



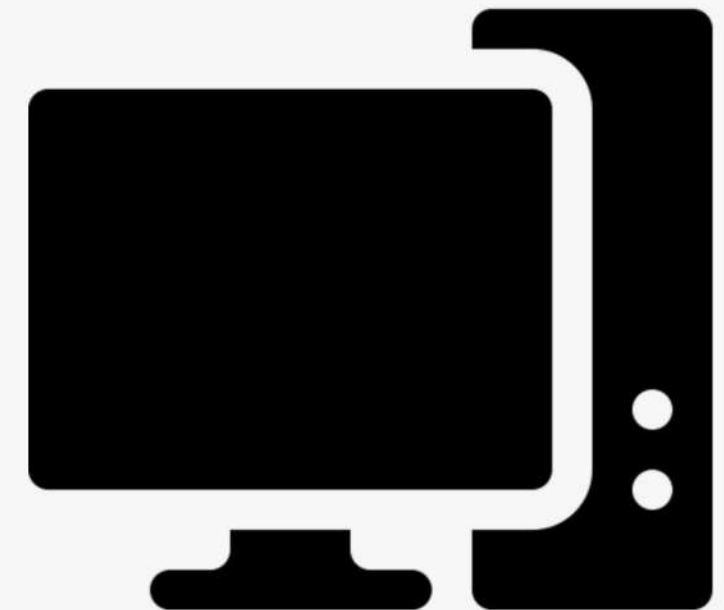
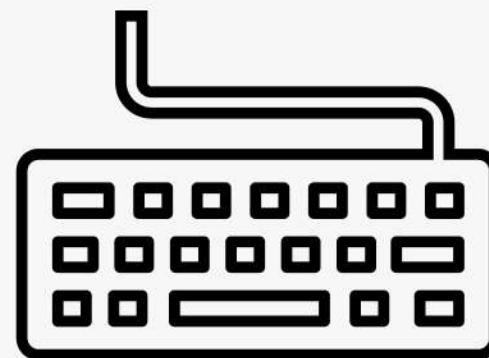
# Consumer Goods Ad-hoc Insights

Presented by Himanshu Yaduvanshi



# ATLIQ HARDWARES

Atliq Hardwares (an Imaginary company) is a leading electronics company with a global footprint . It manufacturer and sells hardware components like mouse, keyboard , PC etc to customers across the world.



# PROBLEM STATEMENT

AtliQ Hardwares has noticed that they lack sufficient insights for quick and informed decision-making at the top management level. They have recognized the power of data and want to harness it to their advantage. They have provided 10 ad-hoc requests and asked us to analyze them using SQL, then present the results as visuals to the top management.



# APPROACH

They provided us 10 Ad-hoc requests and asked us to solve using SQL query, convert SQL output into visualization and presents the insights to Top level management.





# QUES. 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



## QUES. 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

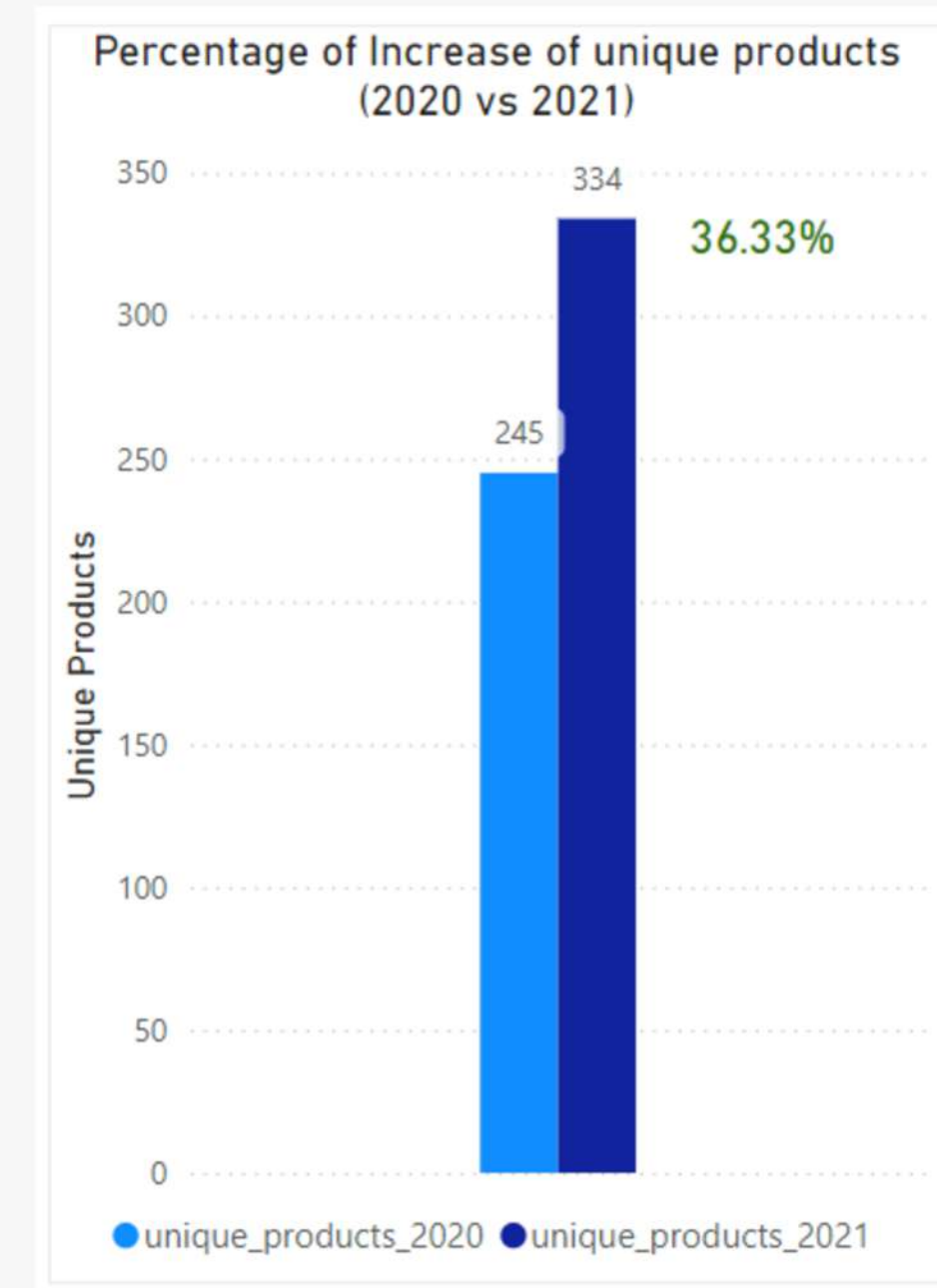
percentage\_chg

### OUTPUT:

unique_products_2020	unique_products_2021	percentage_change
245	334	36.33



The production of unique products at AtliQ Hardware saw a remarkable 36.33% increase from 2020 to 2021, growing from 245 to 334 products. This surge reflects strong growth potential and could significantly boost profitability.





## QUES. 3

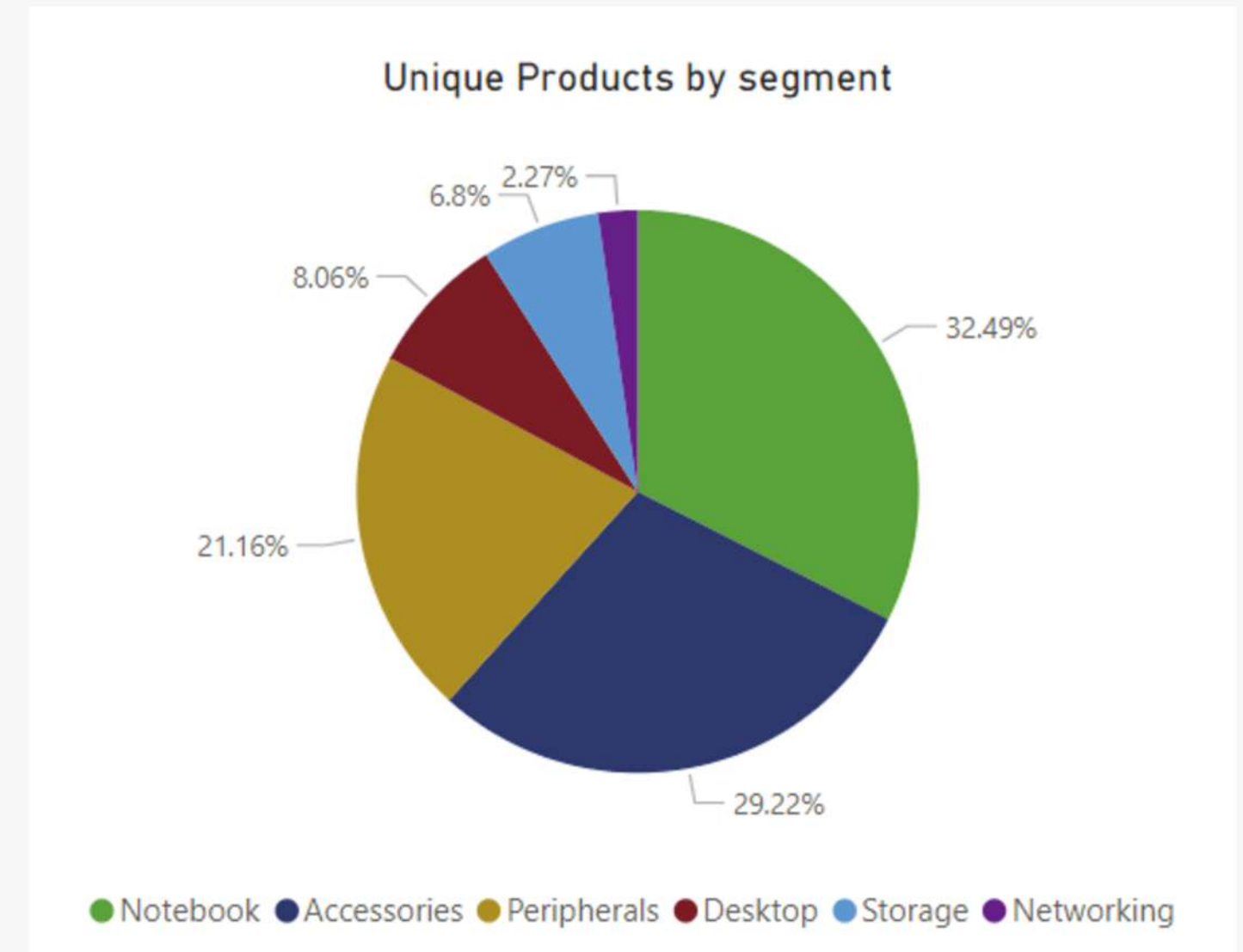
Provide a report with all the unique product counts for each segment and sort them in descending order of product counts. The final output contains 2 fields,

segment  
product\_count

### OUTPUT:

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

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



The pie chart shows the distribution of unique products at AtliQ Hardware across six segments. Notebooks lead at 32.49%, followed by Accessories at 29.22% and Peripherals at 21.16%. Smaller shares include Desktop (8.06%), Storage (6.8%), and Networking (2.27%). This indicates that Notebooks and Accessories are the main drivers, while Networking presents an opportunity for growth.



## QUES. 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

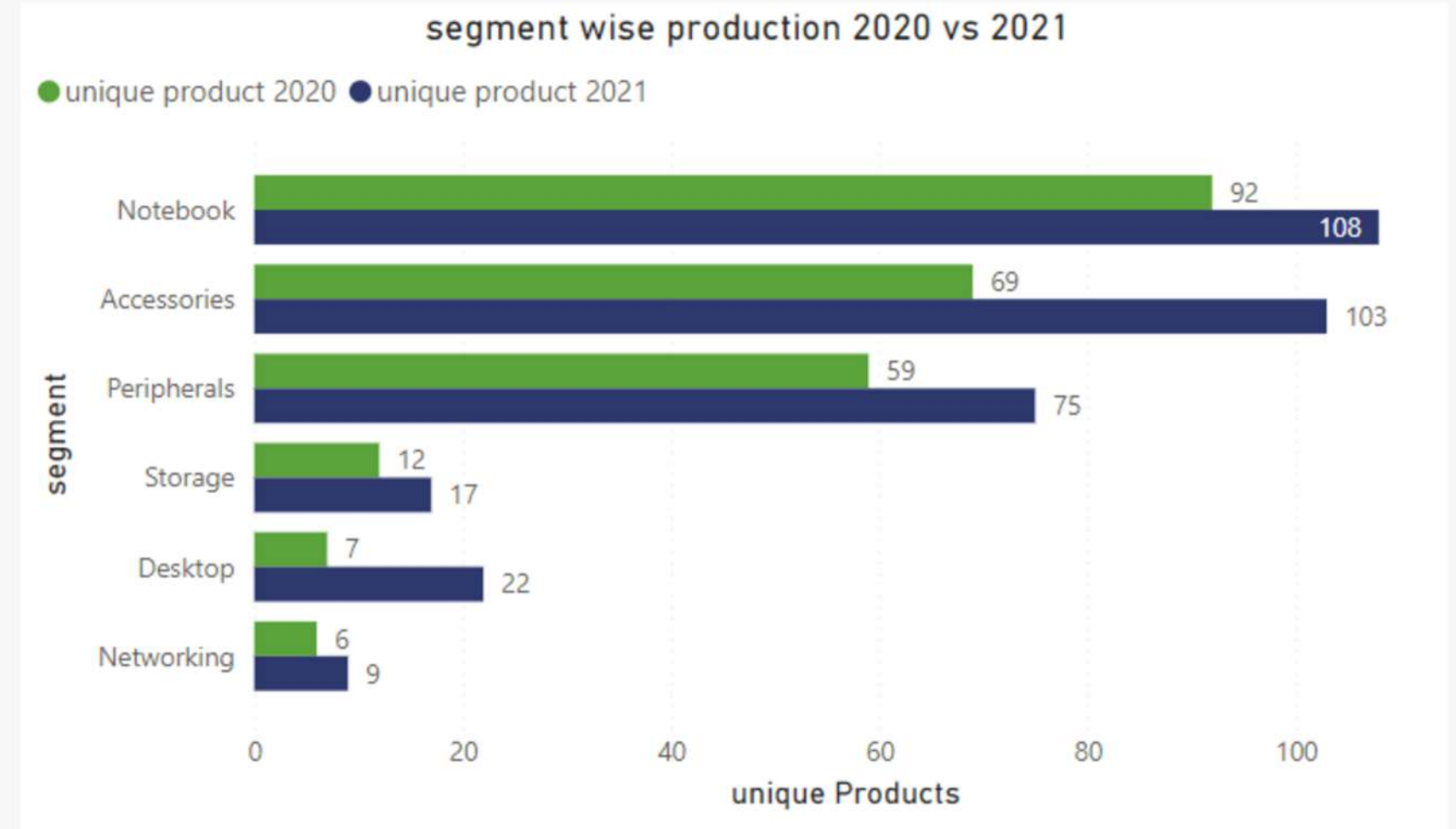
product\_count\_2021

difference

### OUTPUT:

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

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



- Production levels increased across all segments from 2020 to 2021, indicating a broad expansion in product diversity and manufacturing efforts.
- The Accessories segment had the highest growth, with a significant rise in unique products from 2020 to 2021..
- Storage and Networking segments had modest production increases, showing slower growth than other segments.

## QUES. 5

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

product\_code

product

manufacturing\_cost

### OUTPUT:

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



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



### Personal Desktop

AQ HOME Allin1 Gen 2

**240.54**

### Mouse

AQ Master wired x1 Ms

**0.89**

- The product having highest manufacturing cost is AQ HOME Alin 1 Gen 2 which is a Desktop and the product with least manufacturing cost is AQ Master wired x1 Ms which is a Mouse.
- AtliQ Hardwares must focus on reducing the manufacturing cost of AQ HOME Alin1 Gen 2 in order to maximize their profits.

## QUES. 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

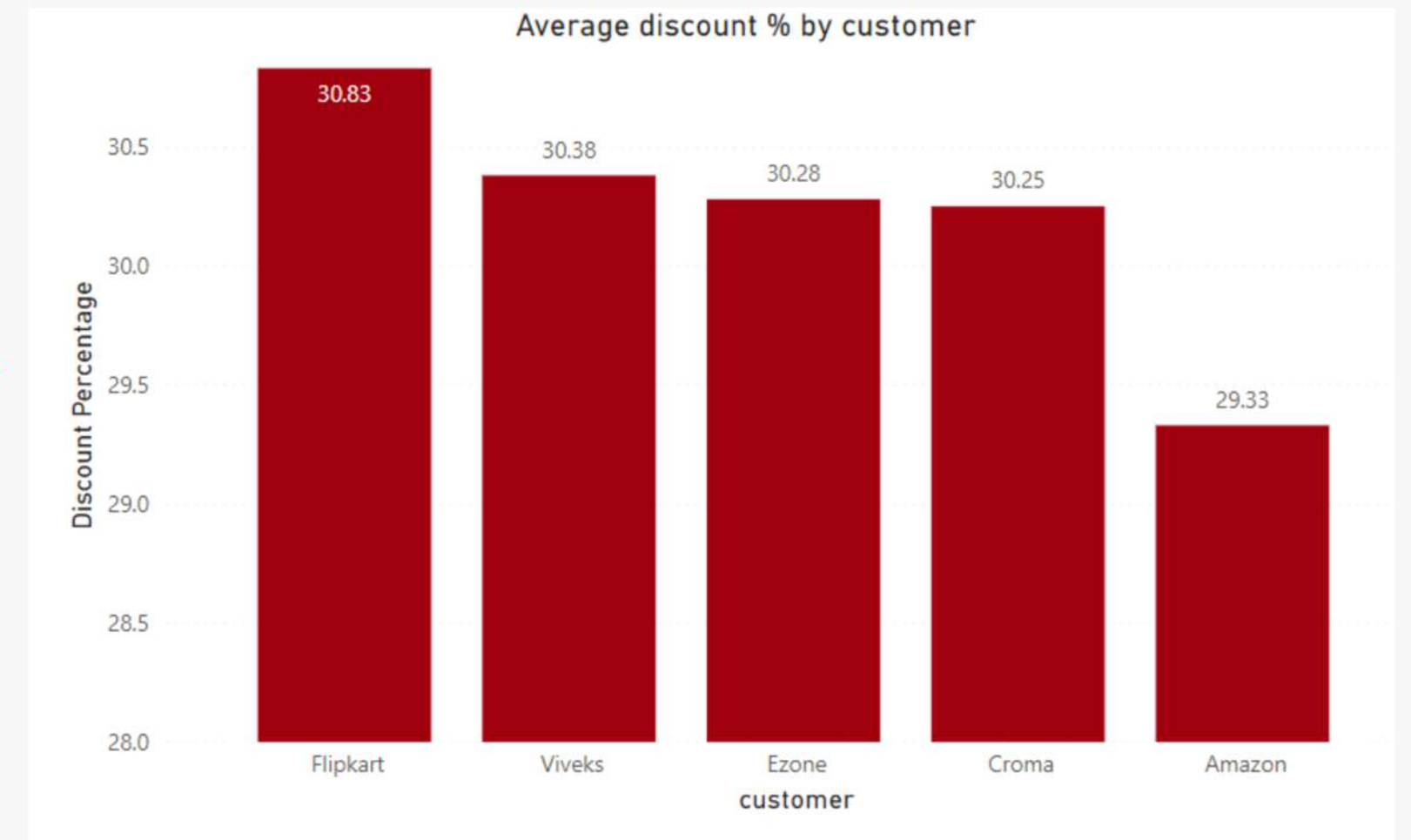
customer

average\_discount\_percentage

### OUTPUT:

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

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



The top 5 customers in India receiving the highest average pre-invoice discount percentage in 2021 were Flipkart, Viveks, Ezone, Croma, and Amazon. Among these, Flipkart received the highest pre-invoice discount, while Amazon received the lowest.



## QUES. 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	year	gross_sales_amount
September	2019	9.09M
October	2019	10.38M
November	2019	15.23M
December	2019	9.76M
January	2020	9.58M
February	2020	8.08M
March	2020	0.77M
April	2020	0.80M
May	2020	1.59M
June	2020	3.43M
July	2020	5.15M
August	2020	5.64M
September	2020	19.53M
October	2020	21.02M
November	2020	32.25M
December	2020	20.41M
January	2021	19.57M
February	2021	15.99M
March	2021	19.15M
April	2021	11.48M
May	2021	19.20M
June	2021	15.46M
July	2021	19.04M
August	2021	11.32M

month	year	gross_sales_amount
September	2019	9.09M
October	2019	10.38M
November	2019	15.23M
December	2019	9.76M
January	2020	9.58M
February	2020	8.08M
March	2020	0.77M
April	2020	0.80M
May	2020	1.59M
June	2020	3.43M
July	2020	5.15M
August	2020	5.64M
September	2020	19.53M
October	2020	21.02M
November	2020	32.25M
December	2020	20.41M
January	2021	19.57M
February	2021	15.99M
March	2021	19.15M
April	2021	11.48M
May	2021	19.20M
June	2021	15.46M
July	2021	19.04M
August	2021	11.32M



- The line chart shows comparison between the gross sales amount obtained in the years 2019, 2020, 2021.
- The highest gross sales was generated during November 2020 and the lowest was in march 2020, which could be due to the significant impact of COVID-19.



## QUES. 8

In which quarter of 2020, got the maximum total\_sold\_quantity? The final output contains these fields sorted by the total\_sold\_quantity,

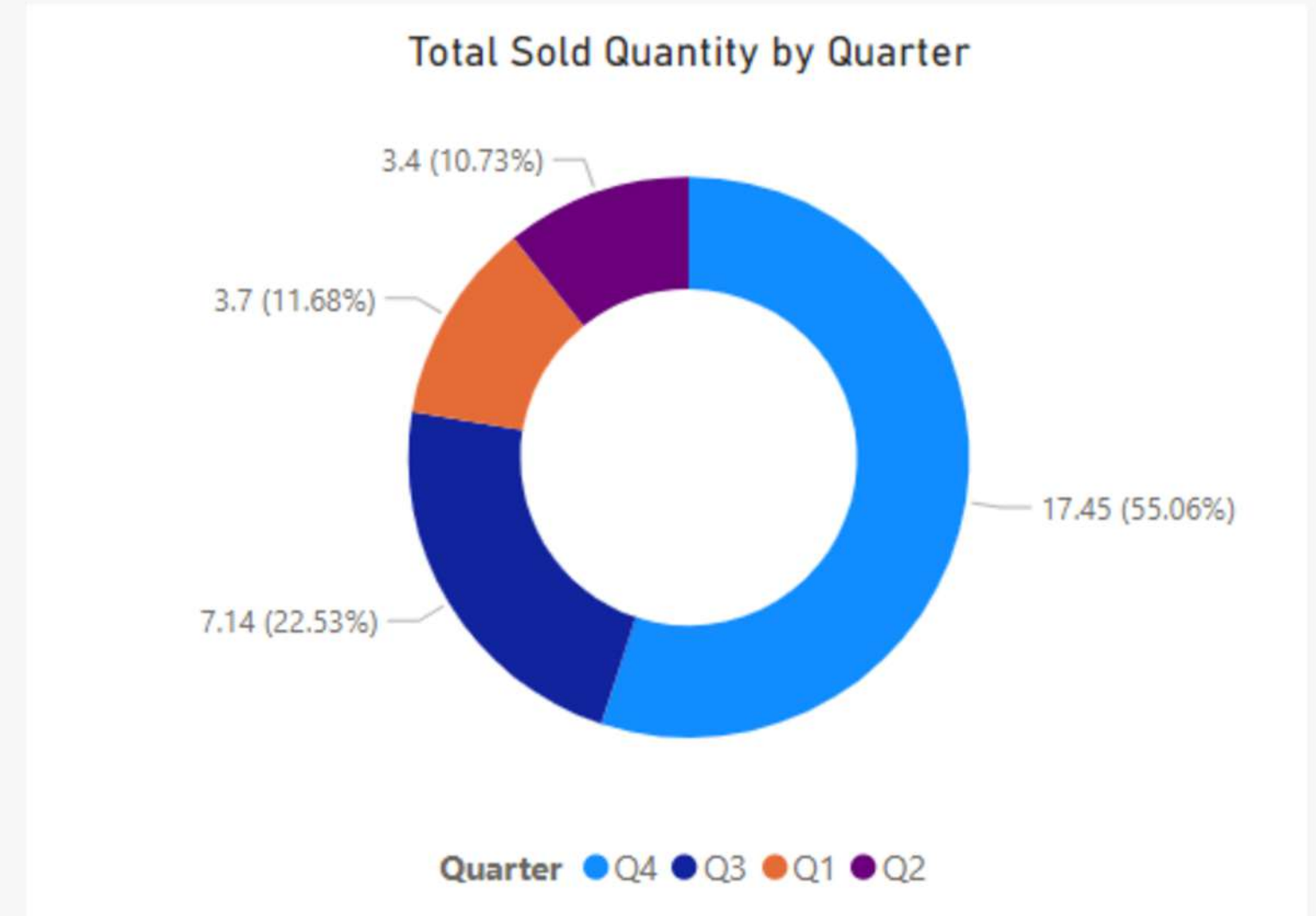
Quarter  
total\_sold\_quantity

**OUTPUT:**

Quarter	total_sold_quantity_in_mln
Q1	3.70
Q2	3.40
Q3	7.14
Q4	17.45



Quarter	total_sold_quantity_in_mln
Q1	3.70
Q2	3.40
Q3	7.14
Q4	17.45



AtliQ Technologies' fiscal year begins in September, making FY2020 run from September 2019 to August 2020. In FY2020, the highest sales were recorded in the fourth quarter (June, July, and August), while the lowest sales occurred in the second quarter (December, January, and February).

## QUES. 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

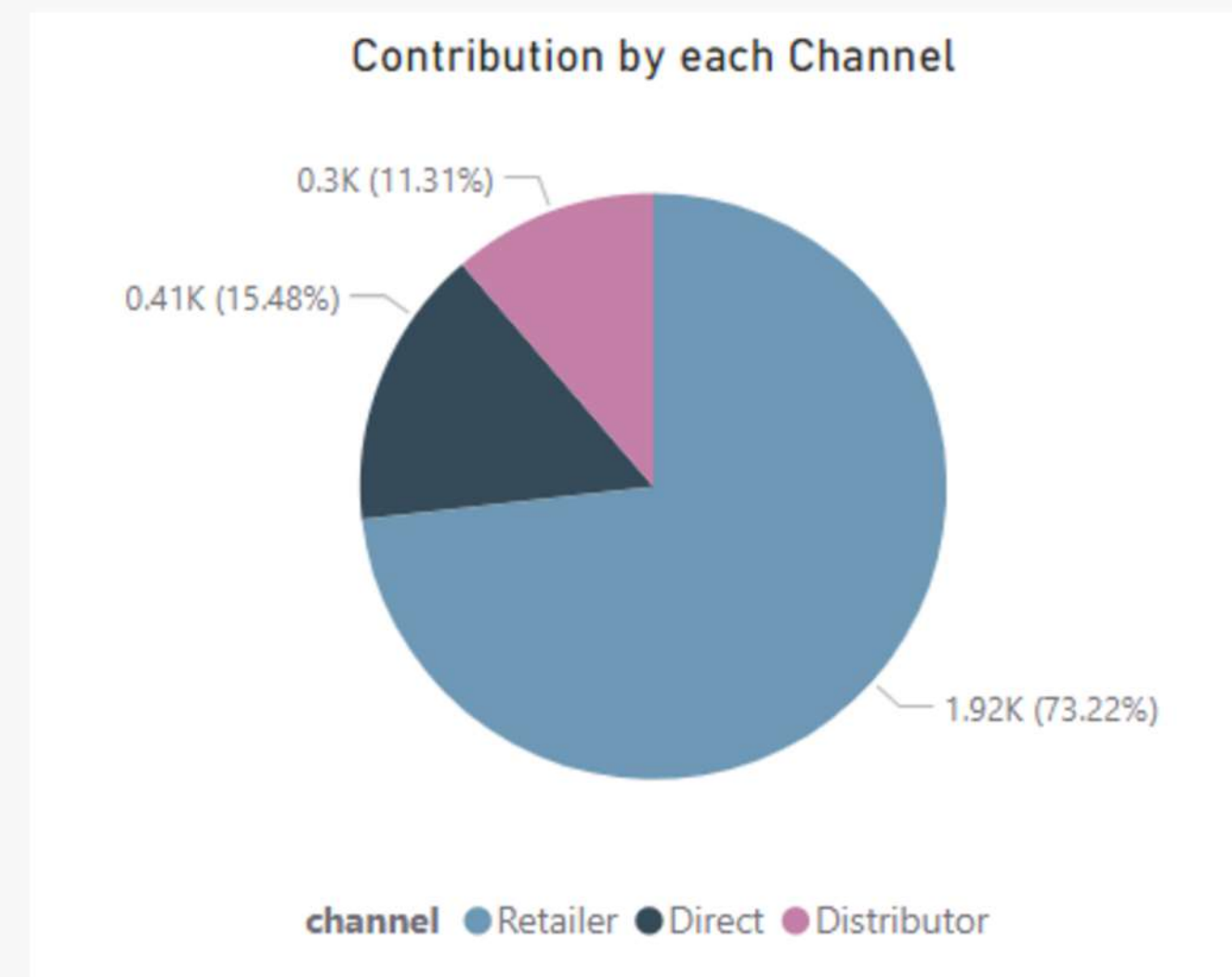
gross\_sales\_mln

percentage

### OUTPUT:

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

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



- The retailers contributed the most towards gross sales in the FY2021. It constitutes around 73.22% on the whole.
- The Distributors are the ones who contributed the least towards gross sales in the FY2021.



## QUES. 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	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

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



- The top performing product in the Network and Storage (N&S) division is AQ Pen Drive 2 IN 1 with total sales of 701273 in FY2021.
- The top performing product in the Peripherals and Accessories (P&A) division is AQ Gamers MS with total sales of 428298 in FY2021.
- The top performing product in the Personal Computer (PC) division is AQ Digit with total sales of 17434 in FY2021.

