



Customer Goods
Ad_hoc Analysis

Content

- ❖ Introduction
- ❖ Approach
- ❖ Data Model
- ❖ Ad-hoc Requests

Introduction

- ❖ Atliq Hardwares is one of the leading computer hardware producers in India and well expanded in other countries too.
- ❖ 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.

Approch

- ❖ We have received 10 ad-hoc requests that need to be addressed .
- ❖ To provide valuable insights for the management team, we will execute sql queries to gather the necessary data and present our findings

Data Model

1. dim_customers: contains customer-related data
2. Dim_product: contains product related data
3. Fact_gross_price: contains gross price information for each product
4. Fact_manufacturing_cost: contains the cost incurred in the production of each product
5. Fact_pre_invoice_deductions: contains pre-invoice deductions information for each product
6. Fact_sales_monthly: contains monthly sales data for each product

Ad-hoc Requests



Question 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

Question 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_chg
▶	245	334	36.33

Question 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

Question 4

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

Question 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	manufacturing_cost
▶	A2118150101	AQ Master wired x1Ms	0.8920
	A6120110206	AQ HOME Allin1 Gen 2	240.5364

Question 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	0.31
90002006	Viveks	0.30
90002002	Croma	0.30
90002003	Ezone	0.30
90002016	Amazon	0.29

Question 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
August	2021	7178707.59
July	2021	12092346.32
June	2021	9824521.01
May	2021	12150225.01
April	2021	7311999.95
March	2021	12144061.25
February	2021	10129735.57
January	2021	12399392.98

Question: 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:

	channel	gross_sales_mln	percentage
▶	Retailer	1219.08	73.23
	Direct	257.53	15.47
	Distributor	188.03	11.30

Question: 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
▶	Retailer	1219.08	73.23
	Direct	257.53	15.47
	Distributor	188.03	11.30

Question: 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

THANK YOU