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

```sql
select distinct market from dim_customer
 where customer = "AtliqExclusive"and region="APAC";
```

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

```sql
with X as(
select count(distinct product_code) as unique_product_2020 from fact_sales_monthly where
fiscal_year = 2020),y as(
select count(distinct product_code)as unique_product_2021 from
fact_sales_monthlywherefiscal_year=2021)
select x.unique_product_2020,y.unique_product_2021,
round((y.unique_product_2021-x.unique_product_2020)/x.unique_product_2020*100,2) as
percentage_change from x,y;
```

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

```sql
select segment ,count(distinct product) product_count from  dim_product group by segment
order by product_count desc;
```

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

```sql
with X as (select segment,count(distinct product_code) as product_count_2020 from dim_product
join fact_sales_monthly using(product_code)where fiscal_year=2020 group by segment),
  y as (select segment,count(distinct product_code)as product_count_2021 from dim_product join
fact_sales_monthly using(product_code)where fiscal_year=2021 group by segment)
         select      x.segment,product_count_2020,product_count_2021,abs(product_count_2020-
product_count_2021)as difference from x join y using(segment) order by difference desc;
```

5.Get the products that have the highest and lowest manufacturing costs. The final output should contain these fields, product_code product manufacturing_cost

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

```
select fi.customer_code,c.customer,concat(round(avg(fi.pre_invoice_discount_pct),4),"%") as
average_discount_percentage
from fact_pre_invoice_deductions fi join dim_customer c
using(customer_code) where market="India" and fiscal_year=2021 group by fi.customer_code,c.customer
order by average_discount_percentage desc limit 5;
```

```
select Monthname(fs.date)as month ,Year(fs.date)as year,
round(sum((fg.gross_price*sold_quantity)),2)Gross_sales_Amount from fact_gross_price fg
join fact_sales_monthly fs using(product_code)
join dim_customer using(customer_code) where
customer ="Atliq Exclusive" group by month, year order by year;
```

```sql
select case
 when month(date)in(9,10,11) then "Q1"
 when month(date) in (12,1,2) then "Q2"
 when month(date) in (3,4,5) then "Q3"
 else "Q4"
 end as Quarters,sum(sold_quantity)total_sold_quantity from fact_sales_monthly
 where fiscal_Year=2020 group by Quarters order by  total_sold_quantity  desc;
```

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

```sql
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  xorder by gross_sales_mln desc;
```

10.Get the Top 3 products in each division that have a hightotal_sold_quantity in the fiscal_year 2021? The final output contains thesefields,divisionproduct_code

```
with cte as(select p.division,p.product_code,sum(s.sold_quantity) as
total_sold_qty,
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  using(product_code)
 where s.fiscal_year =2021
 group by p.division,p.product_code)
 select * from cte where rank_order in(1,2,3) order by division,rank_order;
```