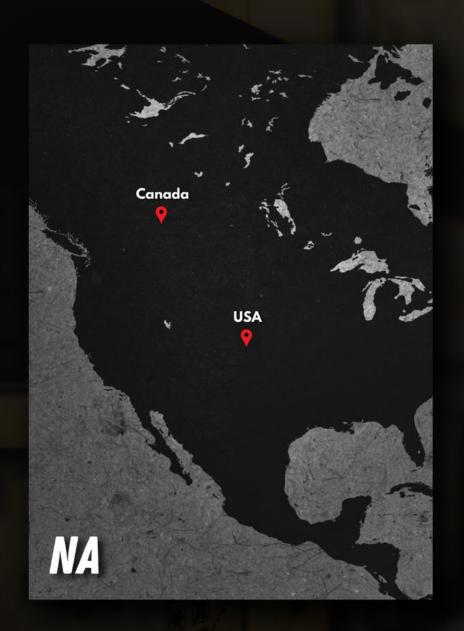


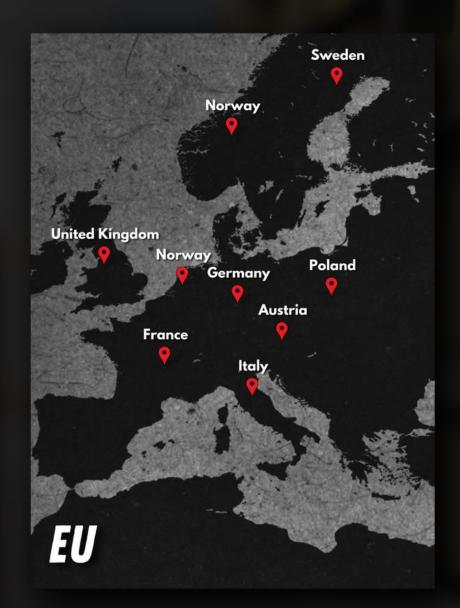
### Objectives

- Atliq Hardware, a fictional corporation, stands out as a major computer hardware manufacturer in India and has a robust global presence.
- Despite its prominence, the management recognizes a need for more timely and informed decisions backed by data insights.
- There's a strategic initiative to enhance the data analytics team by onboarding junior data analysts.
- In order to evaluate potential candidates comprehensively, Tony Sharma, the Director of Data Analytics, plans to organize a SQL challenge. This challenge will assess both technical skills and soft skills.
- The company has identified 10 specific ad hoc requests for which they are seeking valuable insights.

#### Atliq Hardawares Market



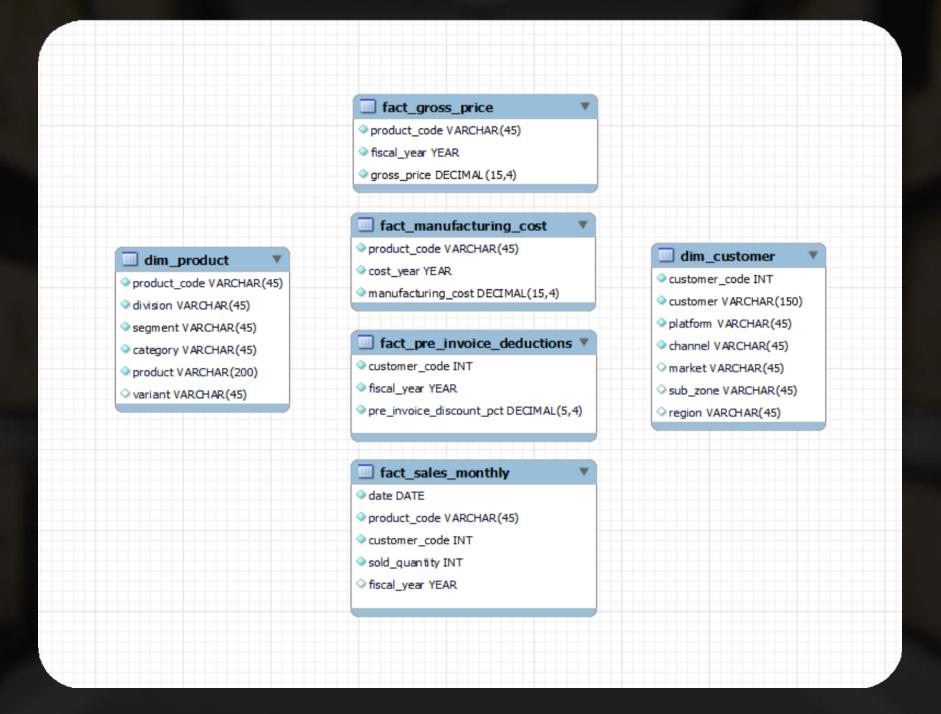






#### Atliq Hardawares Product Line Graphic Card Internal HDD Business Laptop \_\_\_ Peripherals Desktop Motherboard Personal Laptop • Processors Gaming Laptop •-Batteries Notebook Business Laptop •- Keyboard Accessories Personal Laptop •— → Mouse P&A N&S ─ Wi-Fi Extender Networking External SSD Storage USB Flash Drives

#### INPUT DATA



The input dataset comprises sales information for the fiscal years 2020 and 2021, complemented by various dimension tables such as customer details, product details, and more.

# AD-HOC REQUESTS ALONG WITH THE

- QUERIED RESULTS
- VISUALIZATIONS
- INSIGHTS

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

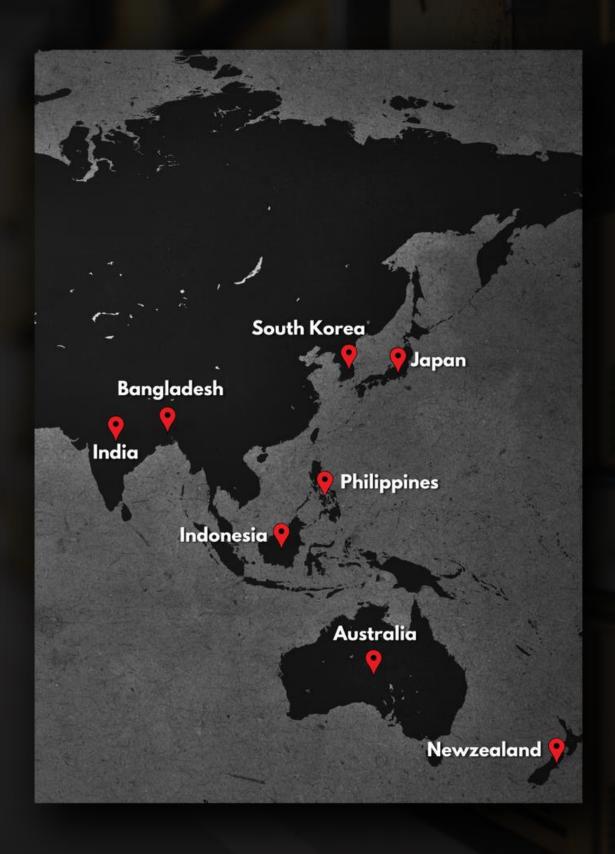
#### CUTPUT





#### INSIGHTS

Atliq Exclusive has established a presence in eight key markets within 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

#### CUTPUT

	unique_products_2020	unique_products_2021	pct_change
•	245	334	36.33

#### INSIGHTS

In FY 2020, we had a total of 245 products, and in FY 2021, the number increased to 334, reflecting a 36% growth.

334 245

2020

2021

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

CUTPUT			NOTEBOOK			129	
	tragile	Trans.		ACCESSORIES			116
	segment	product_count					12 18 14 15
•	Notebook	129		PERIPHERALS		84	
	Accessories	116	>	DESKTOP	32	-	
	Peripherals	84			32		
	Desktop	32		STORAGE	27		
	Storage	27					
	Networking	9		NETWORKING	9		

#### INSIGHTS

- Atliq Hardware presents an extensive array of products across the Notebook, Peripherals, and Accessories sectors.
- There is a strategic need to broaden the product portfolio within the desktop, networking, and storage markets.
- To address this, Atliq Hardware has the opportunity to introduce Trending Products in these specific markets.

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

#### CUTPUT

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

Segment	Product Count 2020	Product Count 2021	Difference
Accessories	69	103	34 🎓
Desktop	7	22	15 🎓
Networking	6	9	3 🎓
Notebook	92	108	16 🎓
Peripherals	59	75	16 🎓
Storage	12	17	5 🎓

#### INSIGHTS

In 2021, Atliq Hardware primarily focused on expanding its presence in the accessories market, introducing a total of 34 new accessory products to the market.

Get the products that have the highest and lowest manufacturing costs.

The final output should contain these fields,

product\_code product manufacturing\_cost

#### OUTPUT

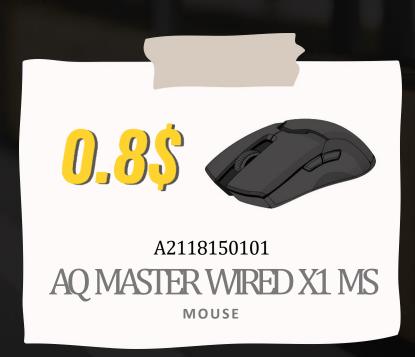
	product_code	product	manufacturing_cost
•	A6120110206	AQ HOME Allin1 Gen 2	240.5364
	A2118150101	AQ Master wired x1 Ms	0.8920

Highest Manufacturing
Cost Product



Lowest Manufacturing

Cost Product



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,

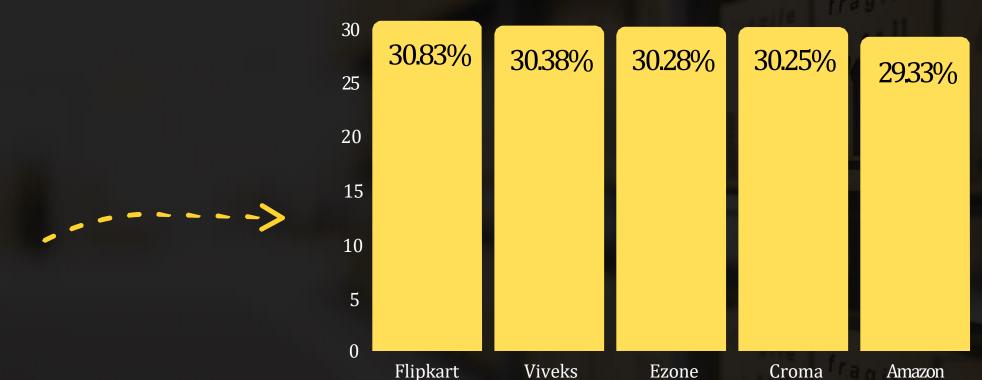
customer\_code

customer

average\_discount\_percentage

#### OUTPUT

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



35

#### INSIGHTS

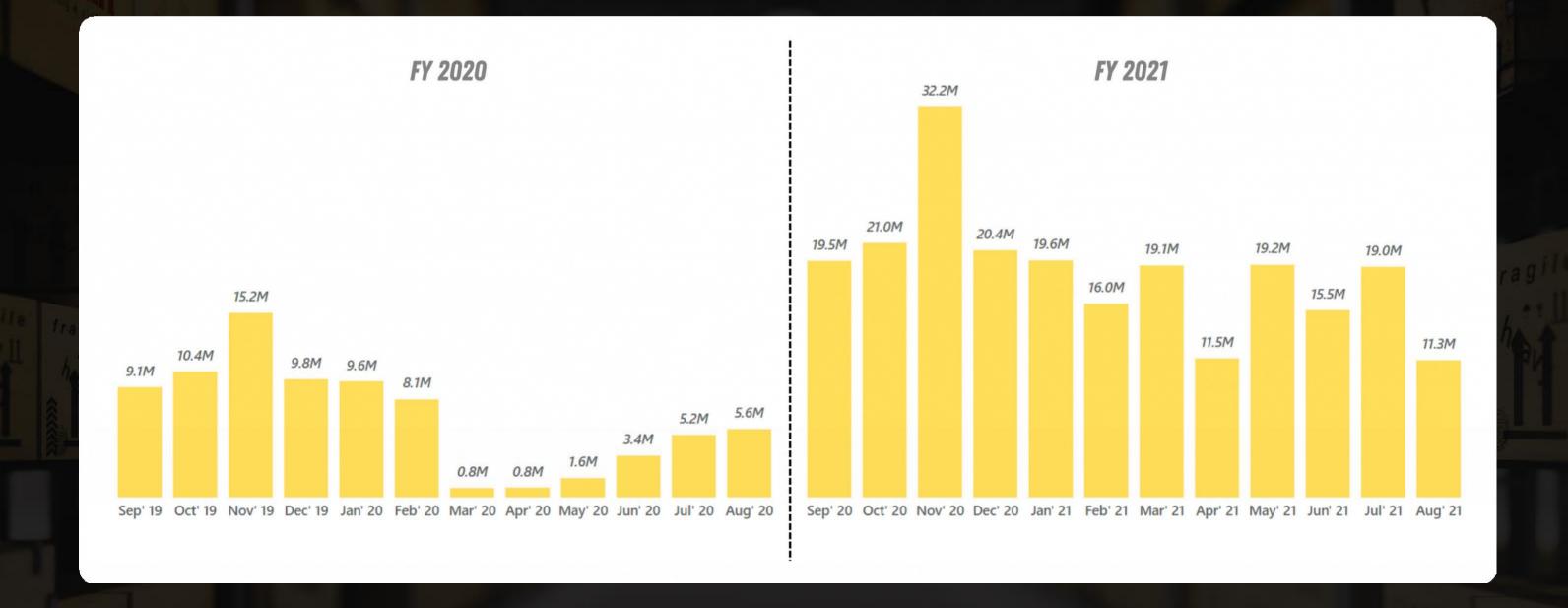
Considering Flipkart holds the position of the most heavily discounted customer in the Indian market, with a pre-invoice discount percentage of 30.83%, Atliq extended approximately similar pre-invoice discount percentages to each of its top 5 clients in 2021.

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



	month	fiscal_year	gross_sales_amount
١	September (2019)	2020	9092670.34
	October (2019)	2020	10378637.60
	November (2019)	2020	15231894.97
	December (2019)	2020	9755795.06
	January (2020)	2020	9584951.94
	February (2020)	2020	8083995.55
	March (2020)	2020	766976.45
	April (2020)	2020	800071.95
	May (2020)	2020	1586964.48
	June (2020)	2020	3429736.57
	July (2020)	2020	5151815.40
	August (2020)	2020	5638281.83
	September (2020)	2021	19530271.30
	October (2020)	2021	21016218.21
	November (2020)	2021	32247289.79
	December (2020)	2021	20409063.18
	January (2021)	2021	19570701.71
	February (2021)	2021	15986603.89
	March (2021)	2021	19149624.92
	April (2021)	2021	11483530.30
	May (2021)	2021	19204309.41
	June (2021)	2021	15457579.66
	July (2021)	2021	19044968.82
ar.	August (2021)	2021	11324548.34



#### **INSIGHTS**

- Atliq Exclusive experienced its highest sales in November 2020, whereas March 2020 recorded the lowest sales.
- The decline in sales between March and August can be attributed to the impact of COVID-19. However, there is optimism as sales have consistently rebounded since the pandemic, remaining robust and surpassing the levels seen in 2020.

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

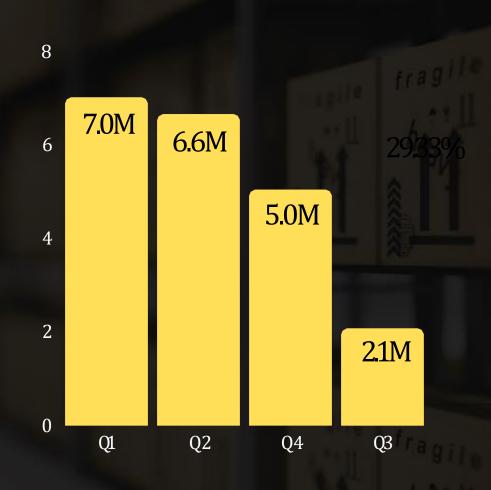
quarters

total\_sold\_quantity

#### OUTPUT

	quarters	total_sold_quantity_in_mln
•	Q1	7.01
	Q2	6.65
	Q4	5.04
	Q3	2.08





#### INSIGHTS

- In the third quarter of fiscal year 2020 (March, April, and May), marked by the peak of COVID-19 and widespread lockdowns impacting businesses, the sold quantity plummeted to 2.1 million.
- Notably, there was a significant demand for computer accessories during this period as a large number of students commenced or persisted in completing their coursework online. This heightened demand likely contributed to the early rebound observed in the fourth quarter.

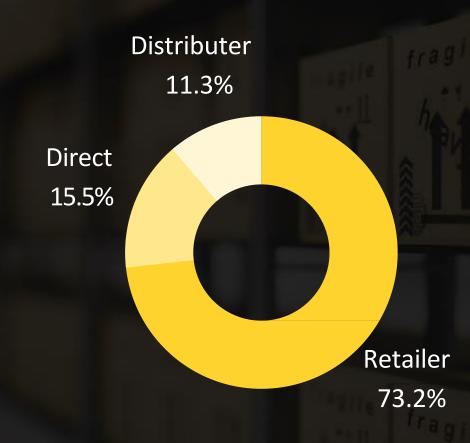
Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution? The final output contains these fields,

channel, gross\_sales\_mln, percentage

#### OUTPUT

	channel	gross_sales_in_mln	percentage
•	Retailer	1924.17	73.22
	Direct	406.69	15.47
	Distributor	297.18	11.31





#### **INSIGHTS**

A substantial 73% of Atliq's total sales were conducted through retailers, constituting the majority of its overall sales. In contrast, sales through direct and distributor channels made up a comparatively modest portion of the total revenue.

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



## Recommendations for enhancing Atliq's sales performance

- Provide excellent customer service and build lasting relationships.
- Implement an effective marketing strategy across various channels.
- Develop a strong brand identity and communicate your unique value.
- Invest in sales team training for improved performance.
- Offer competitive pricing and attractive promotions.
- Enhance your product offerings to meet market demands.
- Gather customer feedback to continuously improve.

