```sql
/*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";
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

market
India
Indonesia
Japan
Philiphines
South Korea
Australia
Newzealand
Bangladesh

```sql
/*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 CTE AS (SELECT
    COUNT(DISTINCT CASE WHEN fiscal_year = 2020 THEN product_code END) AS unique_products_2020,
    COUNT(DISTINCT CASE WHEN fiscal_year = 2021 THEN product_code END) AS unique_products_2021
FROM
    fact_sales_monthly)
SELECT *,ROUND((unique_products_2021-unique_products_2020)*100/unique_products_2020,2) AS percentage FROM CTE;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

unique_products_2020	unique_products_2021	percentage
245	334	36.33

```sql
/*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;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

segment	product_count
Notebook	129
Accessories	116
Peripherals	84
Desktop	32
Storage	27
Networking	9

```sql
/*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 CTE AS (SELECT p.segment,
COUNT(DISTINCT CASE WHEN s.fiscal_year=2020 THEN s.product_code END) AS product_count_2020,
COUNT(DISTINCT CASE WHEN s.fiscal_year=2021 THEN s.product_code END) AS product_count_2021 FROM fact_sales_monthly s
LEFT JOIN dim_product p USING (product_code) GROUP BY p.segment)
SELECT *,(product_count_2021-product_count_2020) AS difference FROM CTE ORDER BY difference DESC LIMIT 1;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

segment	product_count_2020	product_count_2021	difference
Accessories	69	103	34

```sql
/*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 LEFT 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);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

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

```
40  /*6. Generate a report which contains the top 5 customers who received an average high pre_invoice_discount_pct for the
41  fiscal year 2021 and in the Indian market. The final output contains these fields,
42  customer_code
43  customer
44  average_discount_percentage */
45  SELECT p.customer_code,c.customer,ROUND(AVG(p.pre_invoice_discount_pct),2) AS pre_invoice_discount_pct
46  FROM fact_pre_invoice_deductions p LEFT JOIN dim_customer c USING (customer_code)
47  WHERE p.fiscal_year=2021 AND c.market="India" GROUP BY p.customer_code ORDER BY
48  pre_invoice_discount_pct DESC LIMIT 5;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

customer_code	customer	pre_invoice_discount_pct
90002009	Flipkart	0.31
90002006	Viveks	0.30
90002002	Croma	0.30
90002003	Ezone	0.30
90002016	Amazon	0.29

```sql
/*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 DISTINCT MONTHNAME(m.date) AS month,YEAR(m.date) AS year,m.fiscal_year,ROUND(SUM(g.gross_price*m.sold_quantity),2) AS gross_Sales
FROM fact_sales_monthly m LEFT JOIN dim_customer c USING (customer_code) LEFT JOIN fact_gross_price g ON m.product_code=g.product_code
WHERE c.customer="Atliq Exclusive" GROUP BY month,year,fiscal_year ORDER BY fiscal_year;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

month	year	fiscal_year	gross_Sales
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
August	2021	2021	11324548.34

```sql
/*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 */
WITH CTE AS (SELECT get_fiscal_quarter(date) AS quarter,SUM(sold_quantity) AS total_sold_qty FROM fact_sales_monthly
WHERE fiscal_year=2020 GROUP BY quarter)
SELECT * FROM CTE WHERE total_sold_qty=(SELECT MAX(total_sold_qty) FROM CTE);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

quarter	total_sold_qty
Q1	7005619

```sql
/*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 CTE1 AS (SELECT c.channel, ROUND(SUM(g.gross_price*s.sold_quantity)/1000000,2) as gross_sales_mln FROM
fact_sales_monthly s LEFT JOIN dim_customer c USING (customer_code) LEFT JOIN fact_gross_price g
ON s.product_code=g.product_code AND s.fiscal_year=g.fiscal_year WHERE s.fiscal_year=2021 GROUP BY c.channel),
CTE2 AS (SELECT *,gross_sales_mln*100/SUM(gross_sales_mln) OVER () AS percentage FROM CTE1)
SELECT channel,gross_sales_mln,ROUND(percentage,2) AS percentage FROM CTE2 ORDER BY percentage DESC LIMIT 1;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

channel	gross_sales_mln	percentage
Retailer	1219.08	73.23

```sql
/*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 */
WITH CTE1 AS (SELECT p.division,p.product_code,p.product,SUM(s.sold_quantity) AS total_sold_quantity
FROM fact_sales_monthly s LEFT JOIN dim_product p USING (product_code) WHERE s.fiscal_year=2021
GROUP BY p.product),
CTE2 AS (SELECT *,DENSE_RANK() OVER (PARTITION BY division ORDER BY total_sold_quantity DESC) AS rank_order FROM CTE1)
SELECT * FROM CTE2 WHERE rank_order<=3;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

division	product_code	product	total_sold_quantity	rank_order
N & S	A6818160201	AQ Pen Drive DRC	2034569	1
N & S	A6218160101	AQ Digit SSD	1240149	2
N & S	A6419160301	AQ Clx1	1238683	3
P & A	A2319150301	AQ Gamers Ms	2477098	1
P & A	A2520150501	AQ Maxima Ms	2461991	2
P & A	A2218150201	AQ Master wireless x1 Ms	2448784	3
PC	A4218110201	AQ Digit	135092	1
PC	A4620110601	AQ Gen Y	135031	2
PC	A4419110401	AQ Elite	134431	3