#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**"**;

A screenshot of a computer

Description automatically generated

#Q2 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**(product\_code)) **AS** unique\_products\_2020

**FROM** fact\_sales\_monthly

**WHERE** fiscal\_year=2020),

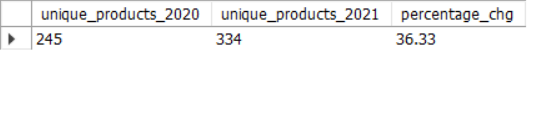
cte1 **AS** (**SELECT** COUNT(**DISTINCT**(product\_code)) **AS** unique\_products\_2021

**FROM** fact\_sales\_monthly

**WHERE** fiscal\_year=2021)

**SELECT** \*, ROUND((unique\_products\_2021-unique\_products\_2020)/unique\_products\_2020 \*100, 2) **AS** percentage\_chg

**FROM** cte, cte1;



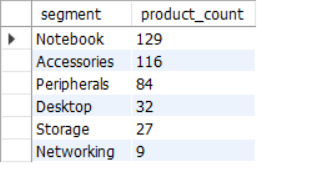
#Q3

**SELECT** segment, COUNT(product\_code) **AS** product\_count

**FROM** dim\_product

**GROUP** **BY** segment

**ORDER** **BY** product\_count **DESC**;



#Q4

**WITH** cte1 **AS**(

**SELECT** d.segment, COUNT(**DISTINCT** f.product\_code) **AS** product\_count\_2020

**FROM** dim\_product d

**JOIN** fact\_sales\_monthly f

**ON** d.product\_code=f.product\_code

**WHERE** fiscal\_year=2020

**GROUP BY** d.segment),

cte2 **AS**(

**SELECT** d.segment AS segment\_, COUNT(DISTINCT f.product\_code) **AS** product\_count\_2021

**FROM** dim\_product d

**JOIN** fact\_sales\_monthly f

**ON** d.product\_code=f.product\_code

**WHERE** fiscal\_year=2021

**GROUP** **BY** d.segment),

cte3 **AS**(SELECT \*, (product\_count\_2021-product\_count\_2020) **AS** difference

**FROM** cte1 c1

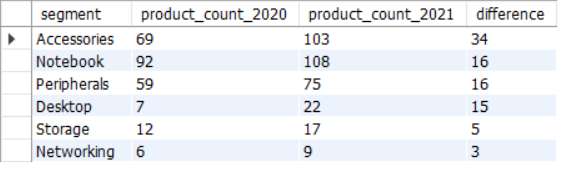
**JOIN** cte2 c2

**ON** c1.segment=c2.segment\_

**ORDER** **BY** difference **DESC**)

**SELECT** segment, product\_count\_2020, product\_count\_2021, difference

**FROM** cte3;



#Q5

**SELECT** d.product\_code, d.product, f.manufacturing\_cost

**FROM** dim\_product d

**JOIN** fact\_manufacturing\_cost f

**ON** d.product\_code=f.product\_code

**WHERE** manufacturing\_cost= (**SELECT** MAX(manufacturing\_cost) **AS** max\_ **FROM** fact\_manufacturing\_cost) **OR** manufacturing\_cost= (**SELECT** MIN(manufacturing\_cost) **AS** min\_ **FROM** fact\_manufacturing\_cost)

**ORDER** **BY** manufacturing\_cost **DESC**;

A screenshot of a computer

Description automatically generated

#Q6

**SELECT** d.customer\_code, d.customer, ROUND(**AVG**(pre\_invoice\_discount\_pct),4) **AS** average\_discount\_percentage

**FROM** dim\_customer d

**JOIN** fact\_pre\_invoice\_deductions f

**ON** d.customer\_code=f.customer\_code

**WHERE** f.fiscal\_year=2021 **AND** d.market="India"

**GROUP** **BY** d.customer\_code

**ORDER** **BY** average\_discount\_percentage **DESC**

**LIMIT** 5;



#Q7

**SELECT** MONTHNAME(**date**) **AS** month\_, s.fiscal\_year, ROUND(SUM((gross\_price\*sold\_quantity)),2) **AS** gross\_sales\_amount

**FROM** fact\_gross\_price f

**JOIN** fact\_sales\_monthly s

**ON** f.product\_code=s.product\_code

**JOIN** dim\_customer d

**ON** d.customer\_code=s.customer\_code

**WHERE** customer="Atliq Exclusive"

**GROUP** **BY** s.fiscal\_year, month\_

**ORDER** **BY** s.date;

****

#Q8

**WITH** cte **AS**(

**SELECT** **MONTH**(**date**) **AS** m\_, SUM(sold\_quantity) **AS** tot

**FROM** fact\_sales\_monthly

**WHERE** fiscal\_year=2020

**GROUP** **BY** m\_)

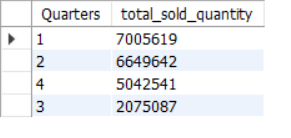
**SELECT** **CASE** **WHEN** m\_ **IN**(9,10,11) **THEN** "1"  
 **WHEN** m\_ **IN**(12,1,2) **THEN** "2"

**WHEN** m\_ **IN**(3,4,5) **THEN** "3" **ELSE** "4" **END** **AS** Quarters, SUM(tot) **AS** total\_sold\_quantity

**FROM** cte

**GROUP** **BY** Quarters

**ORDER** **BY** total\_sold\_quantity **DESC**;



#9

**WITH** cte **AS**(

**SELECT** d.channel, ROUND(SUM((f.sold\_quantity\*g.gross\_price))/1000000, 2) **AS** gross\_sales\_mln

**FROM** dim\_customer d

**JOIN** fact\_sales\_monthly f

**ON** d.customer\_code=f.customer\_code

**JOIN** fact\_gross\_price g

**ON** f.product\_code=g.product\_code

**WHERE** f.fiscal\_year=2021

**GROUP** **BY** d.channel

**ORDER** **BY** gross\_sales\_mln DESC)

**SELECT** \*, ROUND(gross\_sales\_mln/(**SELECT** SUM(gross\_sales\_mln) **FROM** cte)\*100, 2) **AS** percentage

**FROM** cte;

A screenshot of a computer

Description automatically generated  
  
#Q10

**WITH** cte **AS**(

**SELECT** d.division, f.product\_code, d.product, SUM(f.sold\_quantity) **AS** total\_sold\_quantity, **RANK**() **OVER** (**PARTITION** **BY** d.division **ORDER** **BY** SUM(f.sold\_quantity) **DESC**) **AS** rank\_order

**FROM** dim\_product d

**JOIN** fact\_sales\_monthly f

**ON** d.product\_code = f.product\_code

**WHERE** f.fiscal\_year = 2021

**GROUP** **BY** d.division, f.product\_code, d.product)

**SELECT** division, product\_code, product, total\_sold\_quantity, rank\_order

**FROM** cte

**WHERE** rank\_order **IN** (1, 2, 3);

