



Atliq Hardwares

Consumer Goods Ad_Hoc Insights

Created By : Gulam Rasul



SQL Resume Project Challenge



Ad hoc Requests

Codebasics SQL Challenge

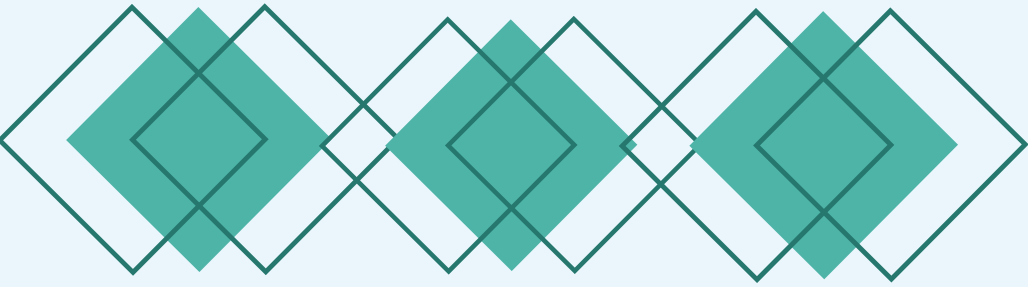
Requests:

1. Provide the list of markets in which customer "Atliq Exclusive" operates its business in the APAC region.
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
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
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
5. Get the products that have the highest and lowest manufacturing costs. The final output should contain these fields,
product_code
product
manufacturing_cost

codebasics.io

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
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
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
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
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

codebasics.io



Context

About Company

Atliq Hardwares (an imaginary company) - One of the leading computer hardware producers in India.

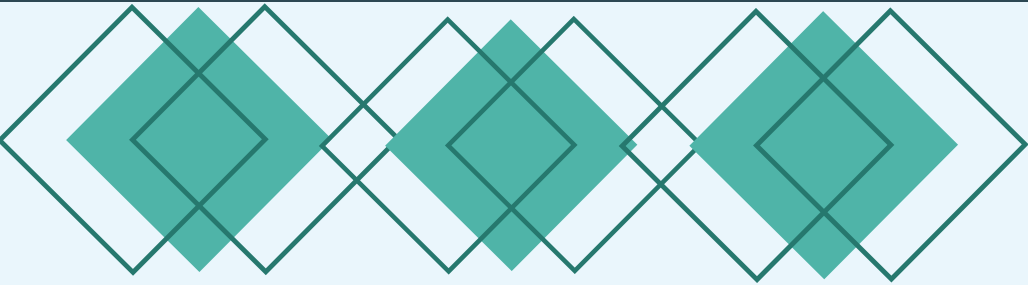
Problem Statement

There are 10 ad-hoc requests for which the company requires some insights.

Tasks

Run a SQL queries to get answers of these requests. Then use that data, visualize and present the Insights to the top level management.

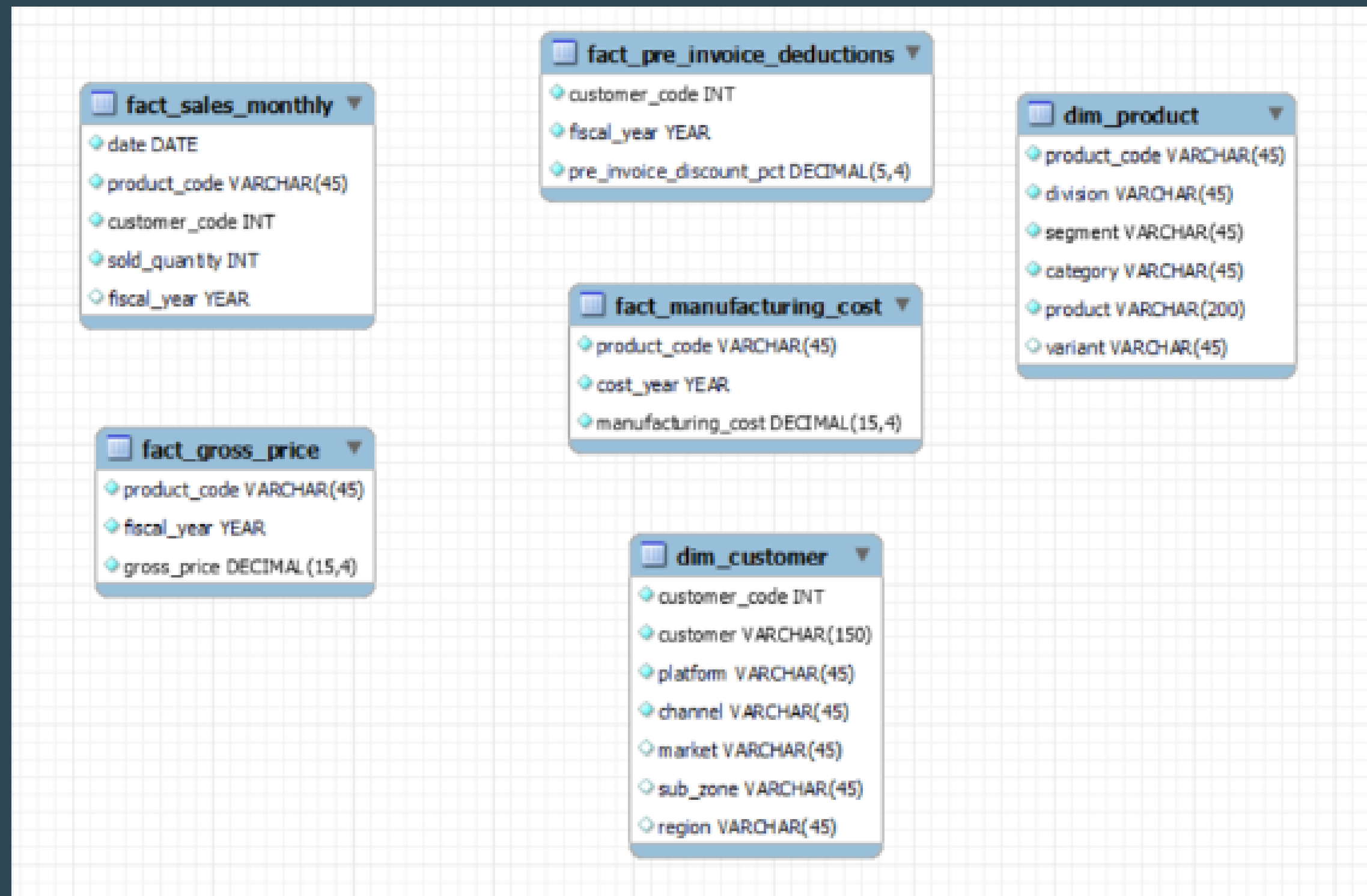


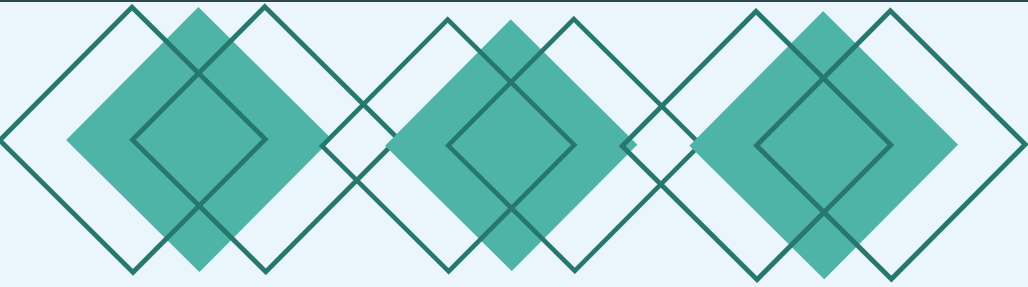


Input data consists of dimension and fact table where in fact tables contain sales data for fiscal year 2020 & fiscal year 2021, pre invoice deductions, gross price and manufacturing cost, and dimension tables contain customer details, product details, etc.



Let's Have A Look At The Database Used





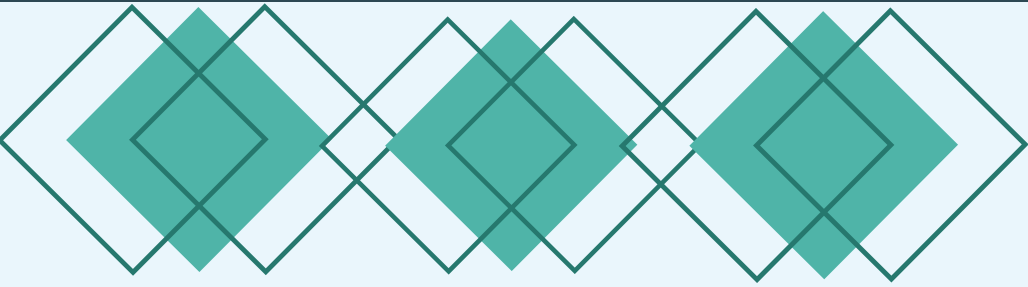
REQUEST # 01:

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

Let's Have A Look At The Database Used



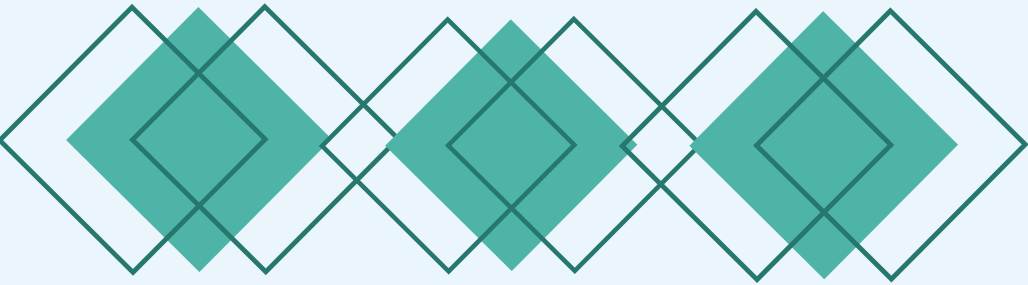
market
India
Indonesia
Japan
Philippines
South Korea
Australia
Newzealand
Bangladesh



REQUEST# 01 INSIGHT

In the APAC region, Atliq Exclusive store has its presence in 8 major markets/countries.





OUTPUT

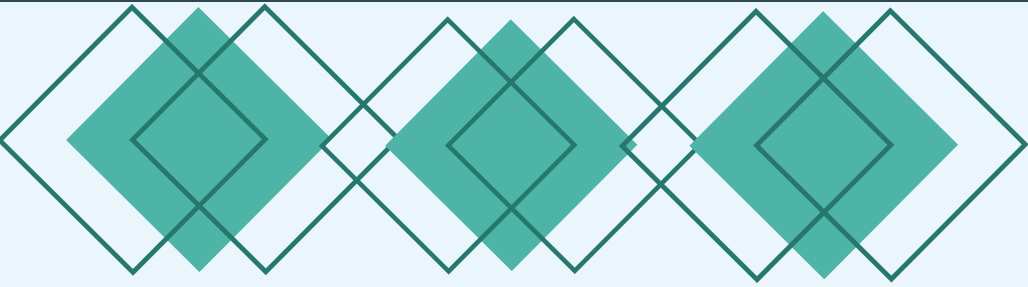


REQUEST # 02:

What is the percentage of unique product increase in 2021 vs. 2020? The final output contains these fields:

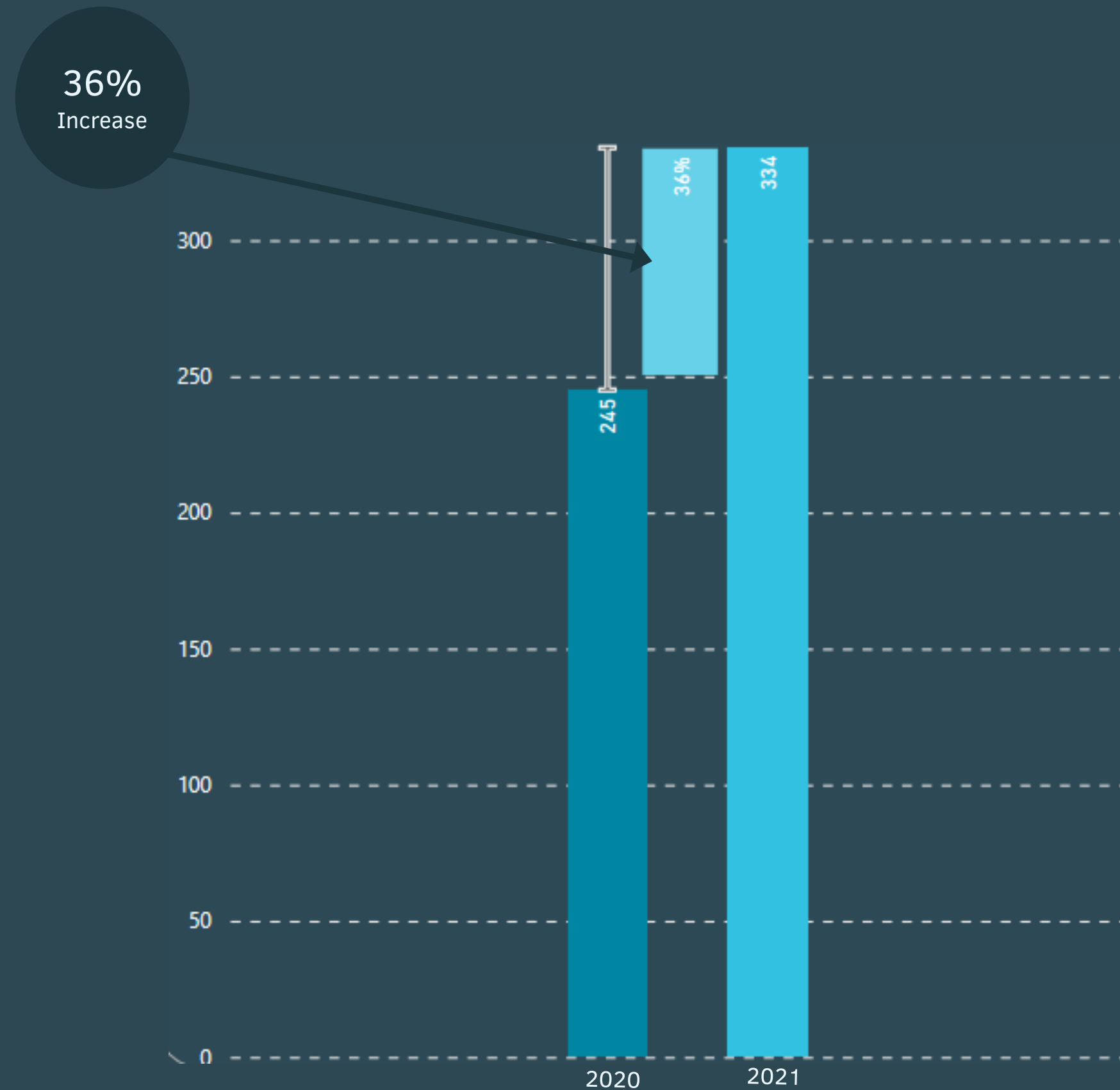
unique_products_2020
unique_products_2021
percentage_chg

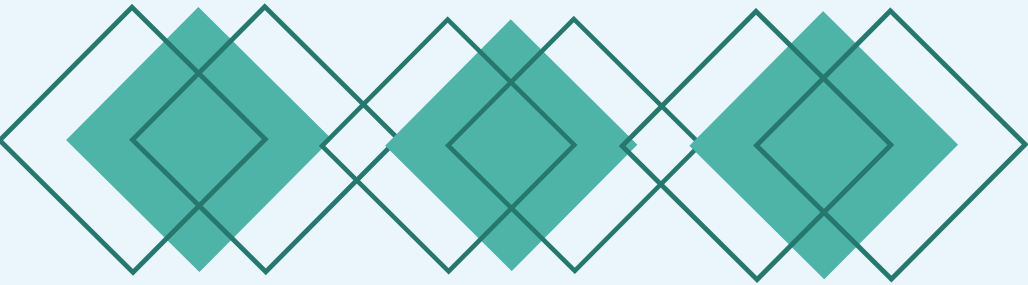
unique_products_2020	unique_products_2021	percentage_chg
245	334	36.33



REQUEST# 02 INSIGHT

Our company is doing well! We're constantly coming up with new products. In fact, we increased the number of products we offer from 245 in FY 2020 to 334 in FY 2021, a jump of 36%!





REQUEST # 03:

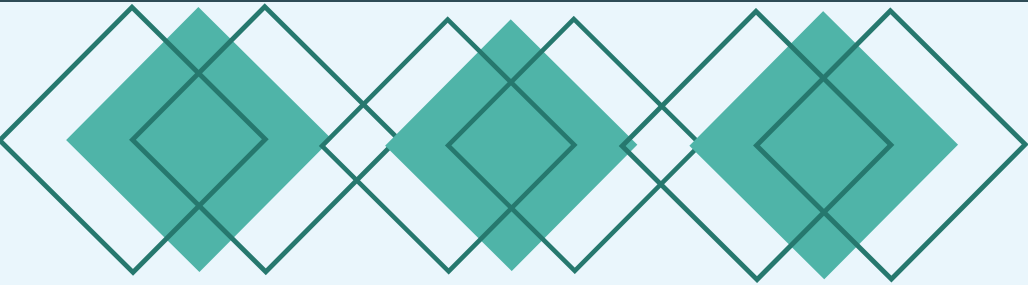
Provide a report with all the unique product counts for each segment and sort them in descending order of product counts. The final output contains 2 fields:

Segment
product_count

OUTPUT

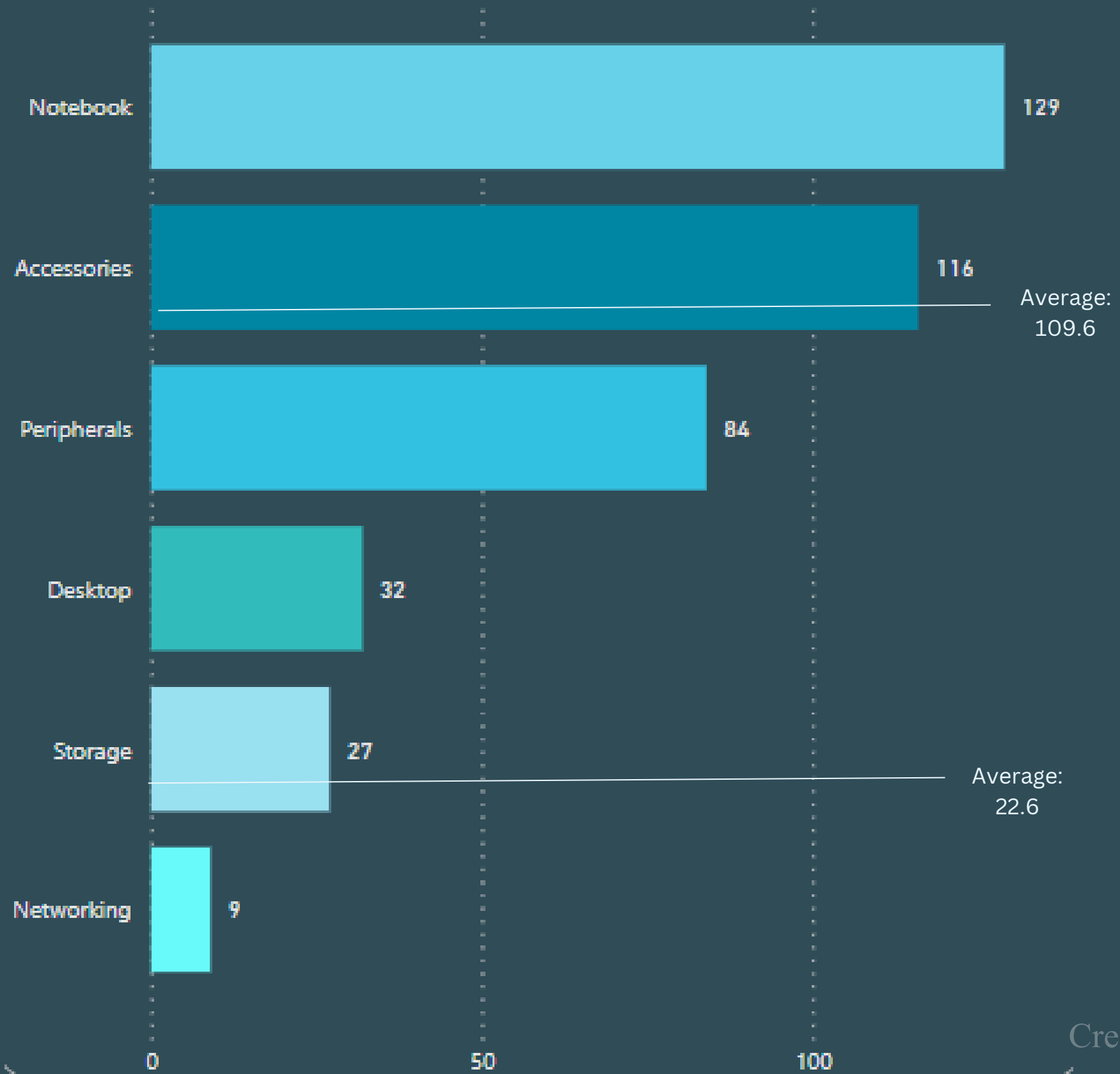


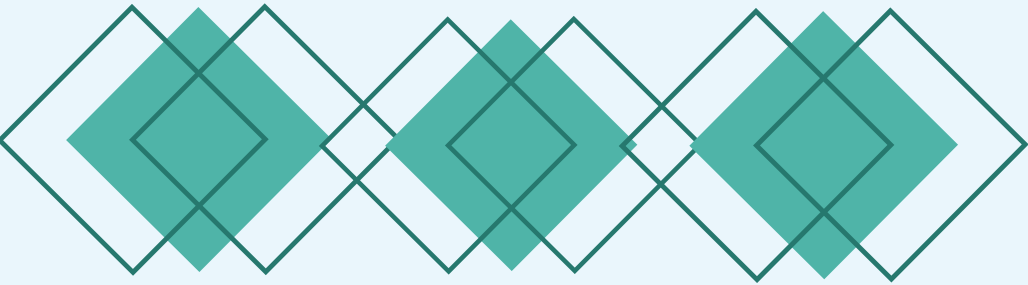
segment	product_count
Notebook	129
Accessories	116
Peripherals	84
Desktop	32
Storage	27
Networking	9



REQUEST# 03 INSIGHT

We offer various products in Notebook, Peripherals, and Accessories categories, with around 110 products in each. However, we aim to expand our offerings in Desktop, Networking, and Storage categories, where we currently have only about 23 products each on average.





OUTPUT

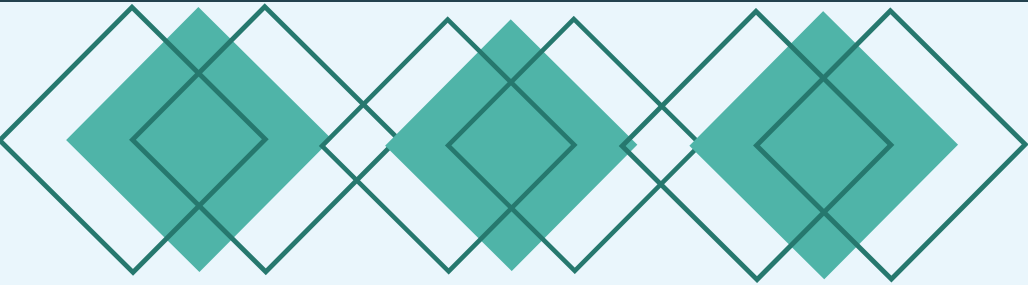


REQUEST # 04:

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

segment	product_count_2020	product_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



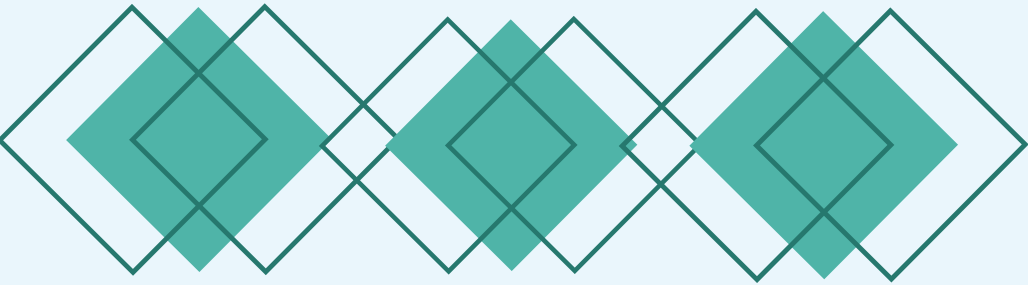
In 2021, our primary emphasis was on broadening the scope of our accessories line. We launched 34 innovative products in the accessories category.

REQUEST# 04 INSIGHT



Comparison of Product count in 2020 vs 2021 for each of the segments

Created by Gulam Rasul



OUTPUT

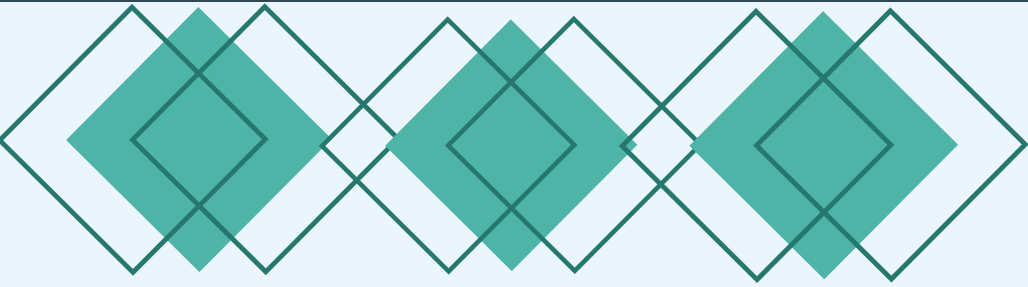


REQUEST # 05:

Get the products that have the highest and lowest manufacturing costs. The final output should contain these fields:

product_code
product
manufacturing_cost

product_code	product	manufacturing_cost
A6120110206	AQ HOME Allin1 Gen 2	240.54
A2118150101	AQ Master wired x1 Ms	0.89



REQUEST# 06

INSIGHT

Product, that has
the highest manufacturing cost

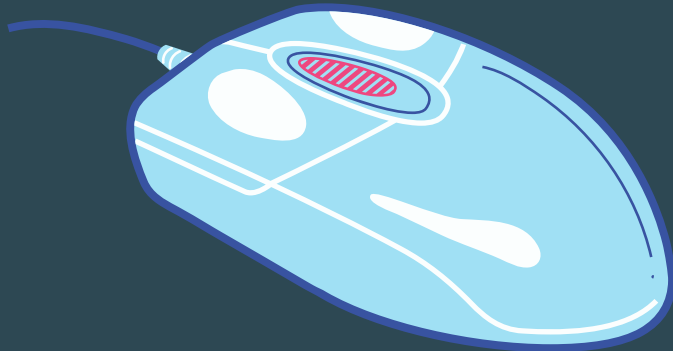
\$240.54



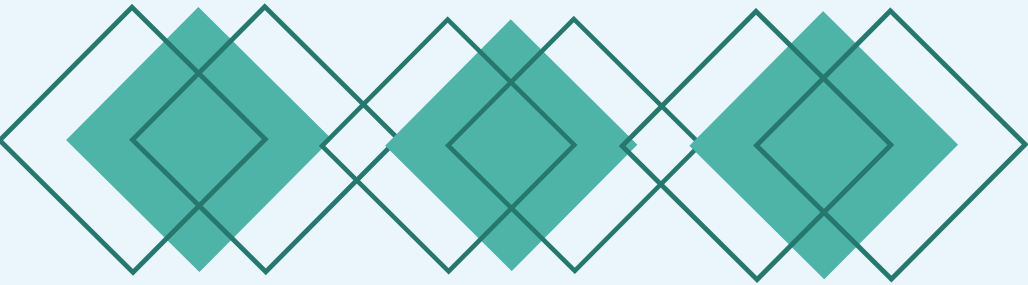
AQ HOME Allin1 Gen 2
Personal Desktop

Product, that has
the lowest manufacturing cost

\$0.89



AQ Master wired x1 Ms
Mous
e



OUTPUT



REQUEST # 06:

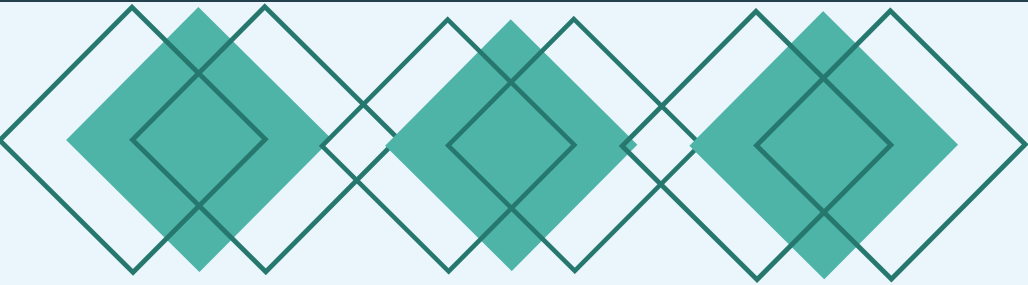
Generate a report which contains the top 5 customers who received an average high pre_invoice discount_pct for the fiscal year 2021 and in the Indian market. The final output contains these fields:

customer_code

customer

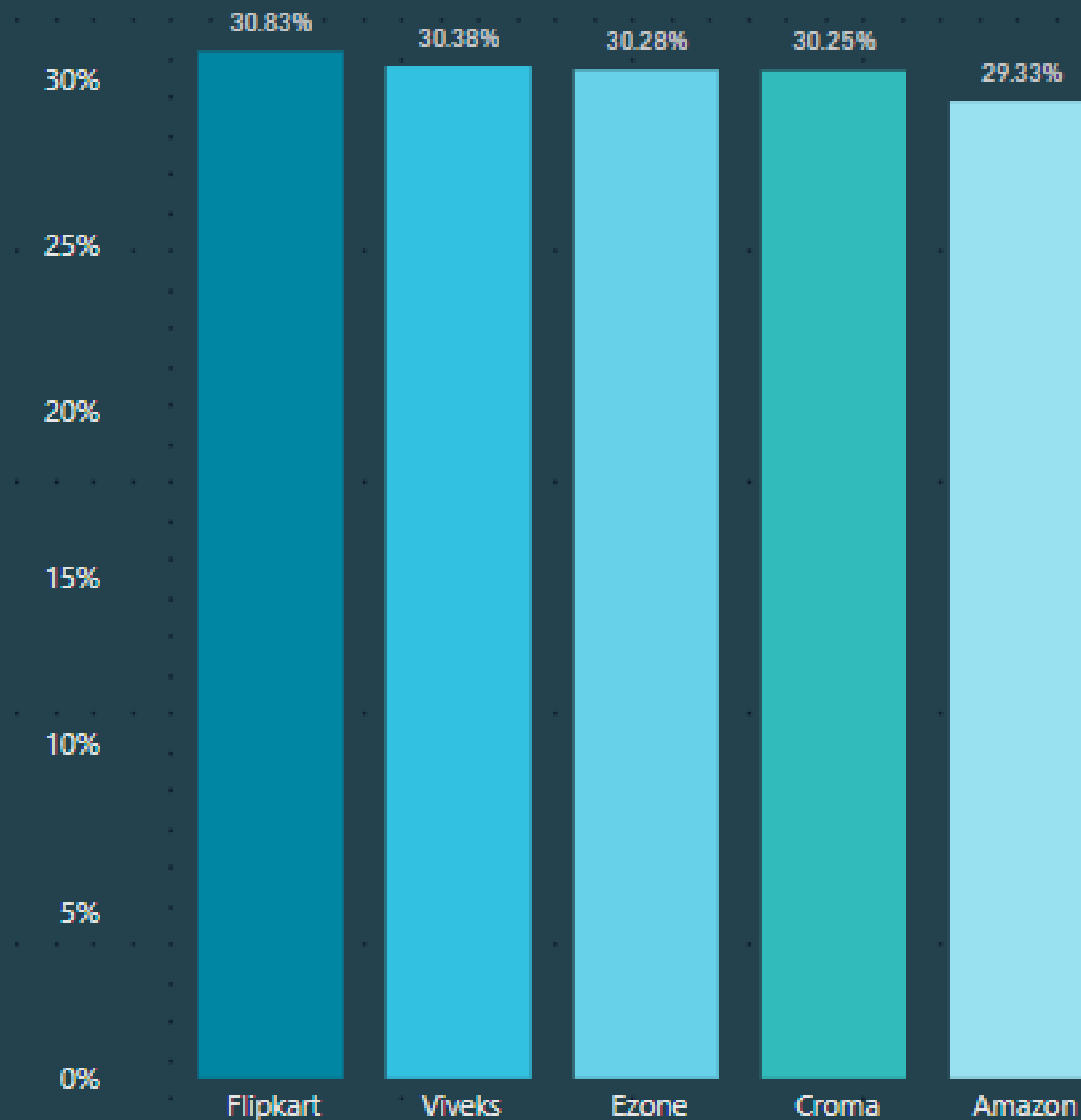
average_discount_percentage

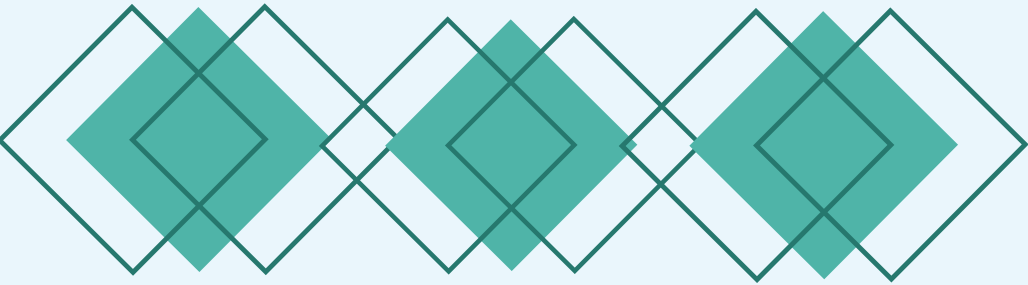
customer_code	customer	average_discount_percentage
90002009	Flipkart	30.83
90002006	Viveks	30.38
90002003	Ezone	30.28
90002002	Croma	30.25
90002016	Amazon	29.33



REQUEST# 06 INSIGHT

In 2021, we gave almost the same discount rates before billing to our top 5 customers. Flipkart got the highest discount, which is 30.83%, because they usually get the biggest discounts in India.





REQUEST # 07:

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

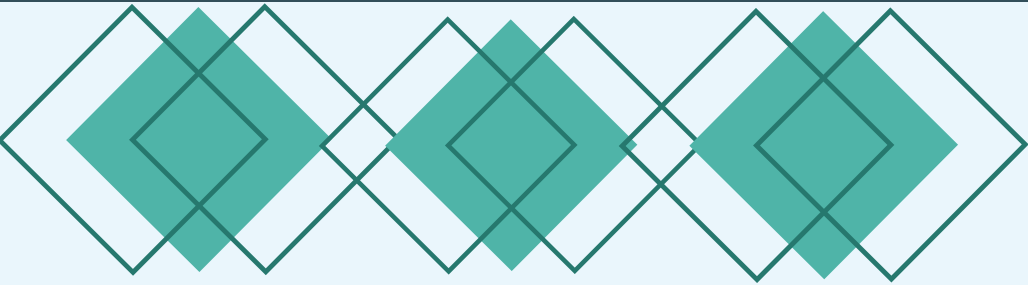
Year

Gross sales Amount

OUTPUT



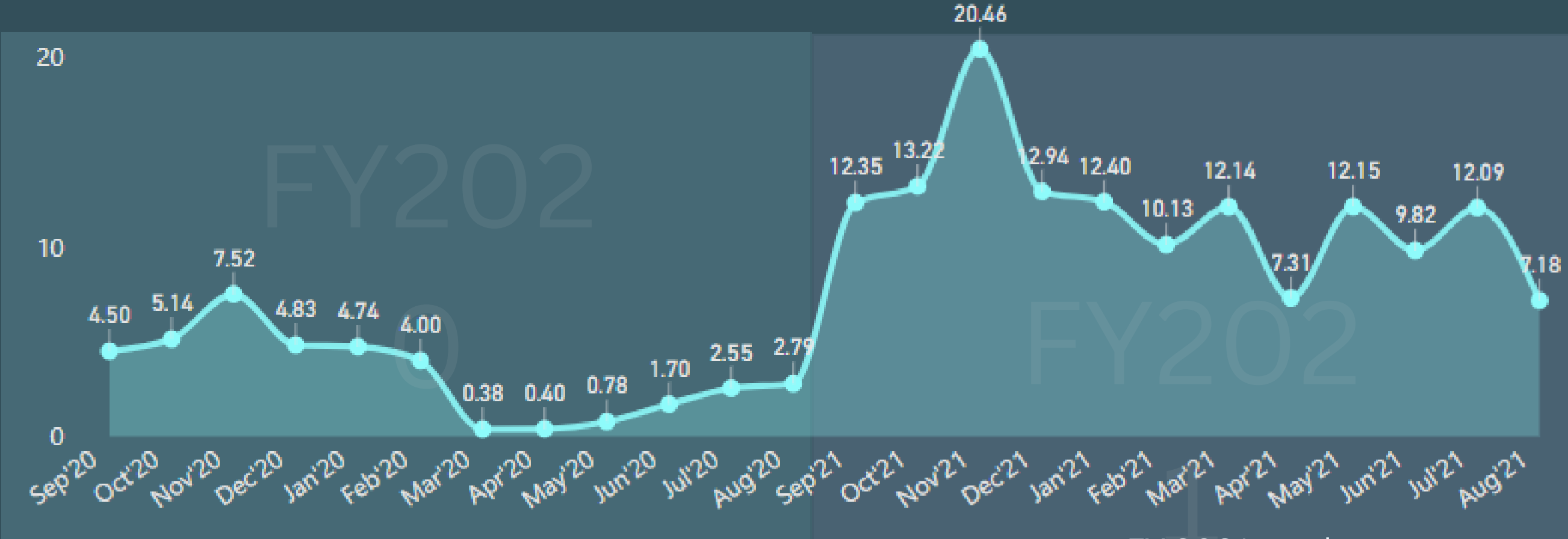
month	fiscal_year	Gross_sales_Amnt_mln
September	2020	4.50
October	2020	5.14
November	2020	7.52
December	2020	4.83
January	2020	4.74
February	2020	4.00
March	2020	0.38
April	2020	0.40
May	2020	0.78
June	2020	1.70
July	2020	2.55
August	2020	2.79
September	2021	12.35
October	2021	13.22
November	2021	20.46
December	2021	12.94
January	2021	12.40
February	2021	10.13
March	2021	12.14
April	2021	7.31
May	2021	12.15
June	2021	9.82
July	2021	12.09
August	2021	7.18



In fiscal year 2020, Atliq Exclusive began with a total gross sales price of 4.5 million, experienced a downturn due to the COVID-19 pandemic, reaching its lowest point at 0.38 million, but rebounded to achieve its highest total gross sales price of 20.46 million within the same fiscal year. By the conclusion of fiscal year 2021, Atliq Exclusive's total gross sales price for all products sold amounted to 7.18 million.

REQUEST# 07
INSIGHT

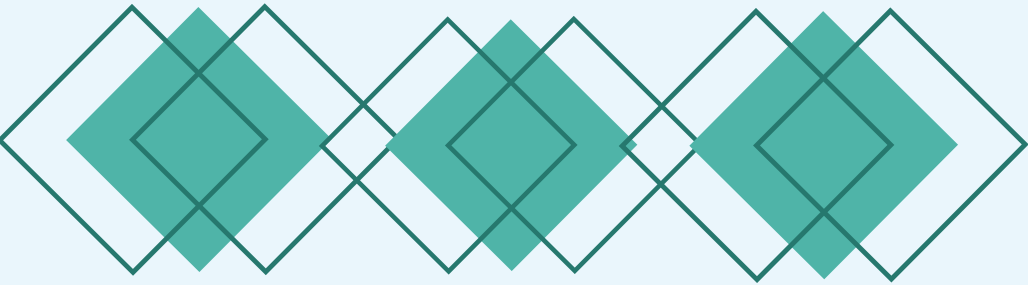
Monthly Gross Sales Trend for **Atliq Exclusive**



In FY 2021, we have a total sales of 39.33 M

In FY 2021, we have a total sales of 142.19 M

Altogether we have a total sales of 181.52 M



REQUEST # 07:

In which quarter of 2020,
got the maximum
total_sold_quantity ?

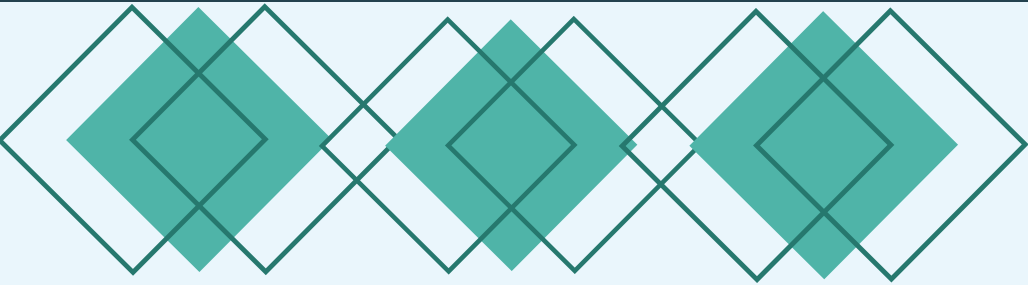
The final output contains these
fields sorted by the
total_sold_quantity:

Quarter
total_sold_quantity

OUTPUT

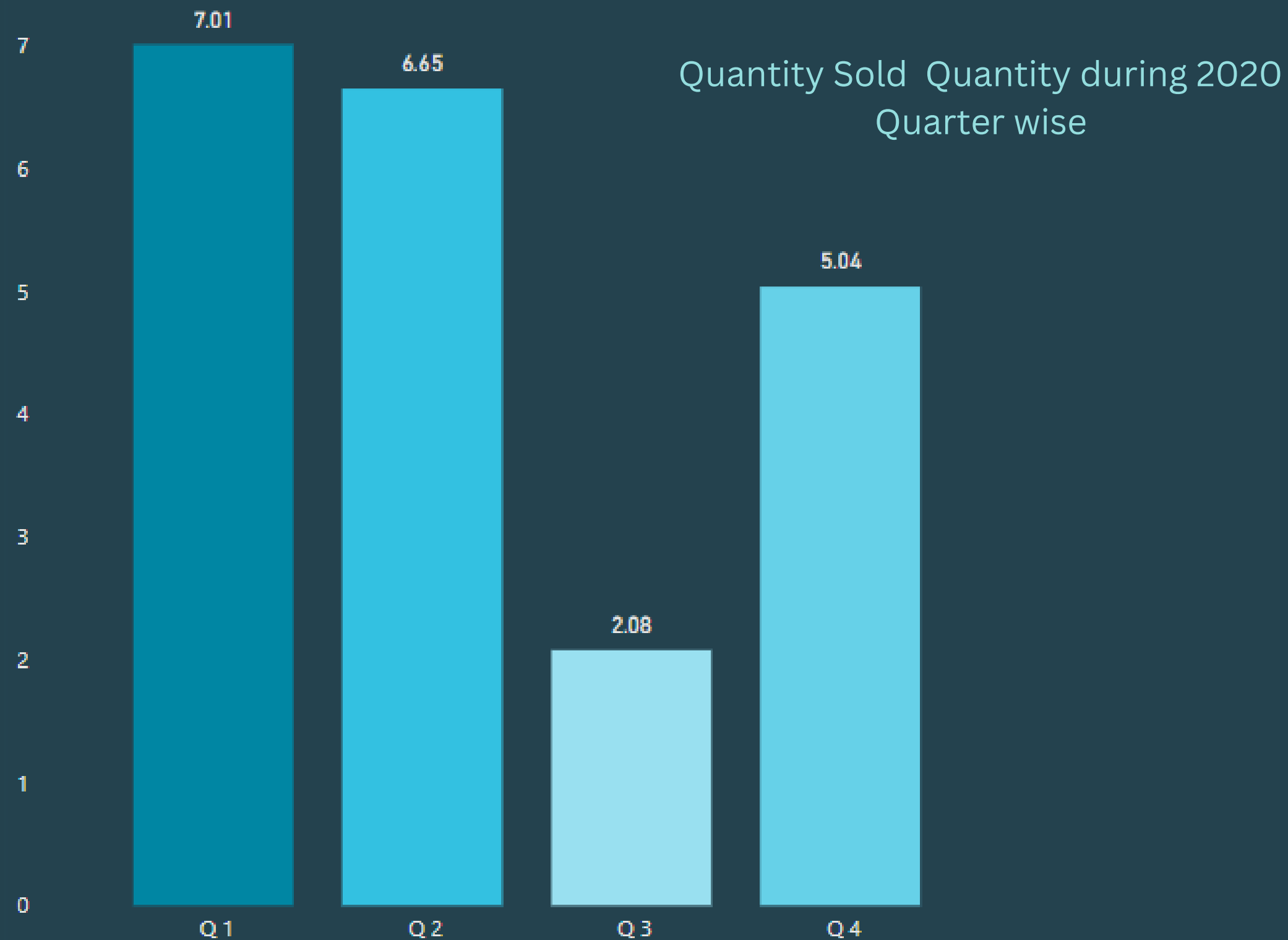


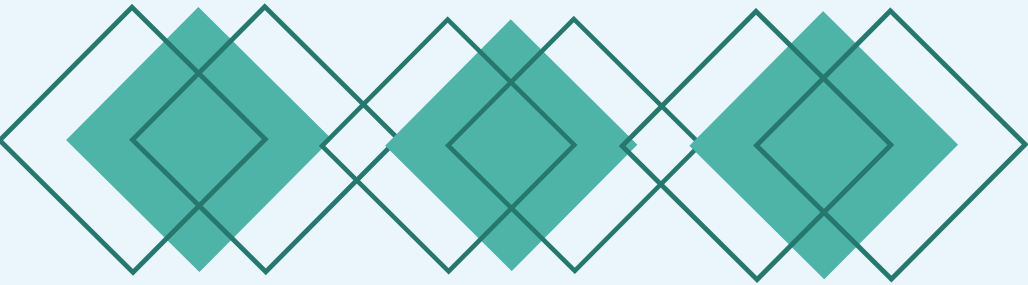
Quarter	total_sold
Q 1	7.01
Q 2	6.65
Q 4	5.04
Q 3	2.08



REQUEST# 08 INSIGHT

We have sold the most products during the first part of the year 2020, specifically in the first quarter (Q1), selling around 7.01 million items. However, their sales hit a low point in the third quarter (Q3) of the same year, with approximately 2.08 million products sold. **This drop was happened because of the COVID-19 pandemic**, which was at its worst between March and May 2020.





REQUEST # 09:

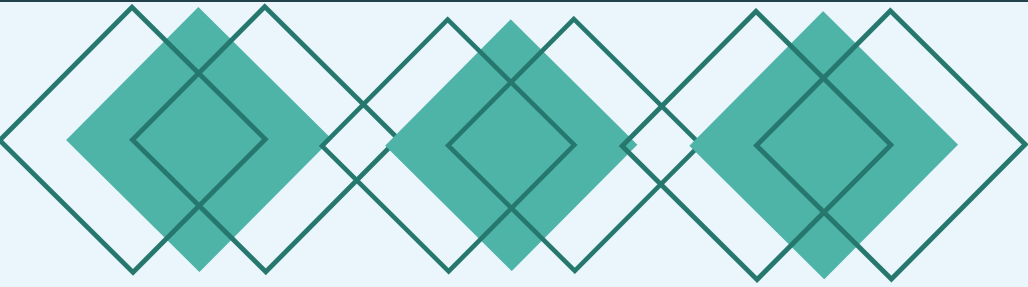
Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution? The final output contains these fields:

channel
gross_sales_mln
percentage

OUTPUT

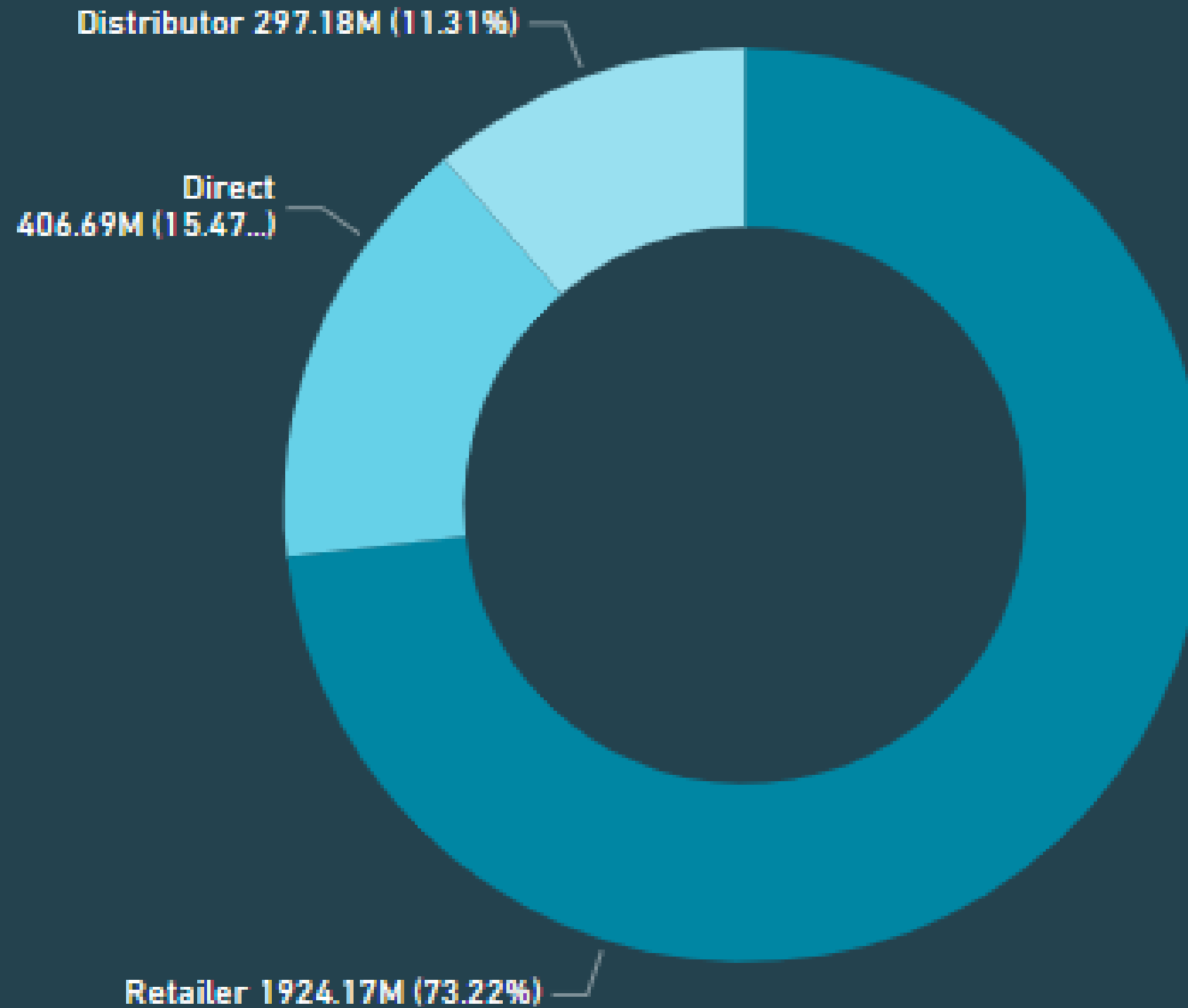


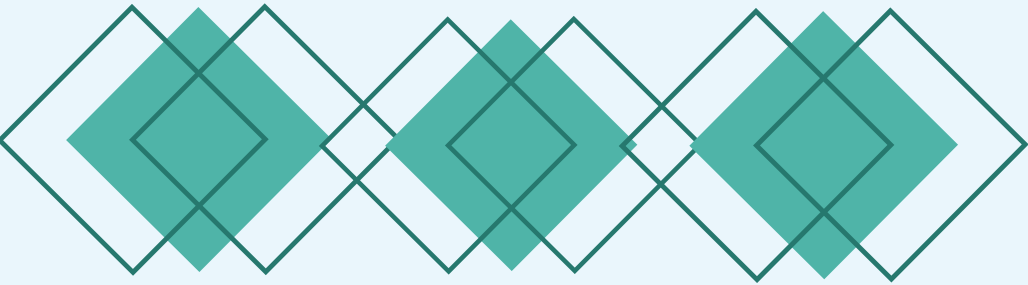
channel	gross_sales_mln	percentage
Retailer	1924.17	73.22
Direct	406.69	15.47
Distributor	297.18	11.31



We make sales in three main ways. Selling directly to stores is their top earner, bringing in around 73.22% of their total revenue, which is about 1924.17 million. On the flip side, selling to middlemen who then sell the products is their least profitable method, only accounting for approximately 11.3% of their earnings, roughly 188.03 million.

REQUEST# 09 INSIGHT





OUTPUT



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

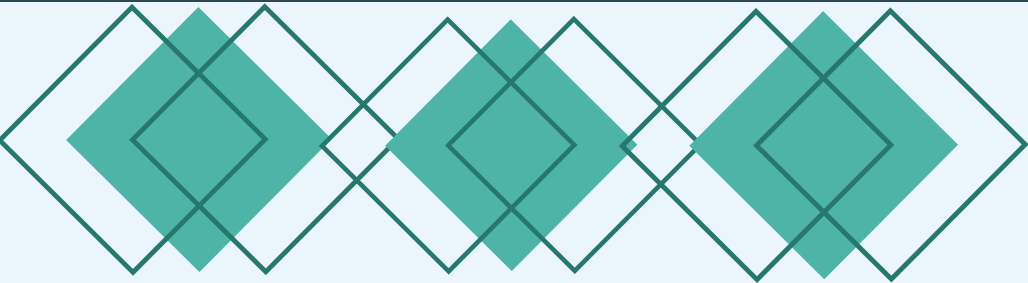
product_code

Product

total_sold_quantity

rank_order

division	product_code	product	total_sold_quantity	rnk
PC	A4218110202	AQ Digit(Standard Blue)	26012	1
PC	A4319110306	AQ Velocity(Plus Red)	25978	2
PC	A4118110107	AQ Aspiren(Premium Black)	25963	3
P & A	A2319150302	AQ Gamers Ms(Standard 2)	683634	1
P & A	A2219150204	AQ Master wireless x1 Ms(Plus 2)	682321	2
P & A	A2319150306	AQ Gamers Ms(Premium 2)	681531	3
N & S	A6720160103	AQ Pen Drive 2 IN 1(Premium)	1159222	1
N & S	A6818160201	AQ Pen Drive DRC(Standard)	1128104	2
N & S	A6419160301	AQ Clx1(Standard)	729696	3

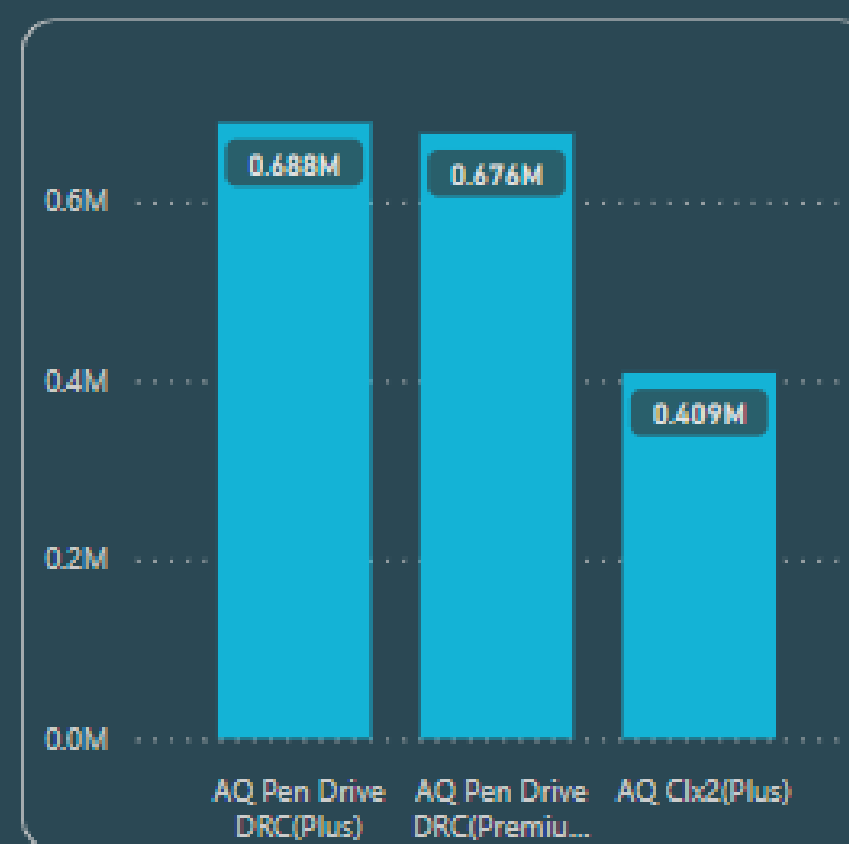


Top 3 selling products in each of Atliq's product lines in FY 2021

REQUEST# 10 INSIGHT

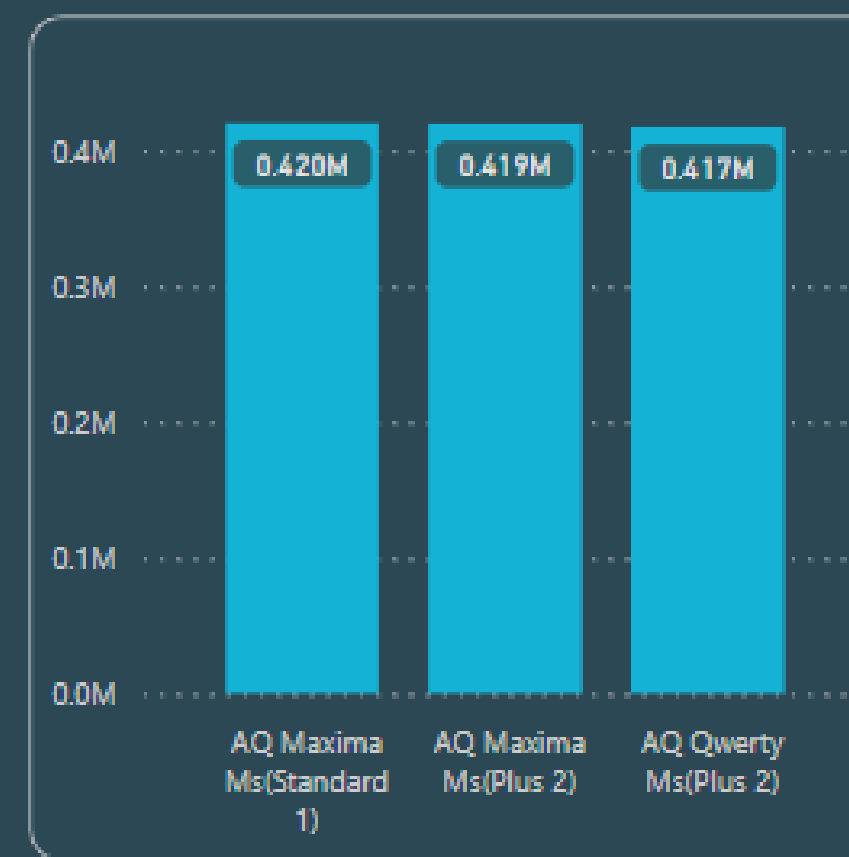
The top 3 selling products in N&S were pen drives, which were around 0.68 Millions in quantity

N & S



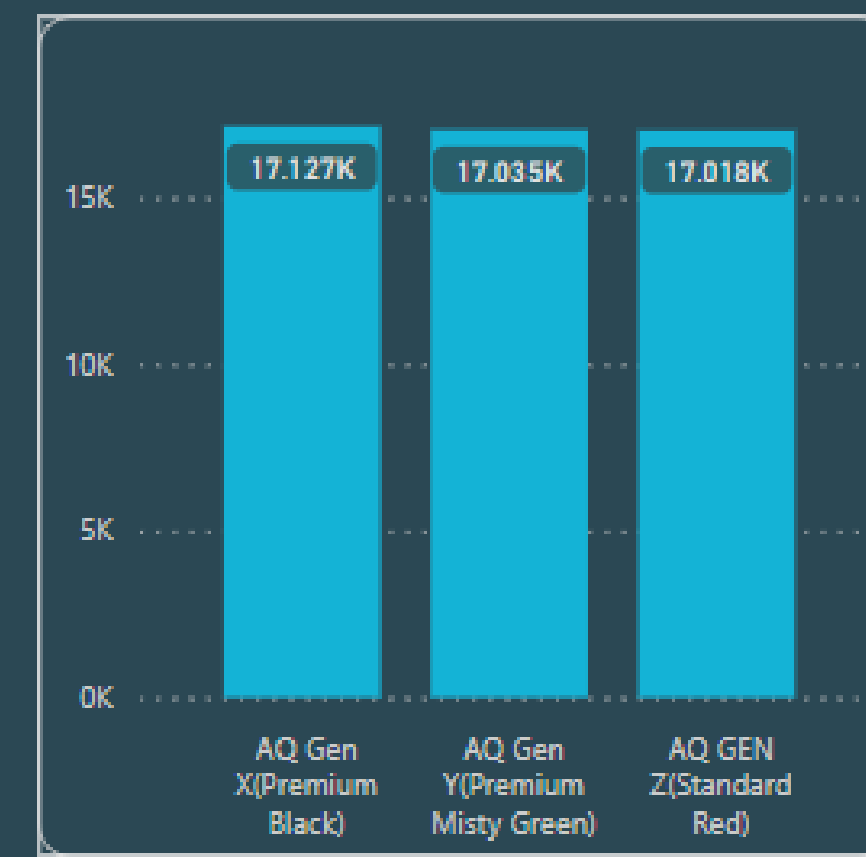
The top 3 selling products in P&A were mouse, which were around 0.42 Millions in quantity.

P & A



The top 3 selling products in PC were personal laptops, which were around 17 thousands in quantity.

PC





**THANK
YOU !**