



**ATLIQ HARDWARES**



# CONSUMER GOODS AD\_HOC INSIGHTS



**SQL PROJECT CHALLENGE**



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# AGENDA



Introduction to Company

Problem Statement

Ad\_hoc Request and Insights



# INTRODUCTION TO COMPANY



Atliq Hardwares (imaginary company) is one of the leading computer hardware producers in India and well expanded in other countries too.

Product line of Atliq's Business

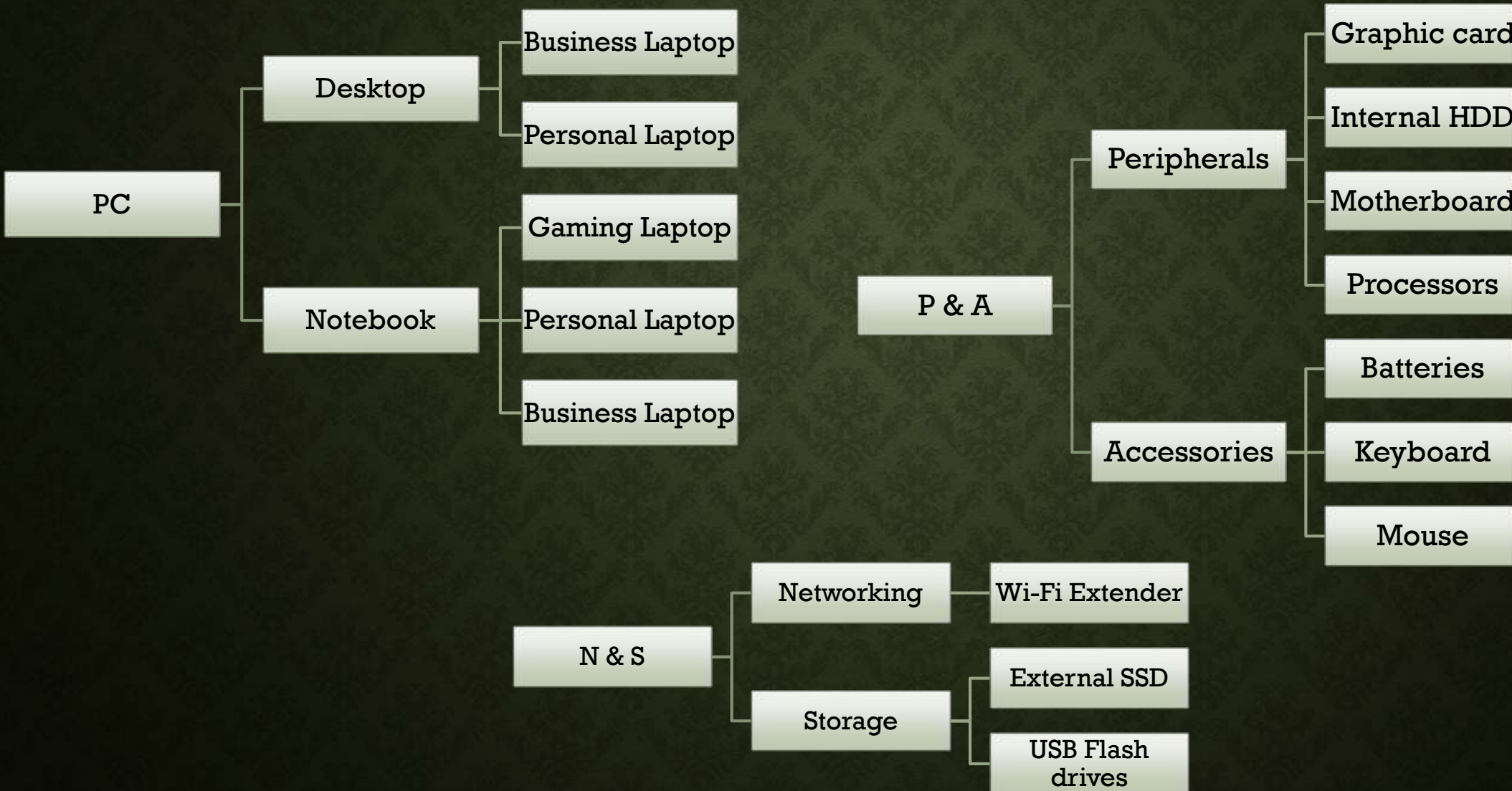
Markets of Atliq's Business

**Domain:** Consumer Goods





# ATLIQ'S PRODUCT LINE





# ATLIQ'S MARKETS



**There are total 27 markets in which Atliq perform its business.**







# PROBLEM STATEMENT



The management noticed that they do not get enough insights to make quick and smart data-informed decisions.

There are 10 ad hoc requests for which the business needs insights.





# AD\_HOC REQUEST AND INSIGHTS



- \* Run a SQL query to answer these ad\_hoc requests and convert these query to visualization so that it can easily understood.
- \* The target audience of this insights is top-level management.
- \* Present this insight to Top-level management of the company.







# AD\_HOC REQUEST AND INSIGHTS





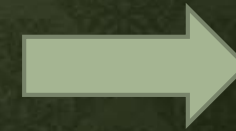


# AD\_HOC REQUEST

Input

## REQUEST :1

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



Output

	market
▶	India
	Indonesia
	Japan
	Philippines
	South Korea
	Australia
	Newzealand
	Bangladesh



# INSIGHTS

"Atliq Exclusive" operates its business in major 8 markets in APAC region.





# AD\_HOC REQUEST

Input

Output

## REQUEST :2

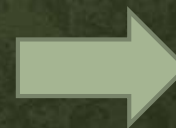
What is the percentage of unique product increase in 2021 vs. 2020?

The final output contains these fields,

unique\_products\_2020

unique\_products\_2021

Percentage change

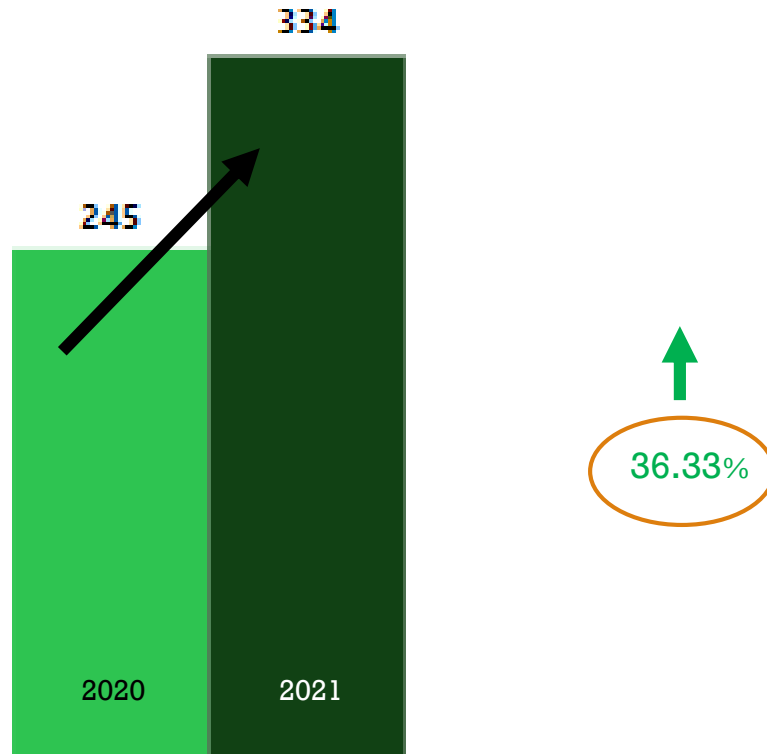


	unique_products_2020	unique_products_2021	percentage_change
▶	245	334	36.33





# INSIGHTS



In 2020 the number of unique product were 245 and after one year in 2021 the number of unique products is increased to 334 i.e., overall 36.33% increment in the unique product which shows that Research and Development (R & D) Department of the company is performing great.



# AD\_HOC REQUEST

Input

## 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

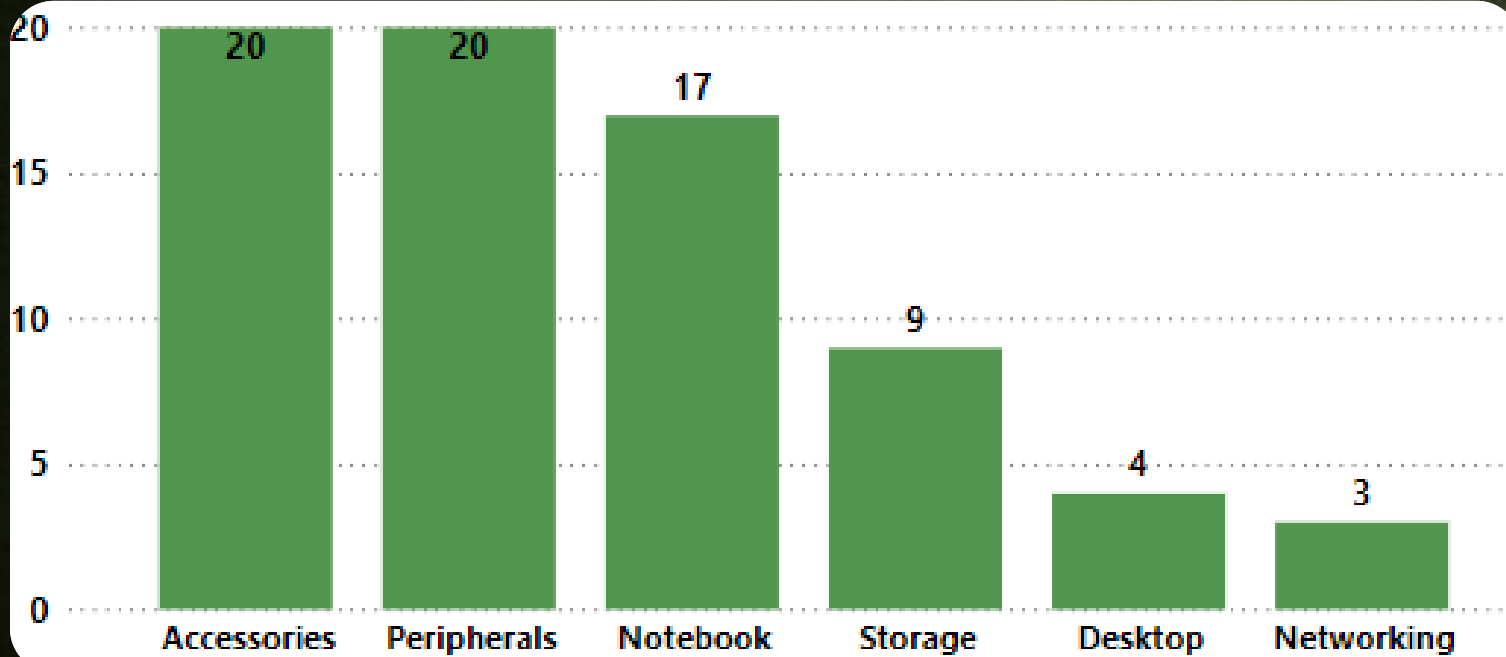


Output

	segment	product_count
▶	Accessories	20
	Peripherals	20
	Notebook	17
	Storage	9
	Desktop	4
	Networking	3



# INSIGHTS



\* It shows that Accessories and Peripherals have good unique product count as compared to other segments and company should focus on Desktop and Networking segment as desktop have 4 unique product and networking have only 3.

\* Marketing and sales department should analyze the requirement of the customer in Desktop and Networking segment





# AD\_HOC REQUEST

Input

## 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



Output

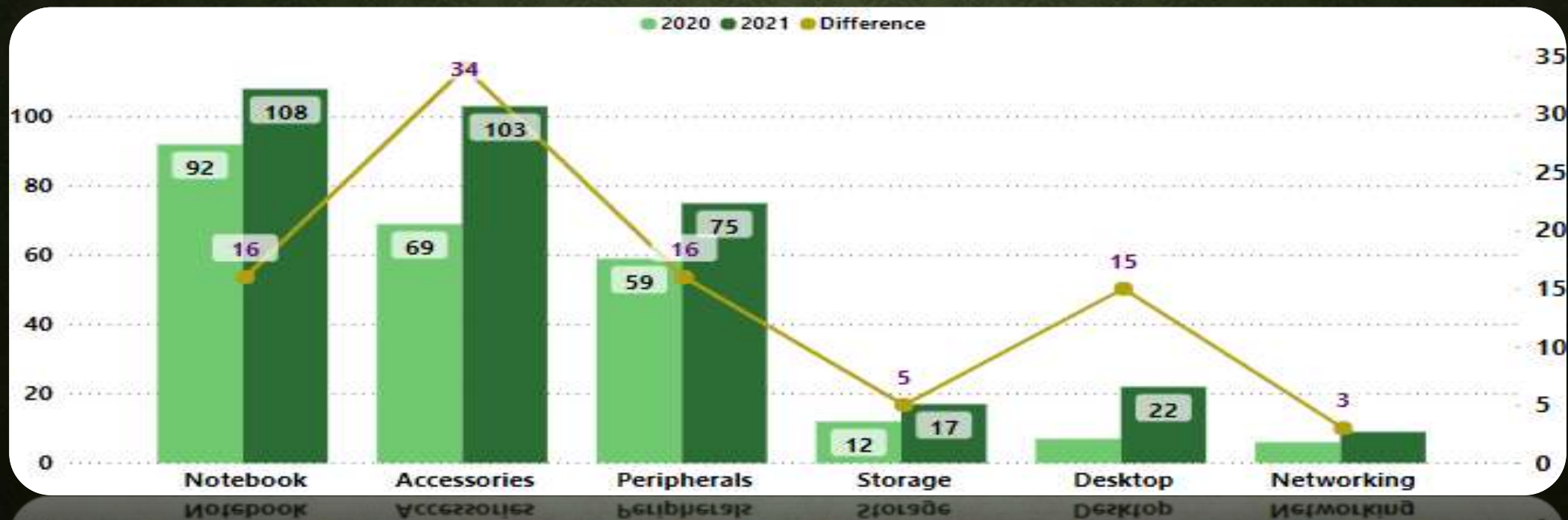
	segment	product_count_2020	product_count_2021	difference
▶	Accessories	69	103	34
	Notebook	92	108	16
	Peripherals	59	75	16
	Desktop	7	22	15
	Storage	12	17	5
	Networking	6	9	3



# INSIGHTS

\* After analyzing it shows that Accessories have most increase in unique product with 34 new products which is highest increment as compared to other segments but focusing on individual segment is not good for company .

\* As there is only 3 product increment in Networking segment which is the point of concern, Research and Development department of the company should focus on this and know the exact reason behind this.





# AD\_HOC REQUEST

Input

Output

## REQUEST :5

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	240.5364
	A2118150101	AQ Master wired x1 Ms	0.8920





# INSIGHTS

It shows that AQ Home Allin 1 Gen 2 has highest manufacturing cost which is point of concern ,either price of raw material and labour cost is high or any supply chain issue.

AQ HOME Allin 1 Gen 2

**\$240.5364**

Product code : A6120110206

Highest manufacturing  
cost

AQ Master wired x1 Ms

**\$0.892**

Product code : A2118150101

Lowest manufacturing  
cost



# AD\_HOC REQUEST

Input

Output

## 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

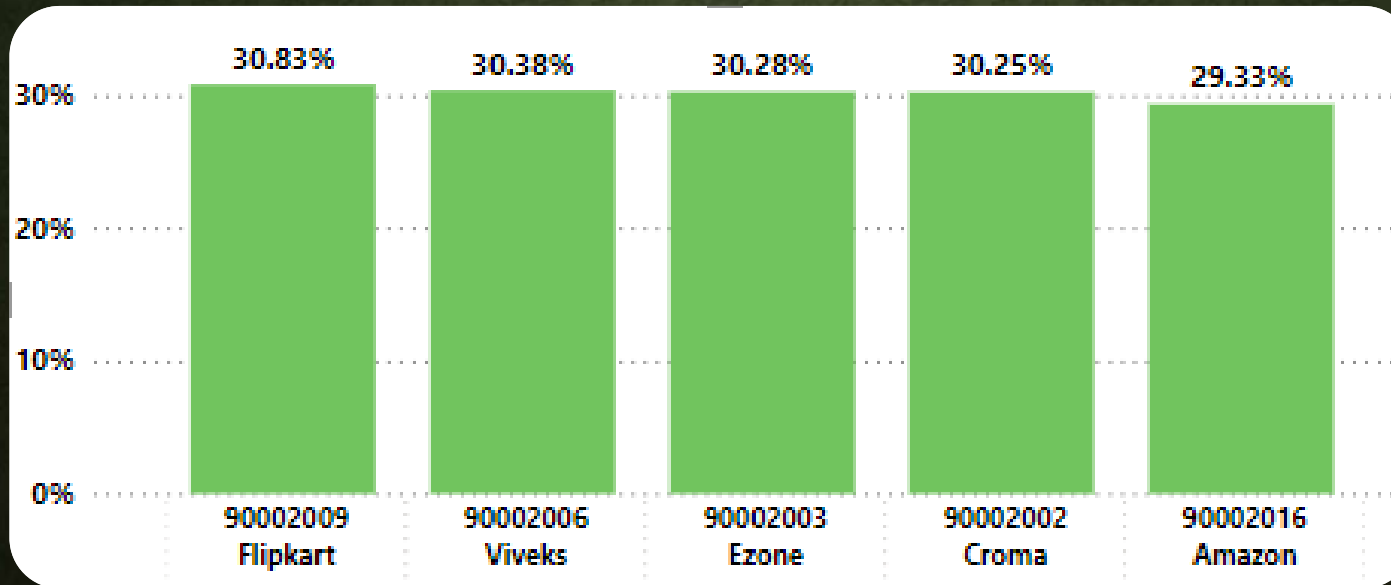


	customer_code	customer	Avg_pre_invoice_discount_pct
▶	90002009	Flipkart	0.30830
	90002006	Viveks	0.30380
	90002003	Ezone	0.30280
	90002002	Croma	0.30250
	90002016	Amazon	0.29330



# INSIGHTS

Analyzing the Average pre invoice discount percentage , it shows that Flipkart and Viveks have highest and similar average pre invoice percentage with 30.83% and other 3 customers are also having almost equal .







# AD\_HOC REQUEST

Input

## 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 take strategic decisions. The final report contains these

columns:

Month

Year

Gross sales Amount



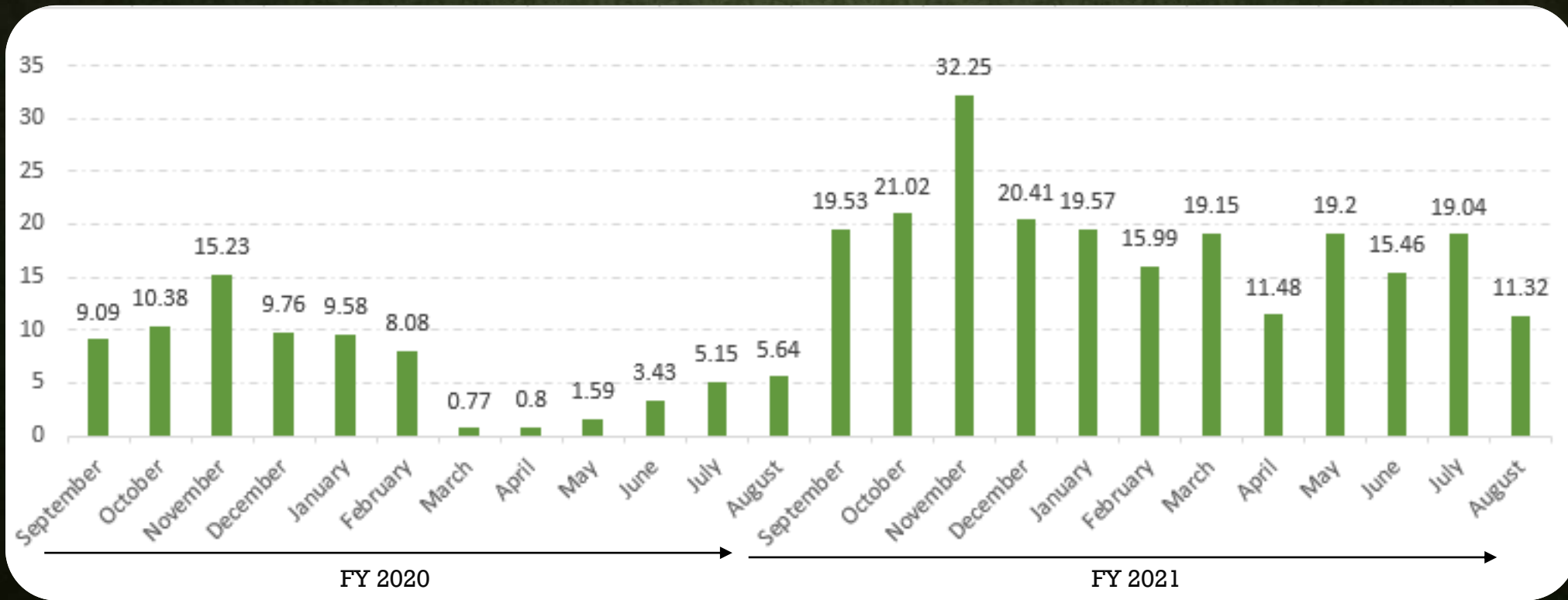
Output

month_name	Year	Gross_sales_amount_in_millions
September	2019	9.09
October	2019	10.38
November	2019	15.23
December	2019	9.76
January	2020	9.58
February	2020	8.08
March	2020	0.77
April	2020	0.8
May	2020	1.59
June	2020	3.43
July	2020	5.15
August	2020	5.64
September	2020	19.53
October	2020	21.02
November	2020	32.25
December	2020	20.41
January	2021	19.57
February	2021	15.99
March	2021	19.15
April	2021	11.48
May	2021	19.2
June	2021	15.46
July	2021	19.04
August	2021	11.32



# INSIGHTS

In November of FY 2021 there is highest gross sales amount with \$32.25M and March 2020 shows lowest sales amount with only \$0.77M but after August 2020, with starting of FY 2021 in September there is drastic increase in sales which is good for company.





# AD\_HOC REQUEST

Input

Output

## REQUEST :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



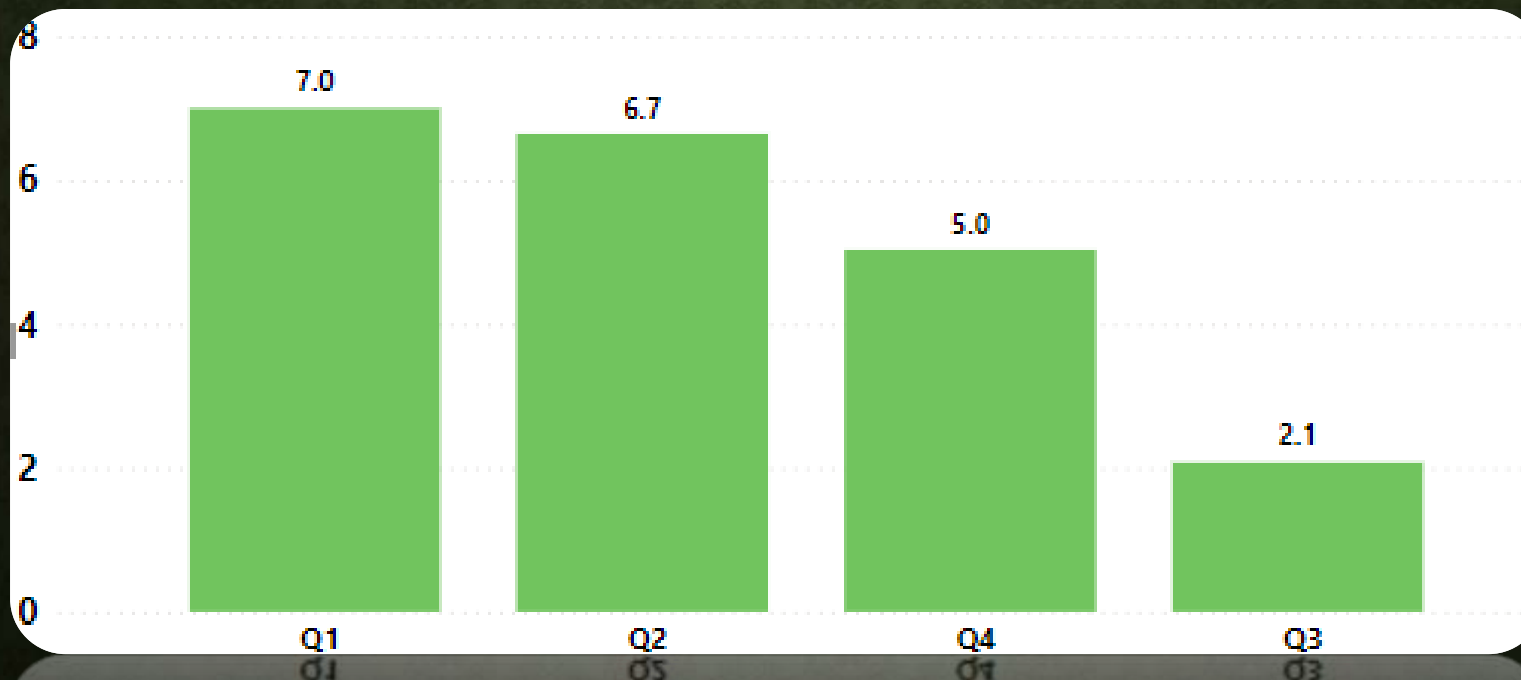
	quarter	total_sold_quantity_in_millions
▶	Q1	7.01
	Q2	6.65
	Q4	5.04
	Q3	2.08





# INSIGHTS

- \* In 2020 Quarter 1 has maximum total sold quantity with \$7.0 million which shows that in September, October and November there is highest sales because Financial Year of company starts from September.
- \* The point of concern is sales of Quarter 3 which shows lowest sold quantity
- \* Marketing and Sales department should focus on Sales of Q3 know the exact reason behind this downfall of sales.





# AD\_HOC REQUEST

Input

Output

## REQUEST :9

Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution?

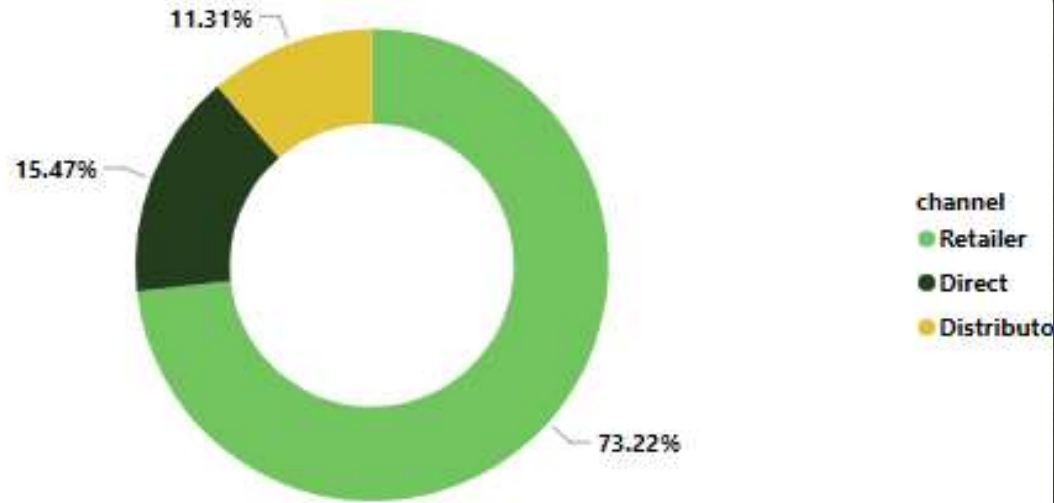
The final output contains these fields,  
channel  
gross\_sales\_mln percentage



	channel	gross_sales_in_million	Percentage
▶	Retailer	1924.17	73.22
	Direct	406.69	15.47
	Distributor	297.18	11.31



# INSIGHTS



Atliq Hardware company is selling its product through three channels i.e., Retailer, Direct , Distributor and in 2021 Retailer brings the highest gross sales with 1924.17M and is contributing about 73.22% of overall gross sales of 2021 which shows that this channel is more beneficial for company as compared to other channel .

\* As Distributor channel is contributing only 11.31% which is point of concern , the Distribution department should focus on this and know the exact reason behind lowest gross sales.





# AD\_HOC REQUEST

Input

## 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



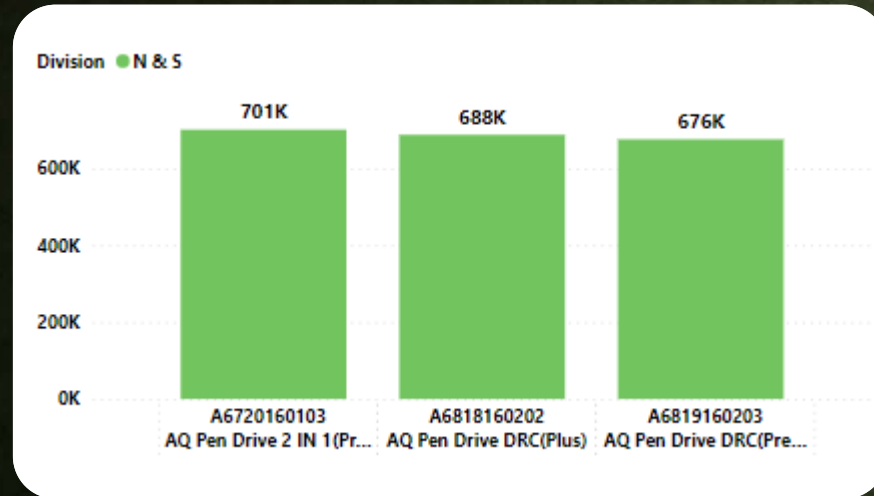
Output

	division	product_code	product	total_sold_quantity	rank_order
▶	N & S	A6720160103	AQ Pen Drive 2 IN 1(Premium)	701373	1
	N & S	A6818160202	AQ Pen Drive DRC(Plus)	688003	2
	N & S	A6819160203	AQ Pen Drive DRC(Premium)	676245	3
	P & A	A2319150302	AQ Gamers Ms(Standard 2)	428498	1
	P & A	A2520150501	AQ Maxima Ms(Standard 1)	419865	2
	P & A	A2520150504	AQ Maxima Ms(Plus 2)	419471	3
	PC	A4218110202	AQ Digit(Standard Blue)	17434	1
	PC	A4319110306	AQ Velocity(Plus Red)	17280	2
	PC	A4218110208	AQ Digit(Premium Misty Green)	17275	3

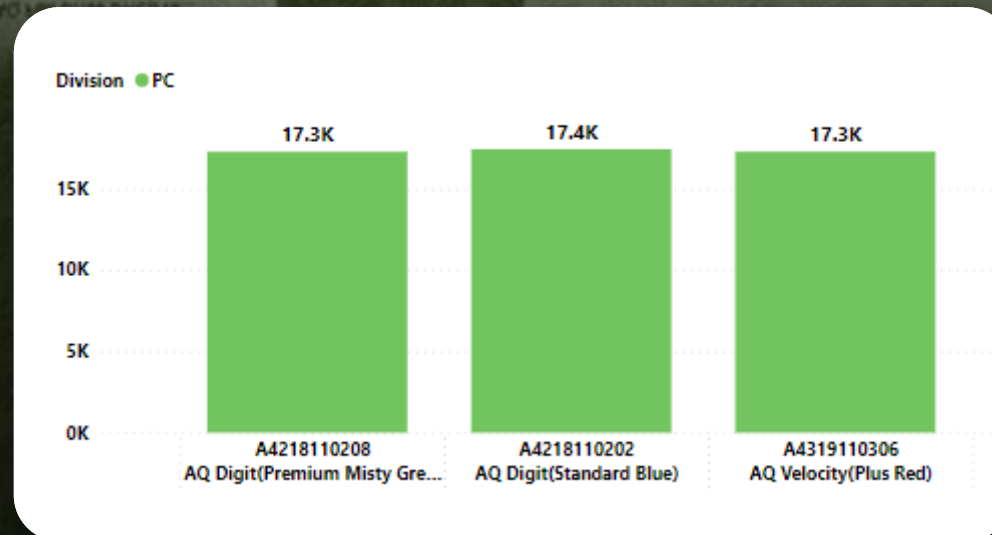
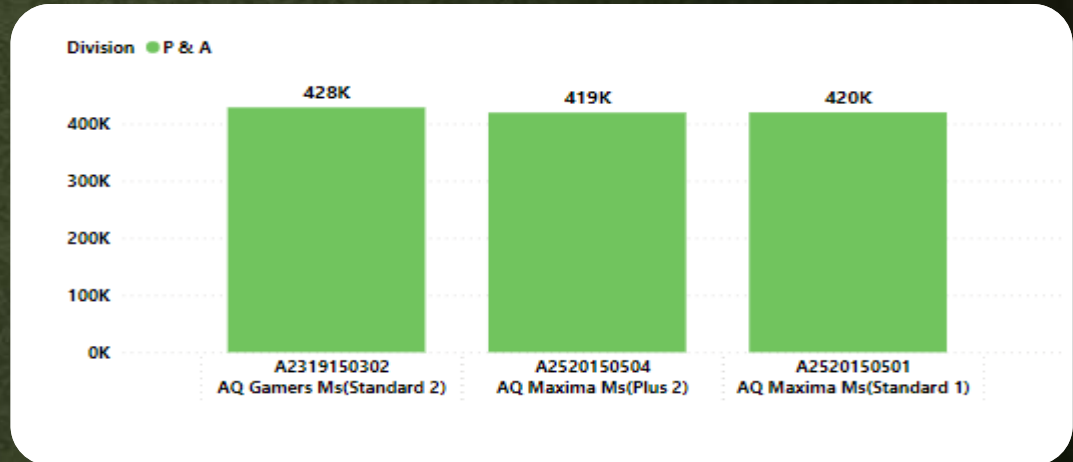


# INSIGHTS

In 2021 top 3 selling product in N & S were pen drive which were about 7 lakhs in quantity



In 2021 top 3 selling product in P & A were mouse which were about 4 lakhs in quantity



In 2021 top 3 selling product in PC were personal laptop which were about 17K in quantity



# ATLIQ HARDWARES



# THANK YOU



## SQL PROJECT CHALLENGE



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