SQL queries

Q1. 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"
```

Q2. What is the percentage of unique product increase in 2021vs. 2020?

```
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;
```

Q3. Provide a report with all the unique product counts for each segment and sort them in descending order of product counts.

```
select segment,

count(distinct (product_code)) as product_count

from dim_product

group by segment

order by product_count desc
```

Q4. Which segment had the most increase in unique products in 2021 vs 2020?

```
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
```

Q5. Get the products that have the highest and lowest manufacturing costs.

```
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;
```

Q6. Generate a report which contains the top 5 customers who received an average high pre invoice deductions

pre_invoice_discount_pct for the fiscal year 2021 and in the Indian market.

```
select i.customer_code, c.customer, round(avg(i.pre_invoice_discount_pct)*100,2) as avg_dis_pct
from  fact_pre_invoice_deducϴons 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;
```

Q7.Get the complete report of the Gross sales amount for the customer “Atliq Exclusive” for each month.

```
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 ;
```

Q8. In which quarter of 2020, got the maximum total_sold_quanϴty?

```
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_quanϴty) AS total_sold_qty
FROM fact_sales_monthly
WHERE fiscal_year = 2020
GROUP BY Quarters
ORDER BY total_sold_qty desc;
```

Q9. Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution?

```
with x as (select c.channel,
round(sum(g.gross_price*s.sold_quanϴty)/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;
```

Q10. 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_quanϴty) AS Total_sold_quanϴty,
RANK() OVER(PARTITION BY P.division ORDER BY SUM(S.sold_quanϴty) 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;
```