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

```
1

SELECT DISTINCT( market) FROM gdb023.dim_customer WHERE customer='Atliq Exclusive' and region='APAC';
```

OUTPUT

market
India
Indonesia
Japan
Philiphines
South Korea
Australia
Newzealand
Bangladesh

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

```
(SELECT   DISTINCT(P.product_code),P.product ,max(M.manufacturing_cost) AS Manufacturing_cost  FROM gdb023.dim_product P
INNER  JOIN  gdb023.fact_manufacturing_cost  M ON P.product_code=M.product_code
GROUP BY P.product_code,product ORDER BY max(M.manufacturing_cost) DESC LIMIT 1)
UNION ALL
(SELECT   DISTINCT(P.product_code),P.product ,P.segment,min(M.manufacturing_cost)AS Manufacturing_cost   FROM gdb023.dim_product P
INNER  JOIN gdb023.fact_manufacturing_cost  M ON P.product_code=M.product_code
GROUP BY P.product_code,P.product ORDER BY min(M.manufacturing_cost) ASC LIMIT 1)
```

OUTPUT

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

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

3

```
SELECT P.segment ,COUNT(DISTINCT(P.product_code)) AS Product_count FROM gdb023.dim_product P
GROUP BY P.segment ORDER BY Product_count DESC;
```

OUTPUT

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

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, and difference.

1

```sql
WITH
    CTE1 AS(SELECT P.segment  ,count(DISTINCT(P.product_code)) AS Prod_count1,G.fiscal_year
    FROM gdb023.dim_product P   LEFT  JOIN gdb023.fact_sales_mONthly  G  ON P.product_code=G.product_code
    WHERE G.fiscal_year= 2020 GROUP BY P.segment  order by P.segment DESC),

    CTE2 AS(SELECT P.segment  ,count(DISTINCT(P.product_code)) AS Prod_count2,G.fiscal_year
    FROM gdb023.dim_product P  LEFT JOIN gdb023.fact_sales_mONthly  G  ON P.product_code=G.product_code
    WHERE G.fiscal_year= 2021 GROUP BY P.segment  order by P.segment DESC)
SELECT CTE1.segment,Prod_count1 AS products_count_2020,Prod_count2 AS products_count_2021 ,
ROUND((Prod_count2-Prod_count1 ) ,2)  AS Difference FROM CTE1 CROSS JOIN CTE2 ON CTE1.segment=CTE2.segment
ORDER BY round((Prod_count2-Prod_count1 ) ,2) DESC ;
```

OUTPUT

segment	products_count_2020	products_count_2021	Difference
Accessories	69	103	34
Peripherals	59	75	16
Notebook	92	108	16
Desktop	7	22	15
Storage	12	17	5
Networking	6	9	3

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

```
(SELECT   DISTINCT(P.product_code),P.product ,max(M.manufacturing_cost) AS Manufacturing_cost  FROM gdb023.dim_product P
INNER  JOIN gdb023.fact_manufacturing_cost  M ON P.product_code=M.product_code
GROUP BY P.product_code,product ORDER BY max(M.manufacturing_cost) DESC LIMIT 1)
UNION ALL
(SELECT   DISTINCT(P.product_code),P.product ,min(M.manufacturing_cost)AS Manufacturing_cost   FROM gdb023.dim_product P
INNER  JOIN gdb023.fact_manufacturing_cost  M ON P.product_code=M.product_code
GROUP BY P.product_code,P.product ORDER BY min(M.manufacturing_cost) ASC LIMIT 1)
```

OUTPUT

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

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 DISTINCT(C.customer_code),C.customer ,100*(Round(Avg(I.pre_invoice_discount_pct),3))AS average_discount_percentage
FROM gdb023.dim_customer C  INNEE JOIN gdb023.fact_pre_invoice_deductiONs  I ON C.customer_code=I.customer_code
WHERE C.market='India' and I.fiscal_year=2021
GROUP BY C.customer_code,C.customer  order by average_discount_percentage Desc Limit 5
```

OUTPUT

customer_code	customer	average_discount_percentage
90002009	Flipkart	30.800
90002006	Viveks	30.400
90002002	Croma	30.300
90002003	Ezone	30.300
90002016	Amazon	29.300

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

```sql
SELECT month(S.date) AS month,year(date)AS year,Round(sum( (S.sold_quantity)*(G.gross_price)),2)
AS Gross_sales_amount FROM gdb023.fact_sales_monthly S
INNER JOIN gdb023.dim_customer C ON S.customer_code=C.customer_code
INNER JOIN  gdb023.fact_gross_price G ON S.product_code=G.product_code and S.fiscal_year=G.fiscal_year
WHERE C.customer='Atliq Exclusive'
GROUP BY month,year ORDER BY year,month
```

OUTPUT

month	year	Gross_sales_amount
9	2019	4496259.67
10	2019	5135902.35
11	2019	7522892.56
12	2019	4830404.73
1	2020	4740600.16
2	2020	3996227.77
3	2020	378770.97
4	2020	395035.35
5	2020	783813.42
6	2020	1695216.60
7	2020	2551159.16
8	2020	2786648.26
9	2020	12353509.79
10	2020	13218636.20

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 mONth(S.date)AS month, S.sold_quantity AS Sales ,

CASe
     WHEN month(S.date) IN (9,10,11) Then 'First Quarter'
     WHEN month(S.date) IN (12,1,2) Then 'SecONd Quarter'
     WHEN month(S.date) IN (3,4,5) Then 'Third Quarter'
     Else  'Fourth Quarter'
 End AS Quarters
 FROM gdb023.fact_sales_mONthly S WHERE S.fiscal_year=2020)
 SELECT CTE.Quarters,sum(CTE.Sales) AS total_sold_quantity FROM CTE
 GROUP BY CTE.Quarters;
```

OUTPUT

Quarters	total_sold_quantity
First Quarter	7005619
SecONd Quarter	6649642
Third Quarter	2075087
Fourth Quarter	5042541

Get the Top 3 products in each division that have a high total_sold_quantity in the fiscal_year 2021

```sql
WITH CTE3 AS(
  WITH TOP_3 AS (SELECT p.product, s.product_code,p.division,SUM(sold_quantity) as Total_quantity_sold
     FROM gdb023.fact_sales_monthly AS s
     JOIN gdb023.dim_product AS p
     on s.product_code=p.product_code
     WHERE s.fiscal_year=2021 GROUP BY s.product_code,p.division,p.product
     ORDER BY Total_quantity_sold)
  SELECT *,RANK() OVER(PARTITION BY division ORDER BY Total_quantity_sold DESC) as top_rank
  FROM TOP_3)
SELECT * FROM CTE3 WHERE top_rank IN (1,2,3)
```

OUTPUT

product	product_code	division	Total_quantity_sold	top_rank
AQ Pen Drive 2 IN 1	A6720160103	N & S	701373	1
AQ Pen Drive DRC	A6818160202	N & S	688003	2
AQ Pen Drive DRC	A6819160203	N & S	676245	3
AQ Gamers Ms	A2319150302	P & A	428498	1
AQ Maxima Ms	A2520150501	P & A	419865	2
AQ Maxima Ms	A2520150504	P & A	419471	3
AQ Digit	A4218110202	PC	17434	1
AQ Velocity	A4319110306	PC	17280	2
AQ Digit	A4218110208	PC	17275	3

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
   CTE AS(SELECT Distinct(C.channel) AS channels,
   sum((Round(((G.gross_price)*(S.sold_quantity)),2))) OVER(PARTITION BY (C.channel)) AS gross_sales_mln
   FROM gdb023.dim_customer C
   INNER JOIN gdb023.fact_sales_mONthly S ON S.customer_code=C.customer_code
   INNER JOIN  gdb023.fact_gross_price G ON S.product_code=G.product_code
   WHERE S.fiscal_year=2021)
SELECT* ,  Round(gross_sales_mln*100/(SELECT  sum(gross_sales_mln) FROM CTE ),2) AS Percentage
FROM CTE  ORDER BY Percentage DESC;
```

OUTPUT

channels	gross_sales_mln	Percentage
Retailer	1924170470.35	73.22
Direct	406686892.90	15.47
Distributor	297175883.37	11.31