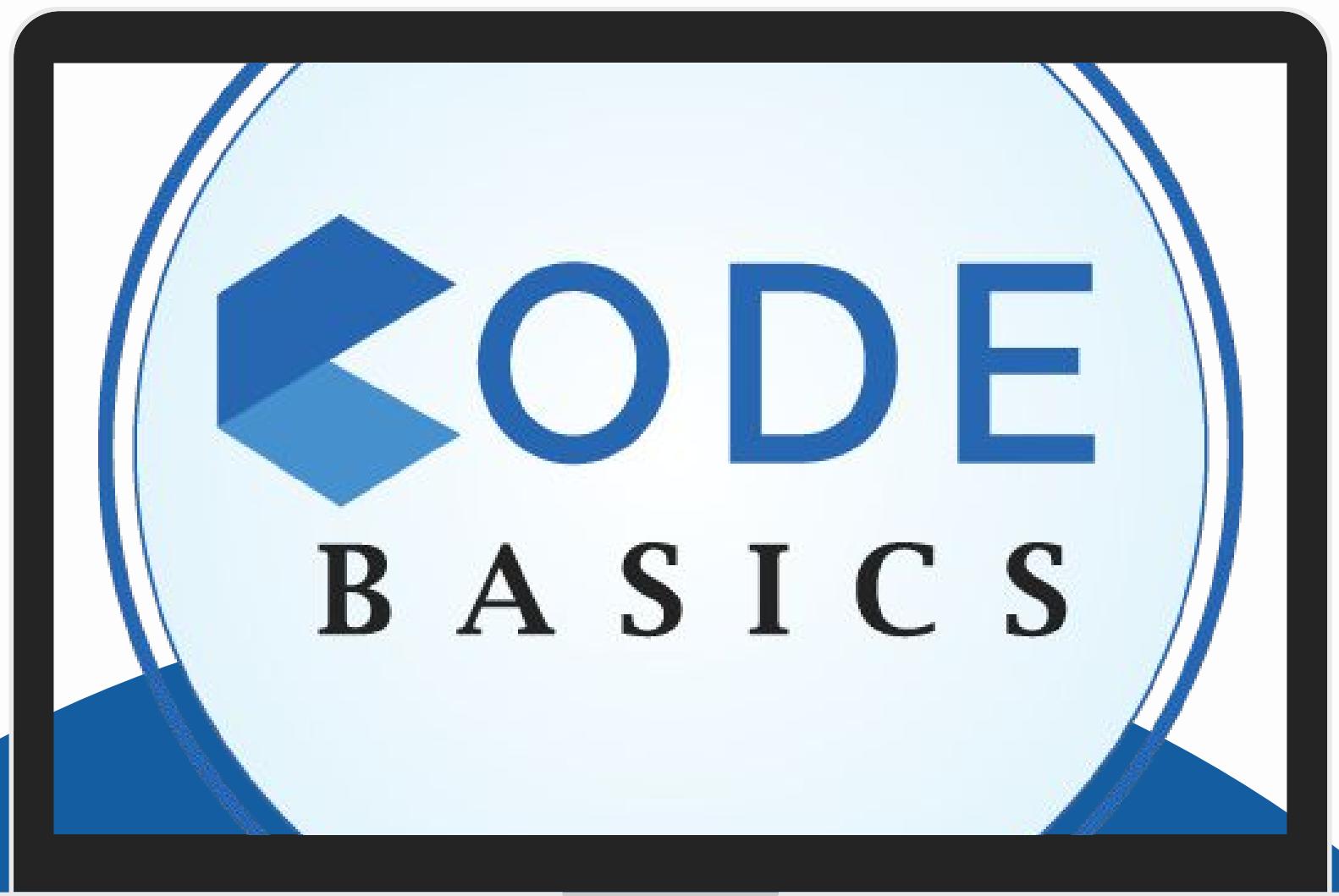




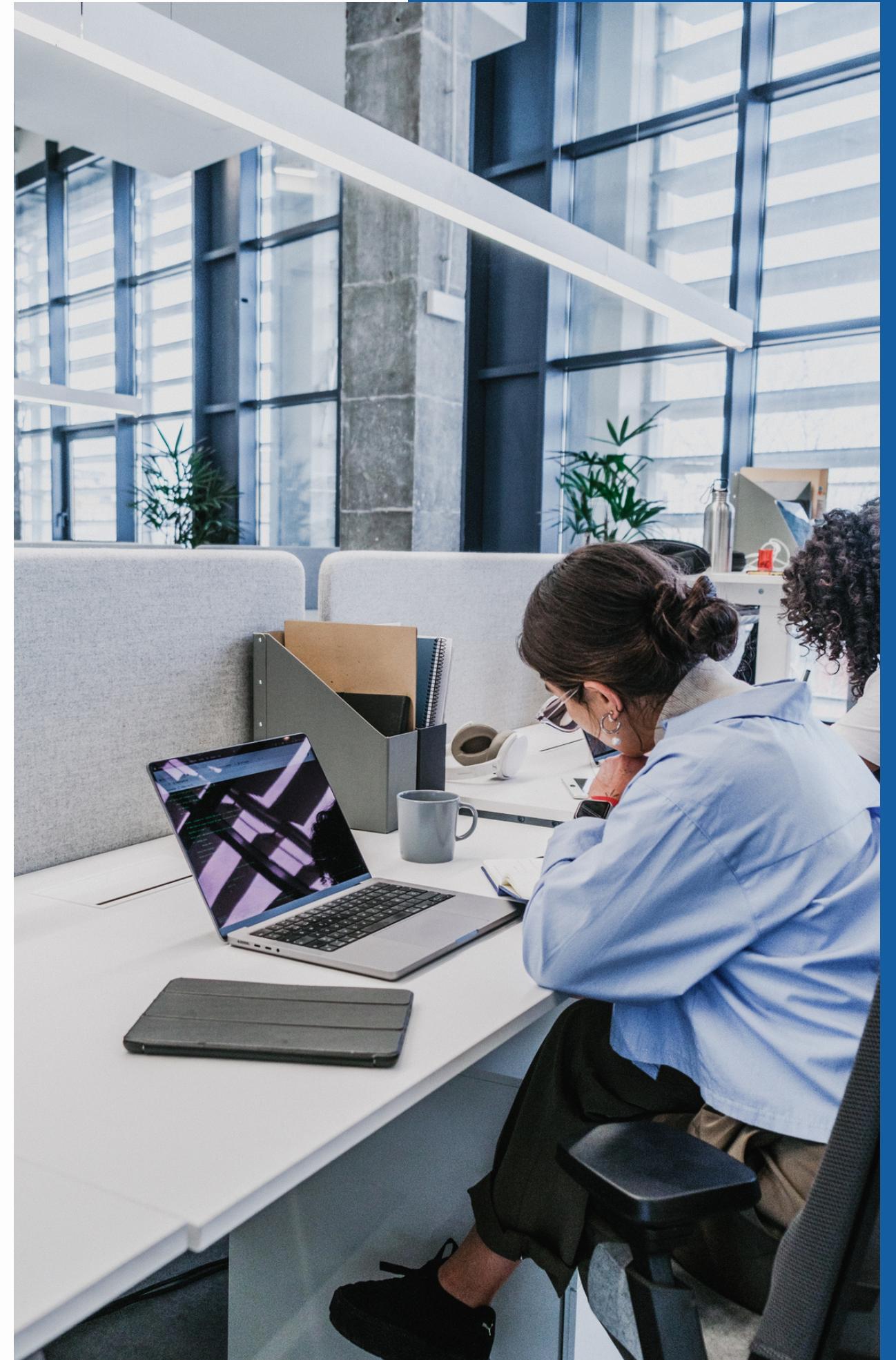
Consumer Goods Ad_Hoc Insights

By: Nishant Bahakar



Agenda

- ▶ Objectives
- ▶ Company Details
- ▶ Company's Market
- ▶ Data, Requests, and Tools
- ▶ AD_HOC Request





Objectives

AtliqHardware (imaginary company) is one of the major computer hardware manufacturers in India, with a strong presence in other nations



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

They want to expand their data analytics team by adding several junior data analysts.



Tony Sharma, their data analytics director wanted to hire someone who is good at both tech and soft skills. Hence, he decided to conduct a SQL challenge which will help him understand both the skills.

Company Details

Atliq Hardware is a computer hardware and accessory manufacturer

Atliq Hardware has 74 customers in 27 countries worldwide.
Along with Asia Pacific(ACPC) , Europe(EU), North America(NA) and Latin America.

Fiscal Year of AtliQ Hardwares

SEPTEMBER 2019 – AUGUST 2020

FY 2020

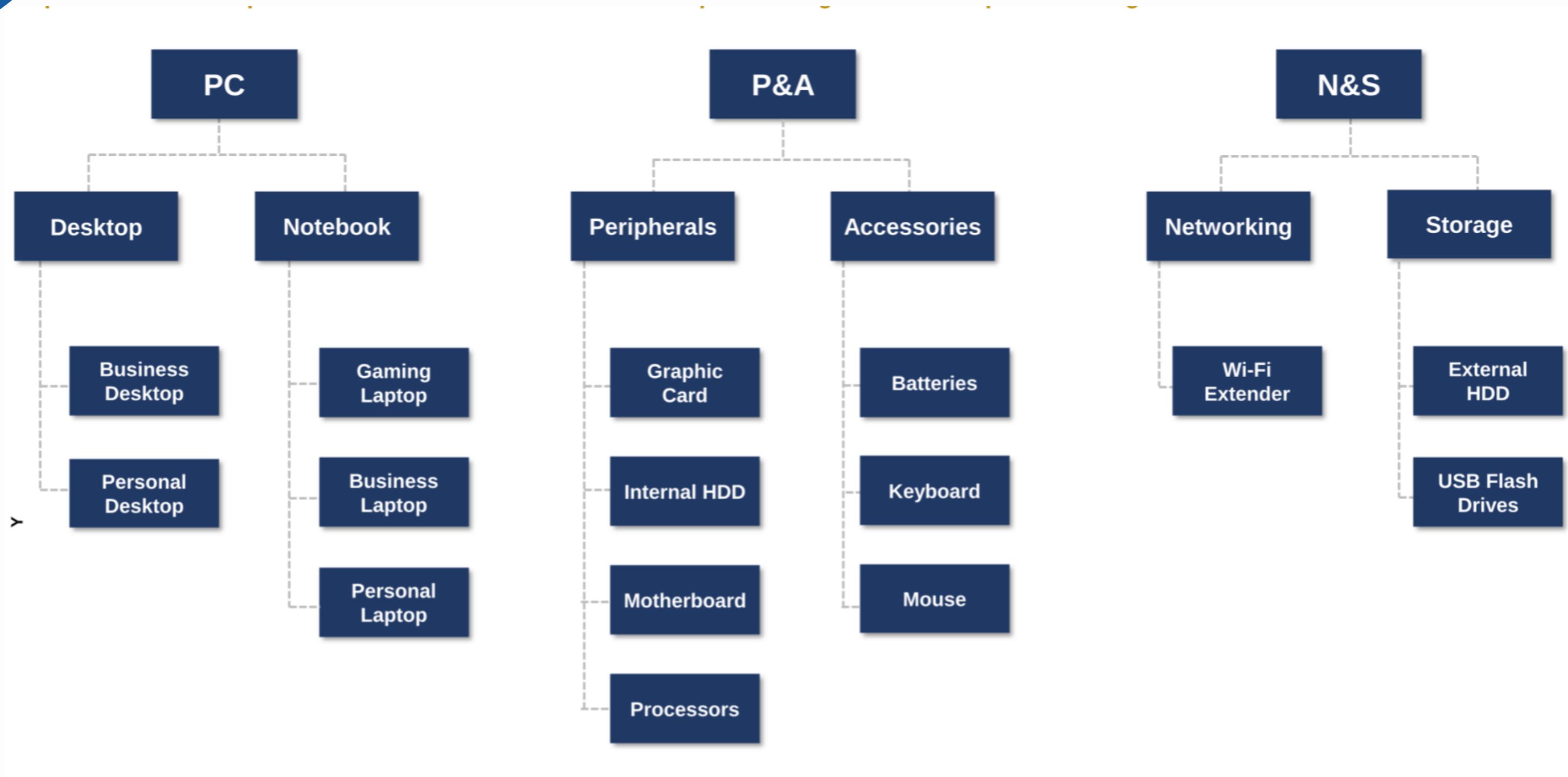
SEPTEMBER 2020 – AUGUST 2021

FY 2021

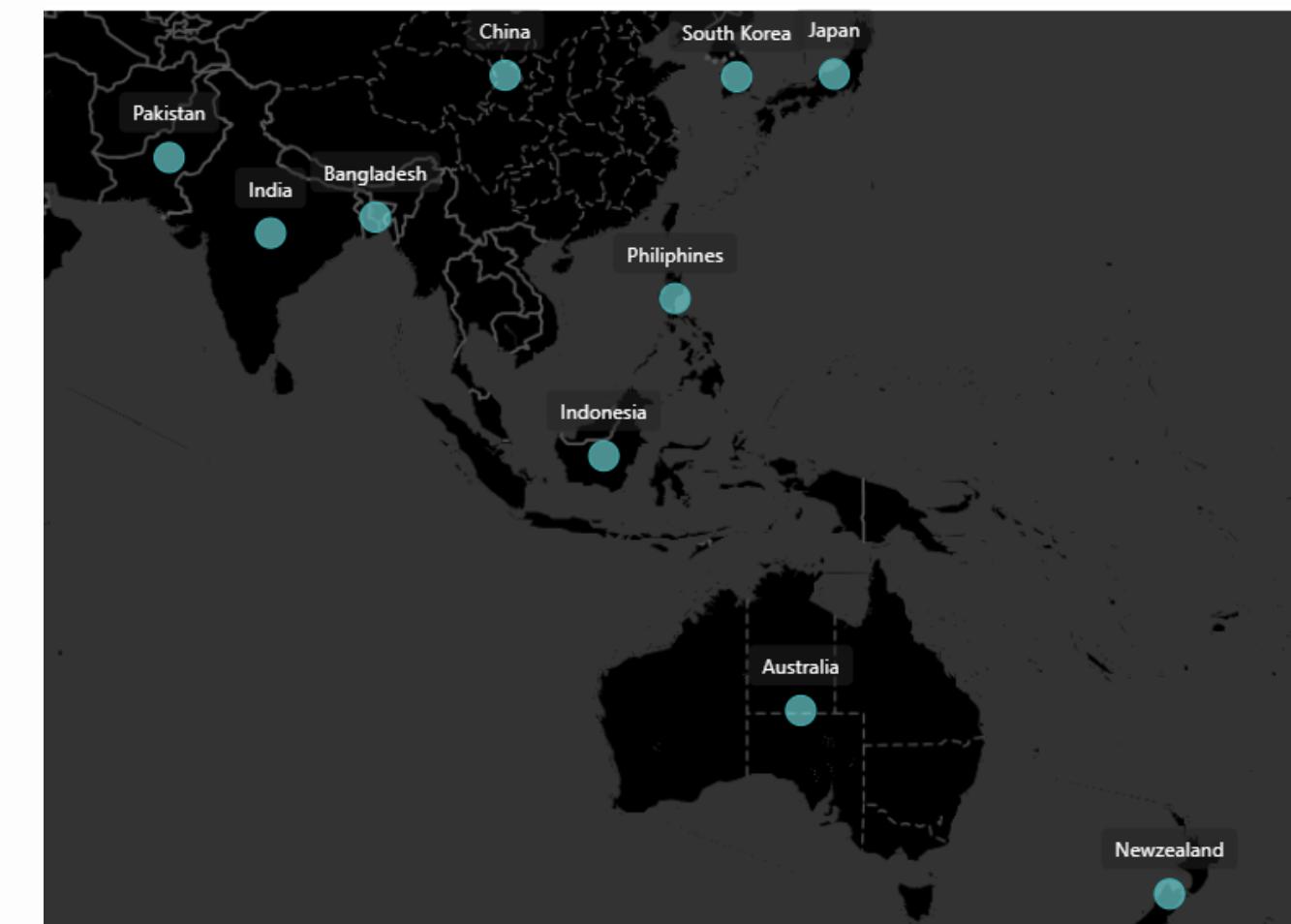
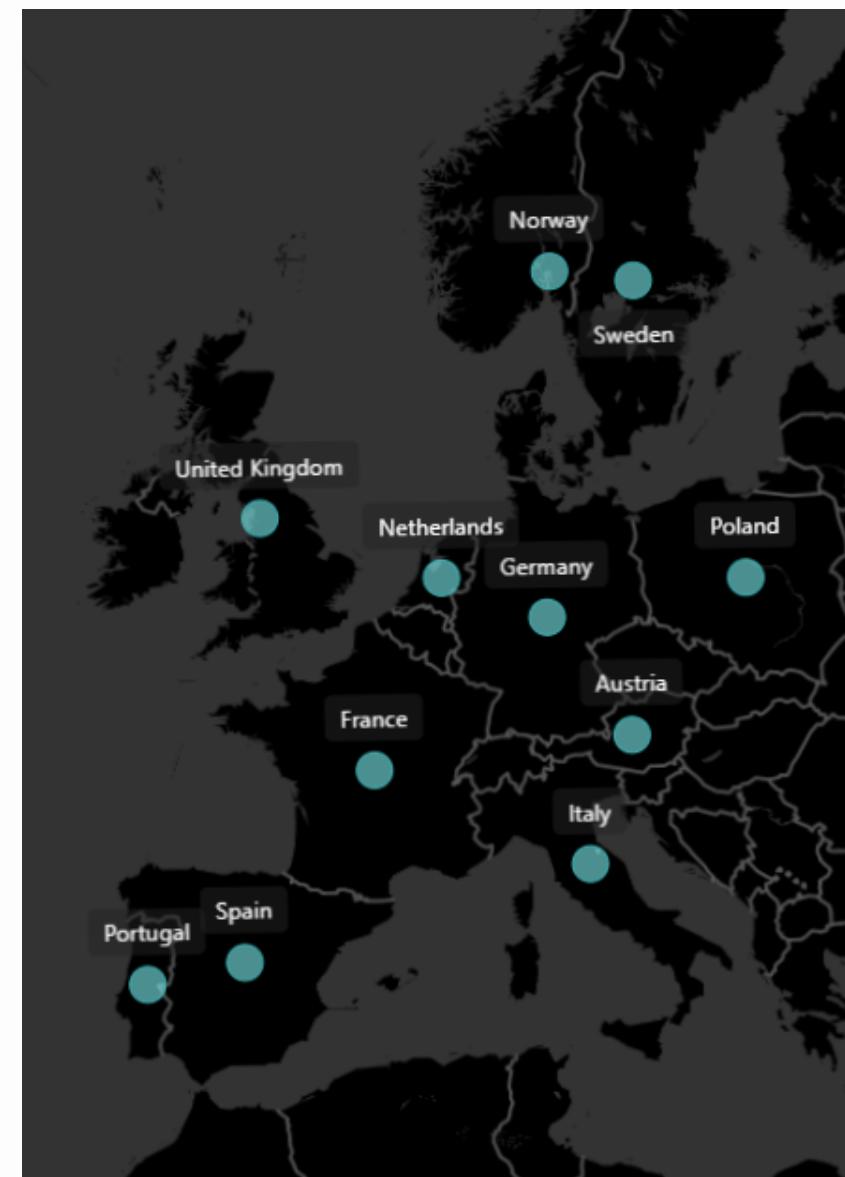
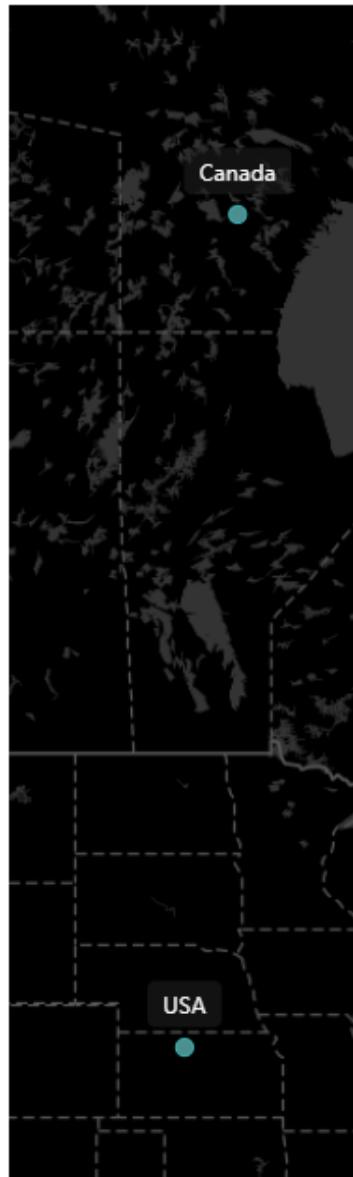




AtliQ Product Lines



Company Market



NA

LATAM

EU

APAC

Data, Requests, and Tools



Tools

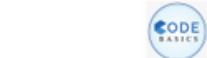


Power BI

Codebasics SQL Challenge

Requests:

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



AD_HOC REQUEST

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

market
Australia
Bangladesh
India
Indonesia
Japan
Newzealand
Philippines
South Korea

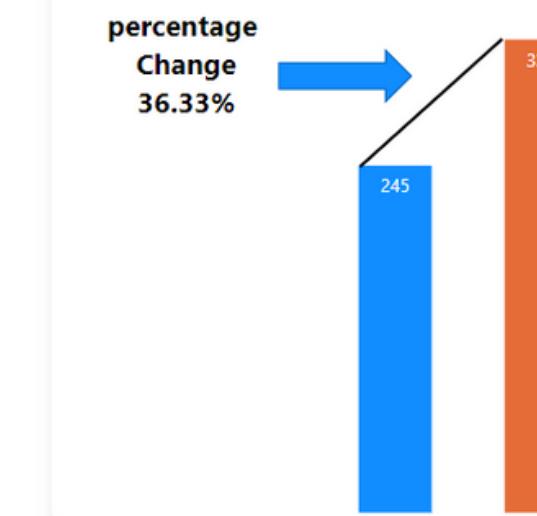
Atliq Exclusive's business presence in the APAC region



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

	unique_product_2020	unique_product_2021	percent_chg
▶	245	334	36.33

Top 5 Indian customers
with highest average discount
percentage for **FY 2021**



Insight:

- Demand and production both increased.

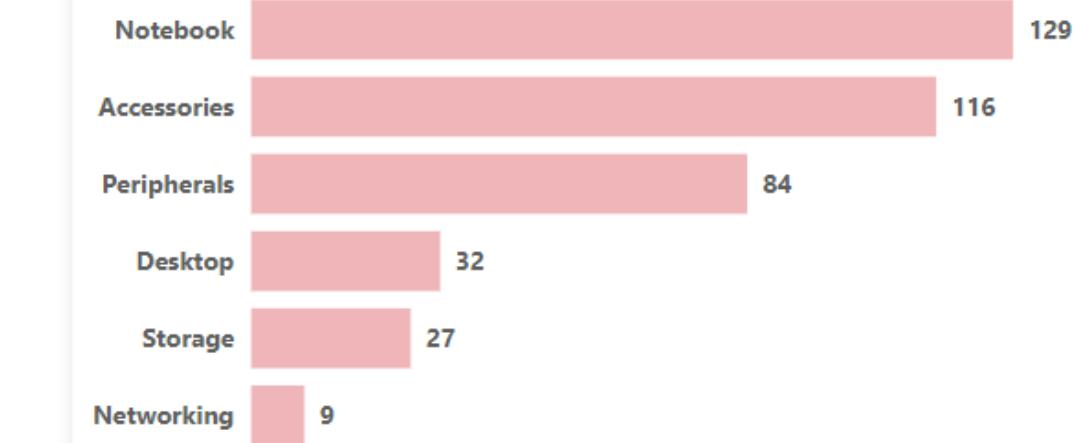
3. Provide a report with all the unique product counts for each segment and sort them in descending order of product counts. The final output contains 2 fields, segment product_count

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

Insight:

- **Segments: notebooks, accessories, and peripherals are showing significant manufacturing growth as compared to desktops, storage, and networking.**
- **Notebooks, accessories, and peripherals constitute 83% of the total manufactured product.**

Top 5 Indian customers with highest average discount percentage for FY 2021



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

	segment	product_cnt_2020	product_cnt_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

Top 5 Indian customers
with highest average discount
percentage for **FY 2021**

segment	unique_product_2020	unique_product_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

Insight:

- **Accessories had the largest increase in production.**
- **Storageandnetworking are experiencing slower production growth than other segments.**

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	240.54
	A2118150101	AQ Master wired x1 Ms	0.89

Insight:

- **Mouse: AQ Master wired x1 Ms (Variant:Standard1) has the lowest manufacturing cost.**
- **Personal Desktop: AQ Home Allin1 Gen2 (Variant:Plus3) has the highest manufacturing cost.**

Top 5 Indian customers
with highest average discount
percentage for FY 2021

\$240.54

Highest_manufacturing_cost

\$0.89

Lowest_manufacturing_cost

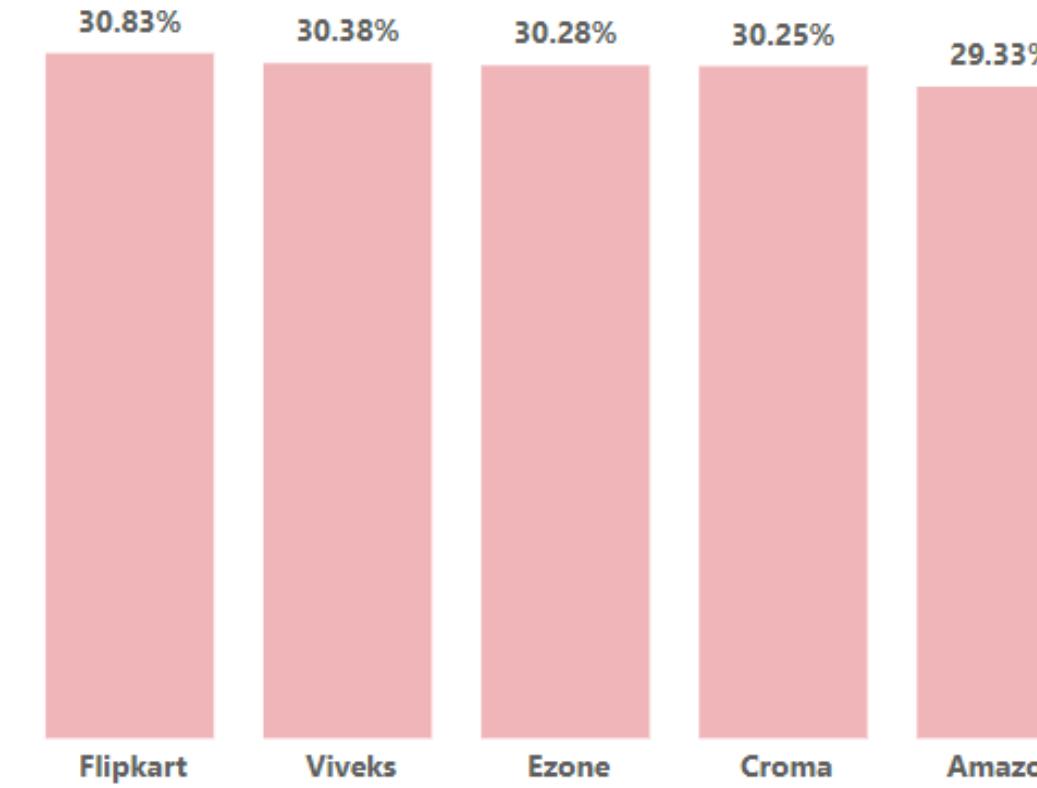
6. Generate a report which contains the top 5 customers who received an average high pre_invoice_discount_pct for the fiscal year 2021 and in the Indian market. The final output contains these fields, customer_code customer average_discount_percentage

	customer_code	customer	average_discount_percentage
▶	90002009	Flipkart	0.3083
	90002006	Viveks	0.3038
	90002003	Ezone	0.3028
	90002002	Croma	0.3025
	90002016	Amazon	0.2933

Insight:

- The largest average pre-invoice discount was given to Flipkart.
- The least average pre-invoice discount was given to Amazon

Top 5 Indian customers with highest average discount percentage for FY 2021



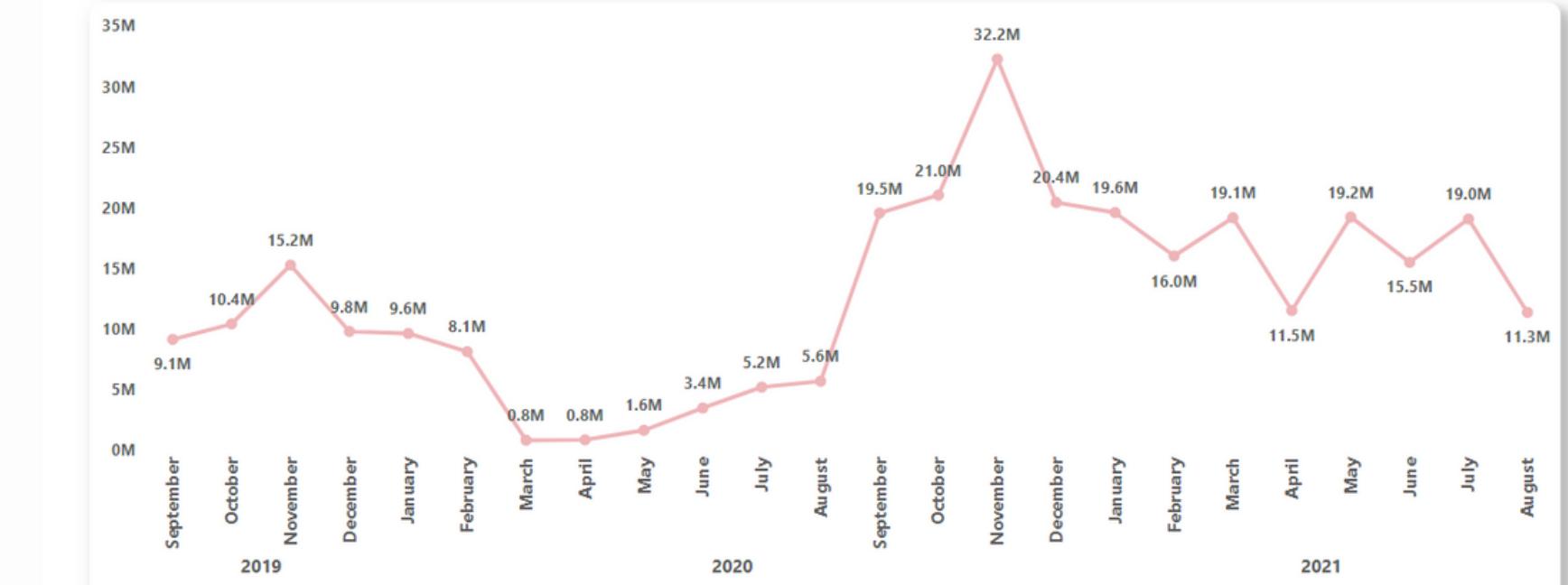
7. Get the complete report of the Gross sales amount for the customer "Atliq Exclusive" for each month. This analysis helps to get an idea of low and high-performing months and take strategic decisions. The final report contains these columns:

Month	Year	Gross_sales_Amount
September	2019	4.49625994
October	2019	5.13590252
November	2019	7.52289284
December	2019	4.83040488
January	2020	4.74060031
February	2020	3.99622801
March	2020	0.37877094
April	2020	0.39503534
May	2020	0.78381324
June	2020	1.69521671
July	2020	2.55115942
August	2020	2.78664834
September	2020	12.35351030
October	2020	13.21863680
November	2020	20.46499966
December	2020	12.94466000
January	2021	12.39939360
February	2021	10.12973622
March	2021	12.14406140
April	2021	7.31200026
May	2021	12.15022567
June	2021	9.82452171
July	2021	12.09234703
August	2021	7.17870782

Insight:

- The lowest Gross sales total for both fiscal years is in March(2020).**
- The highest Gross sales total for both fiscal years is in November (2020)**

Gross sales amount report for AtliQ Exclusive for each month



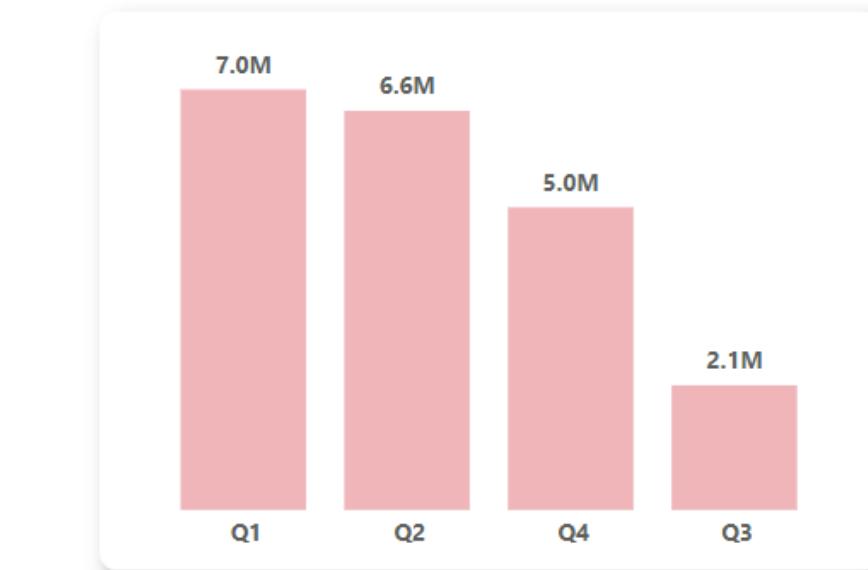
8. In which quarter of 2020, got the maximum total_sold_quantity? The final output contains these fields sorted by the total_sold_quantity, Quarter total_sold_quantity

	Quarter	total_sold_quantity
▶	Q1	7005619
	Q2	6649642
	Q4	5042541
	Q3	2075087

Insight:

- **Quarter 1 of FY2020 saw the most unitssold overall, while Quarter3 had the fewest.**
- **The highest and lowest overall soldquantity is in December and March.**

Top 3 highest-selling products by Division for FY 2021

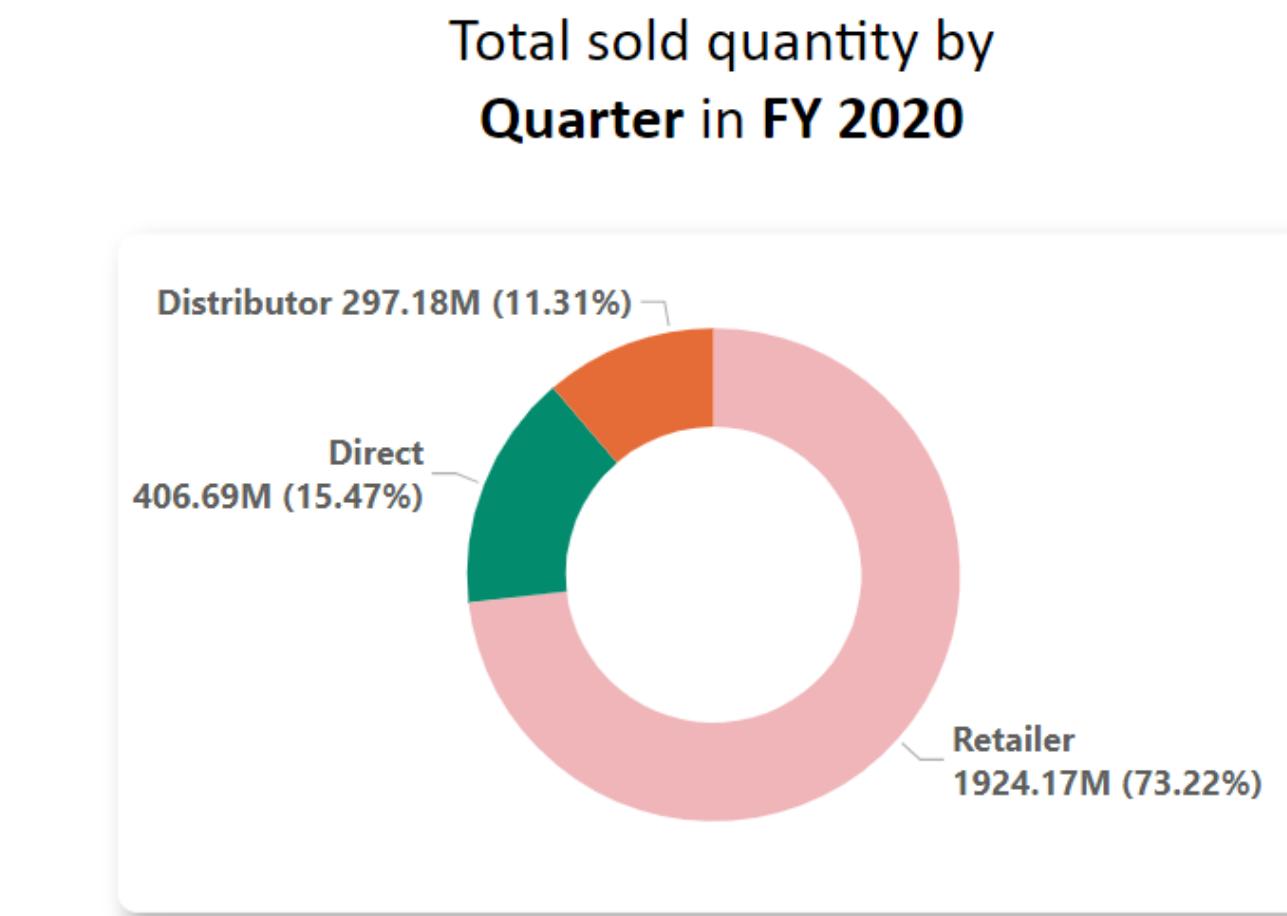


9. Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution? The final output contains these fields, channel gross_sales_mln percentage

	channel	gross_sales_mln	pct
▶	Retailer	1606.39 M	72.609464
	Direct	356.12 M	16.096765
	Distributor	249.86 M	11.293771

Insight:

- **Channel:"Retailer" helped bring maximum sales to the company with 73.22% as the contribution percentage.**
- **Channel:"Distributor"makes the least contribution at a percentage of 11.31%.**

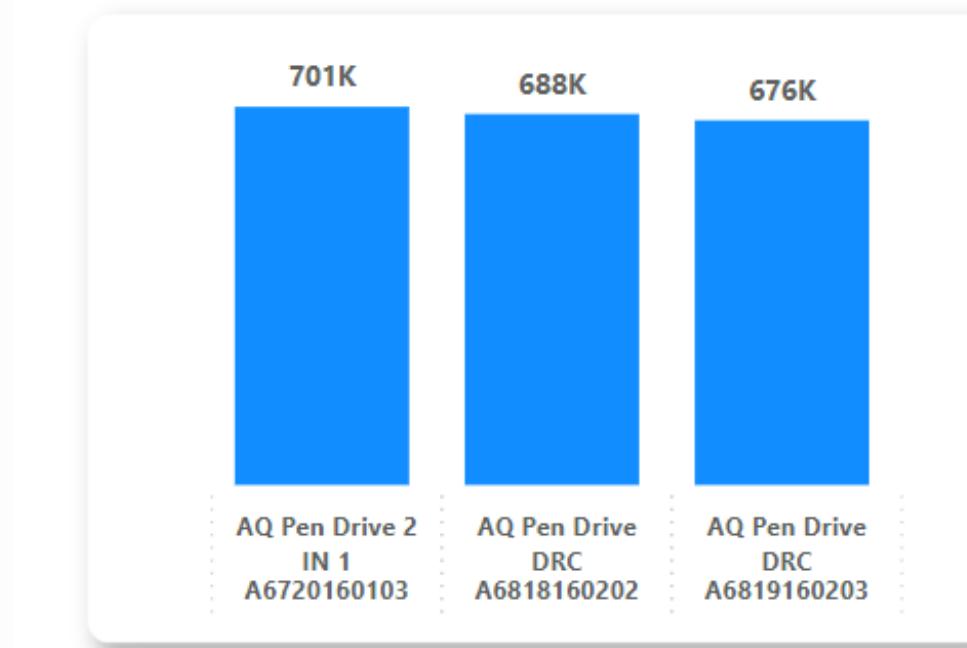


10. Get the Top 3 products in each division that have a high total_sold_quantity in the fiscal_year 2021? The final output contains these fields, division product_code product total_sold_quantity rank_order

	division	product_code	product	total_sold_quantity	product_rank
▶	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

Total sold quantity by
Quarter in FY 2020

N & S P & A PC



Insight:

- Every division has a product with different variants that appears twice in the top three products by division list

THANK YOU!



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