

AD-HOC-REQUEST-1

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

```
SELECT DISTINCT market
FROM dim_customer
WHERE customer="Atliq Exclusive"
AND region="APAC"
```

AD-HOC-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_chg

```
WITH X AS
  (SELECT COUNT(DISTINCT product_code) AS unique_products_2020
   FROM fact_sales_monthly WHERE fiscal_year= 2020),
Y AS
  (SELECT COUNT(DISTINCT product_code) AS unique_products_2021
   FROM fact_sales_monthly WHERE fiscal_year= 2021)
SELECT
  X.unique_products_2020,
  Y.unique_products_2021,
  round(((Y.unique_products_2021-X.unique_products_2020)/X.unique_products_2020)*100,2)
  AS Percentage_chg FROM X,Y;
```

AD-HOC-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

```
select segment,
count(distinct (product_code)) as product_count
from dim_product
group by segment
order by product_count desc
```

AD-HOC-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

```

with x as ( select p.segment,
count(distinct s.product_code) as product_count_2020 from dim_product p
join fact_sales_monthly s on p.product_code = s.product_code where s.fiscal_year=2020 group by
p.segment) ,
y as ( select p.segment,
count(distinct s.product_code) as product_count_2021 from dim_product p
join fact_sales_monthly s on p.product_code = s.product_code where s.fiscal_year=2021 group by
p.segment)
select x.segment , product_count_2020 ,product_count_2021,abs(x.product_count_2020-
y.product_count_2021) as difference
from x join y on x.segment=y.segment order by difference desc

```

AD-HOC-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

```

select m.product_code, p.product, m.manufacturing_cost
from fact_manufacturing_cost m join dim_product p
using (product_code)
where m.manufacturing_cost =
(select max(manufacturing_cost)
from fact_manufacturing_cost)
or m.manufacturing_cost = (select min(manufacturing_cost)
from fact_manufacturing_cost)
order by m.manufacturing_cost desc;

```

AD-HOC-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

```

select i.customer_code, c.customer, round(avg(i.pre_invoice_discount_pct)*100,2) as avg_dis_pct
from
fact_pre_invoice_deductions i join dim_customer c using (customer_code)
where fiscal_year =2021 and c.market="india" group by i.customer_code, c.customer order by
avg_dis_pct desc limit 5;

```

AD-HOC-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

```
select monthname(s.date) as month,s.fiscal_year,
       round(sum(g.gross_price*sold_quantity),2)
as gross_sales_amt from fact_sales_monthly s
join dim_customer c using(customer_code)
join fact_gross_price g using(product_code)
where customer="atliq exclusive"
group by monthname(s.date) ,s.fiscal_year
order by fiscal_year ;
```

AD-HOC-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

```
SELECT
CASE
    WHEN month(date) in (9,10,11) then 'Q1'
    WHEN month(date) in (12,01,02) then 'Q2'
    WHEN month(date) in (03,04,05) then 'Q3'
    ELSE 'Q4'
END AS Quarters,
SUM(sold_quantity) AS total_sold_qty
FROM fact_sales_monthly
WHERE fiscal_year = 2020
GROUP BY Quarters
ORDER BY total_sold_qty DESC;
```

AD-HOC-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

```
with x as (select c.channel,
round(sum(g.gross_price*s.sold_quantity)/100000,2) as gross_sales_mln
from fact_sales_monthly s
```

```

join dim_customer c using(customer_code)
join fact_gross_price g using(product_code)
where s.fiscal_year=2021
group by c.channel)
select channel, gross_sales_mln,
round((gross_sales_mln/(select sum(gross_sales_mln) from x))*100,2)
as pct from x
order by gross_sales_mln desc;

```

AD-HOC-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

```

WITH x AS
(
SELECT P.division, S.product_code, P.product, SUM(S.sold_quantity) AS Total_sold_quantity,
RANK() OVER(PARTITION BY P.division ORDER BY SUM(S.sold_quantity) DESC) AS 'Rank_Order'
FROM dim_product P JOIN fact_sales_monthly S
ON P.product_code = S.product_code
WHERE S.fiscal_year = 2021
GROUP BY P.division, S.product_code, P.product)

SELECT * FROM x
WHERE Rank_Order IN (1,2,3) ORDER BY division, Rank_Order;

```