong dependence on retail distribution for business growth.

- **Distributor and Direct channels** together contribute **26.78%**, showing potential for expansion, particularly in direct sales .

- Increasing the **Direct sales share** could improve profitability by reducing dependency on third-party retailers and intermediaries.

Gross sales and Contribution % in FY 2021

406.69M (15.47%)

channel
- Retailer
- Direct
- Distributor

297.18M (11.31%)

1924.17M (73.22%)

AD-HOC Request-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
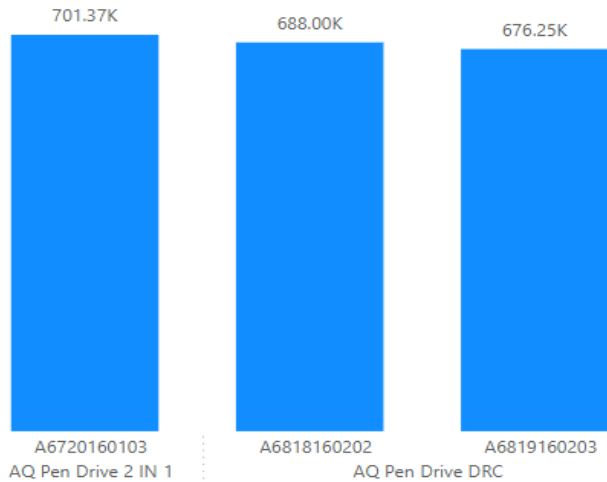
SQL Query

```
-- 10 --
with x as(
select
p.division ,
p.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
using (product_code)
where fiscal_year=2021
group by p.division,p.product_code,p.product)
    select * from x
    where rank_order<=3;
```
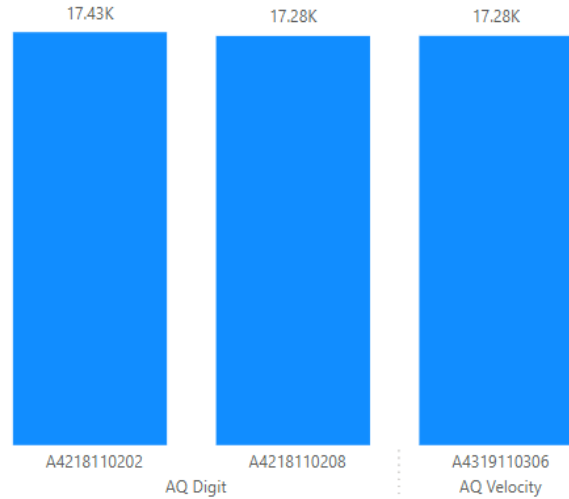
Output

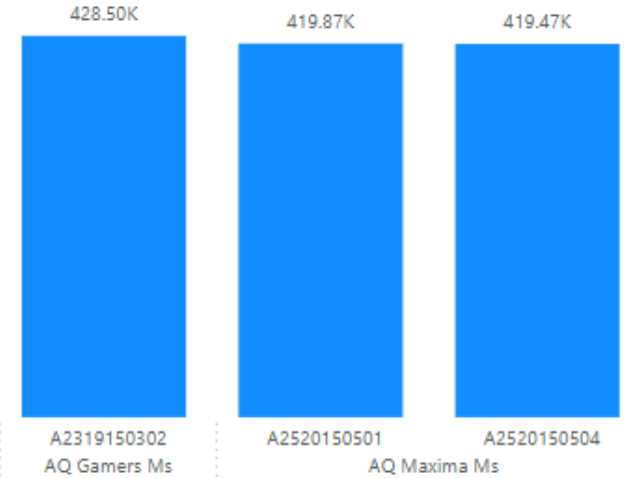| division	product_code	product	total_sold_quantity	rank_order
N & S	A6720160103	AQ Pen Drive 2 IN 1	701373	1
N & S	A6818160202	AQ Pen Drive DRC	688003	2
N & S	A6819160203	AQ Pen Drive DRC	676245	3
P & A	A2319150302	AQ Gamers Ms	428498	1
P & A	A2520150501	AQ Maxima Ms	419865	2
P & A	A2520150504	AQ Maxima Ms	419471	3
PC	A4218110202	AQ Digit	17434	1
PC	A4319110306	AQ Velocity	17280	2
PC	A4218110208	AQ Digit	17275	3

Visual and Insights

Thank You