

AtliQ Hardware Consumer Goods Insights - Codebasics Challenge

Isha Shukla

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

```
2  -- Que 1) Provide the list of markets in which customer "Atliq Exclusive" operates its business in the APAC region.
3  • SELECT
4      DISTINCT market
5  FROM
6      dim_customer
7  WHERE
8      customer="Atliq Exclusive" AND region="APAC";
```

100% 47:8

Result Grid Filter Rows: Search Export:

market
India
Indonesia
Japan
Philippines
South Korea
Australia
Newzealand
Bangladesh

dim_customer 1 Read Only


Action Output

	Time	Action	Response	Duration / Fetch Time
1	23:26:38	SELECT DISTINCT market FROM dim_customer WHERE customer="Atliq Exclusive" AND region="APAC" L...	8 row(s) returned	0.016 sec / 0.000017...


Que 2) What is the percentage of unique product increase in 2021 vs. 2020?

```
11 -- Que 2) What is the percentage of unique product increase in 2021 vs. 2020? The final output contains these fields, unique_products_2020
12 • WITH year_in_20_21 as (
13   SELECT
14     COUNT(DISTINCT CASE WHEN fiscal_year = 2020 THEN product_code END) as unique_products_2020,
15     COUNT(DISTINCT CASE WHEN fiscal_year = 2021 THEN product_code END) as unique_products_2021
16   FROM
17     fact_sales_monthly
18   )
19
20   SELECT
21     unique_products_2020,
22     unique_products_2021,
23     ROUND(ABS(unique_products_2020-unique_products_2021)/(unique_products_2020+unique_products_2021) * 100,2) as percentage_chg
24   FROM
25     year_in_20_21;
26
```

100% 1:26

Result Grid Filter Rows: Search Export: 

unique_products_2020	unique_products_2021	percentage_chg
245	334	15.37

Result 2  Read Only

Action Output

	Time	Action	Response	Duration / Fetch Time
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✓ 2	23:29:02	WITH year_in_20_21 as (SELECT COUNT(DISTINCT CASE WHEN fiscal_year = 2020 THEN product_code...	1 row(s) returned	0.545 sec / 0.000032...

Que 3) Provide a report with all the unique product counts for each segment and sort them in descending order of product counts.

```
29 -- Que 3) Provide a report with all the unique product counts for each segment and sort them in descending order of product counts. The fir
30 • SELECT
31     segment,
32     COUNT(DISTINCT product_code) AS product_count
33 FROM
34     dim_product
35 GROUP BY
36     segment
37 ORDER BY
38     product_count DESC;
39 -----X-----X-----X-----X-----X-----X-----X-----X-----X-----
```

100%

22:38

Result Grid

Filter Rows:

Search

Export:

segment

product_count

Notebook

129

Accessories

116

Peripherals

84

Desktop

32

Storage

27

Networking

9

Result 3

Read Only

Action Output

Time

Action

Response

Duration / Fetch Time

1

23:26:38

SELECT DISTINCT market FROM dim_customer WHERE customer="Atliq Exclusive" AND region="APAC" L...

8 row(s) returned

0.016 sec / 0.000017...

2

23:29:02

WITH year_in_20_21 as (SELECT COUNT(DISTINCT CASE WHEN fiscal_year = 2020 THEN product_code...

1 row(s) returned

0.545 sec / 0.000032...

3

23:32:11

SELECT segment, COUNT(DISTINCT product_code) AS product_count FROM dim_product GROUP BY s...

6 row(s) returned

0.0092 sec / 0.00001...

Que 4) Follow-up: Which segment had the most increase in unique products in 2021 vs 2020?

```
59 SELECT
60     segment,
61     product_count_2020,
62     product_count_2021,
63     (product_count_2021 - product_count_2020) AS difference
64 FROM
65     year_in_20_21_
66 ORDER BY
67     difference DESC;
68
```

100% 1:68

Result Grid Filter Rows: Search Export:

segment	product_count_2020	product_count_2021	difference
Accessories	69	103	34
Notebook	92	108	16
Peripherals	59	75	16
Desktop	7	22	15
Storage	12	17	5
Networking	6	9	3

Result 4 Read Only

Action Output

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✓ 4	23:34:47	WITH year_in_20_21_AS (SELECT dp.segment, COUNT(DISTINCT CASE WHEN fiscal_year=2020 THEN f...	6 row(s) returned	1.173 sec / 0.000043...

Que 5) Get the products that have the highest and lowest manufacturing costs.


```
104 -- Combine the results
105 SELECT * FROM HighestCost
106 UNION ALL
107 SELECT * FROM LowestCost;
```


100%

1:108


Result Grid


Filter Rows:

Export: 

 Result Grid

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

 Form Editor

 Field Types

Result 5

 Read Only

Action Output

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5	23:37:49	WITH HighestCost AS (SELECT dp.product_code, dp.product, fmc.manufacturing_cost...	2 row(s) returned	0.012 sec / 0.000011...

Que 6) 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.

```

121      dc.customer_code = fpid.customer_code
122  WHERE
123      fiscal_year = 2021 AND market = 'India'
124  GROUP BY
125      dc.customer_code,
126      dc.customer
127  ORDER BY
128      average_discount_percentage DESC
129  LIMIT 5;

```

100% 1:130

Result Grid Filter Rows: Search Export: Fetch rows:

customer_code	customer	average_discount_percent...
90002009	Flipkart	0.308
90002006	Viveks	0.304
90002002	Croma	0.303
90002003	Ezone	0.303
90002016	Amazon	0.293

Result 6 Read Only

Action Output

	Time	Action	Response	Duration / Fetch Time
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✓ 5	23:37:49	WITH HighestCost AS (SELECT dp.product_code, dp.product, fmc.manufacturing_cost...	2 row(s) returned	0.012 sec / 0.000011...
✓ 6	23:40:21	SELECT dc.customer_code, dc.customer, ROUND(AVG(fpid.pre_invoice_discount_pct),3) AS average...	5 row(s) returned	0.0088 sec / 0.00001...

Que 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.

```
135 • SELECT
136     MONTHNAME(fsm.date) AS "Month",
137     fsm.fiscal_year As "Year",
138     ROUND(SUM(fgp.gross_price * fsm.sold_quantity),2) AS "Gross sales Amount"
139 FROM
140     fact_sales_monthly fsm
141 JOIN
142     fact_gross_price fgp
```

100% 1:155

Result Grid Filter Rows: Search Export:

Month	Year	Gross sales Amount
November	2021	20464999.10
October	2021	13218636.20
December	2021	12944659.65
January	2021	12399392.98
September	2021	12353509.79
May	2021	12150225.01
March	2021	12144061.25
July	2021	12092346.32
February	2021	10129735.57
June	2021	9824521.01
November	2020	7522892.56
April	2021	7311999.95
August	2021	7178707.59
October	2020	5135902.35
December	2020	4830404.73
January	2020	4740600.16
September	2020	4496259.67
February	2020	3996227.77
August	2020	2786648.26
July	2020	2551159.16
June	2020	1695216.60
May	2020	783813.42
April	2020	395035.35
March	2020	378770.97

Result Grid
Form Editor
Field Types
Query Stats
Execution Plan

Que 8) In which quarter of 2020, got the maximum total_sold_quantity?

```
159 • SELECT
160     quarter(date) AS "Quarter",
161     SUM(sold_quantity) AS total_sold_quantity
162 FROM
163     fact_sales_monthly
164 WHERE
165     fiscal_year = 2020
166 GROUP BY
167     quarter(date)
168 ORDER BY
169     total_sold_quantity DESC
170 LIMIT 1 -- THIS LIMIT IS OPTIONAL IF YOU REMOVE IT YOU WILL ABLE TO SEE total_sold_quantity for all the 4 Quarter
```

100% 20:165

Result Grid

Quarter	total_sold_quantity
4	8425822
3	5246770
1	3704398
2	3395899

Result 9

Read Only

Action Output

	Time	Action	Response	Duration / Fetch Time
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✓ 5	23:37:49	WITH HighestCost AS (SELECT dp.product_code, dp.product, fmc.manufacturing_cost...	2 row(s) returned	0.012 sec / 0.000011...
✓ 6	23:40:21	SELECT dc.customer_code, dc.customer, ROUND(AVG(fpid.pre_invoice_discount_pct),3) AS average...	5 row(s) returned	0.0088 sec / 0.00001...
✓ 7	23:42:29	SELECT MONTHNAME(fsm.date) AS "Month", fsm.fiscal_year As "Year", ROUND(SUM(fgp.gross_pric...	24 row(s) returned	0.818 sec / 0.000057...
✓ 8	23:45:28	SELECT quarter(date) AS "Quarter", SUM(sold_quantity) AS total_sold_quantity FROM fact_sales_mon...	1 row(s) returned	0.401 sec / 0.000033...
✓ 9	23:45:48	SELECT quarter(date) AS "Quarter", SUM(sold_quantity) AS total_sold_quantity FROM fact_sales_mon...	4 row(s) returned	0.401 sec / 0.000042...

Que 9) Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution?

```

194 AND fsm.fiscal_year = fgp.fiscal_year
195 JOIN
196 dim_customer dc
197 ON
198 dc.customer_code = fsm.customer_code
199 WHERE
200 fsm.fiscal_year = 2021
201 GROUP BY
202 dc.channel
203 ORDER BY
204 gross_sales_mln DESC
205 LIMIT 1 -- OPTIONAL

```

100% 1:204

Result Grid Filter Rows: Search Export:

channel	gross_sales_mln	percentage
Retailer	1219.08	73.23%
Direct	257.53	15.47%
Distributor	188.03	11.30%

Result 10 Read Only

Action Output

	Time	Action	Response	Duration / Fetch Time
2	23:29:02	WITH year_in_20_21 as (SELECT COUNT(DISTINCT CASE WHEN fiscal_year = 2020 THEN product_code...	1 row(s) returned	0.545 sec / 0.000032...
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9	23:45:48	SELECT quarter(date) AS "Quarter", SUM(sold_quantity) AS total_sold_quantity FROM fact_sales_mon...	4 row(s) returned	0.401 sec / 0.000042...
10	23:48:53	SELECT dc.channel AS "channel", ROUND((SUM(fgp.gross_price * fsm.sold_quantity)/1e6),2) AS gross_...	3 row(s) returned	1.789 sec / 0.000038...

Que 10) Get the Top 3 products in each division that have a high total_sold_quantity in the fiscal_year 2021?

```

232 total_sold_quantity,
233 rank_order
234 FROM
235 RankedProducts
236 WHERE
237 rank_order <= 3
238 ORDER BY
239 Division, rank_order;

```

100% 26:239

Result Grid Filter Rows: Search Export:

Division	Product_Code	Product	total_sold_quantity	rank_order
N & S	A6720160103	AQ Pen Drive 2 IN 1	701373	1
N & S	A6818160202	AQ Pen Drive DRC	688003	2
N & S	A6819160203	AQ Pen Drive DRC	676245	3
P & A	A2319150302	AQ Gamers Ms	428498	1
P & A	A2520150501	AQ Maxima Ms	419865	2
P & A	A2520150504	AQ Maxima Ms	419471	3
PC	A4218110202	AQ Digit	17434	1
PC	A4319110306	AQ Velocity	17280	2
PC	A4218110208	AQ Digit	17275	3

Result 11 Read Only

Action Output

	Time	Action	Response	Duration / Fetch Time
3	23:32:11	SELECT segment, COUNT(DISTINCT product_code) AS product_count FROM dim_product GROUP BY s...	6 row(s) returned	0.0092 sec / 0.00001...
4	23:34:47	WITH year_in_20_21_ AS (SELECT dp.segment, COUNT(DISTINCT CASE WHEN fiscal_year=2020 THEN f...	6 row(s) returned	1.173 sec / 0.000043...
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10	23:48:53	SELECT dc.channel AS "channel", ROUND((SUM(fgp.gross_price * fsm.sold_quantity)/1e6),2) AS gross_...	3 row(s) returned	1.789 sec / 0.000038...
11	23:51:15	WITH RankedProducts AS (SELECT dp.division AS "Division", dp.product_code AS "Product_...	9 row(s) returned	0.906 sec / 0.00004...