Consumer Goods Ad_Hoc Insights

Q1. Provide the list of markets in which customer "Atliq Exclusive" operates its business in the APAC region.

- Output:

```
78
79 •    select distinct(market) from dim_customer where customer = 'Atliq Exclusive' and region = 'APAC';
80
81
82
83
```

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

market
India
Indonesia
Japan
Philiphines
South Korea
Australia
Newzealand
Bangladesh

Q2. What is the percentage of unique product increase in 2021 vs. 2020?

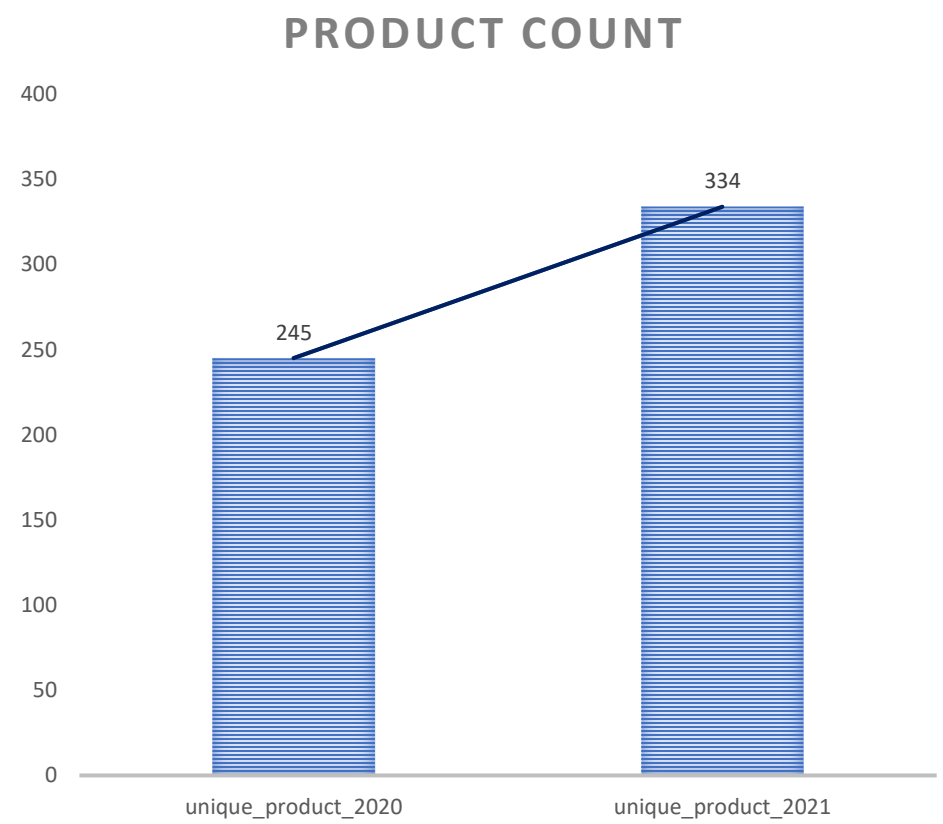
- Output

```
93  with perct as (
94      select (select count(distinct(product_code))
95      from fact_sales_monthly where fiscal_year = 2020) as product2020,
96      (select count(distinct(product_code)) as product2020
97      from fact_sales_monthly where fiscal_year = 2021) as product2021
98      from fact_sales_monthly
99  )
00  select product2020 as unique_product_2020,product2021 as unique_product_2021,
01      concat(round(((product2021-product2020)/product2020)*100,2),"%") as Percent_Increase
02      from perct limit 1;
03
```

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

unique_product_2020	unique_product_2021	Percent_Increase
245	334	36.33%

unique_product_2020	unique_product_2021	Percent_Increase
245	334	36.33%



Insights:

The Unique products in 2021 as compared to 2020 was 36.33% more.

In 2020 Unique Products were 245 and 2021 it was 334.

Q3. Provide a report with all the unique product counts for each segment and sort them in descending order of product counts.

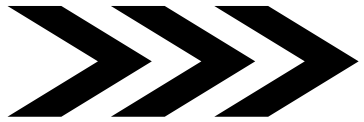
- Output

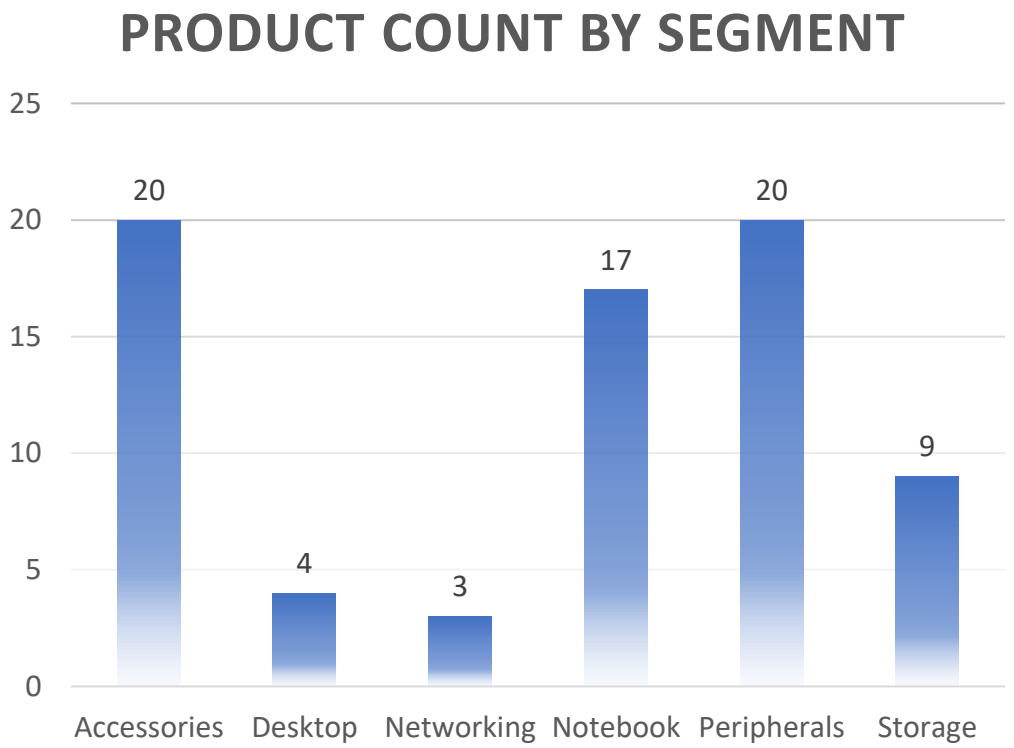
```
L11
L12 ●    select segment,count(distinct(product)) as Product_Count
L13          from dim_product
L14          group by segment
L15          order by count(distinct(product)) desc;
L16
L17
L18
```

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

segment	Product_Count
Accessories	20
Peripherals	20
Notebook	17
Storage	9
Desktop	4
Networking	3

segment	Product_Count
Accessories	20
Peripherals	20
Notebook	17
Storage	9
Desktop	4
Networking	3





Insights:

Accessories and Peripherals have more unique products. And the least Unique products is in Networking segment.

The products in the segment of Accessories and peripherals have more demand.

Q4. Follow-up: Which segment had the most increase in unique products in 2021 vs 2020?

- Output

```
185  with bcd as (
186      select c.Segment2020 as Segment,c.Product_count_2020 as Product_2020,g.Product_count_2021 as Product_2021,
187      g.Product_count_2021-c.Product_count_2020 as Difference_2021_2020
188      from(select d.segment as Segment2020,count(distinct(d.product)) as Product_count_2020 from fact_sales_monthly f
189      inner join dim_product d on f.product_code = d.product_code where f.fiscal_year = 2020 group by segment) c
190      inner join
191      (select d.segment as Segment2021,count(distinct(d.product)) as Product_count_2021 from fact_sales_monthly f
192      inner join dim_product d on f.product_code = d.product_code
193      where f.fiscal_year = 2021 group by segment) g on c.segment2020 = g.segment2021
194      order by g.Product_count_2021-c.Product_count_2020 desc
195  )
196
197  select Segment,product_2020,Product_2021,Difference_2021_2020 from bcd where Difference_2021_2020 = (select max(Difference_2021_2020) from bcd);
```

Segment	Product_2020	Product_2021	Difference_2021_2020
Accessories	13	19	6
Peripherals	15	20	5
Desktop	1	3	2
Notebook	14	16	2
Networking	2	3	1
Storage	6	7	1

Segment	Product_2020	Product_2021	Difference_2021_2020
Accessories	13	19	6

The Result Indicate that the Accessories Segment has more product count difference between the fiscal year 2020 and 2021 i.e. 6

Q5. Get the products that have the highest and lowest manufacturing costs.

- Output

```
34  with manfcost as (
35      select d.product_code as p,d.product as d,sum(f.manufacturing_cost) as Manufacture_cost
36      from fact_manufacturing_cost f inner join dim_product d on f.product_code = d.product_code
37      group by d.product_code,d.product
38  )
39  select p as Product_Code,d as Product,round(Manufacture_cost,2) as Manufacturing_Cost
40      from manfcost where Manufacture_cost = (select max(Manufacture_cost) from manfcost) union all select p as Product_Code,d as Product,
41      round(Manufacture_cost,2) as Manufacturing_Cost
42      from manfcost where Manufacture_cost = (select Min(Manufacture_cost) from manfcost);
43
44
```

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

Product_Code	Product	Manufacturing_Cost
A6018110103	AQ Home Allin1	454.26
A6818160202	AQ Pen Drive DRC	1.15

The Product AQ Home Allin 1 has the highest Manufacturing cost while the product AQ Pen Drive DRC has the lowest manufacturing cost.

Q6. 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.

- Output

```
select d.customer_code,d.customer,
    round(avg(f.pre_invoice_discount_pct),2) as Average_Pre_invoice_discount_pct
    from dim_customer d inner 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,d.customer
    order by avg(f.pre_invoice_discount_pct) desc limit 5;
```

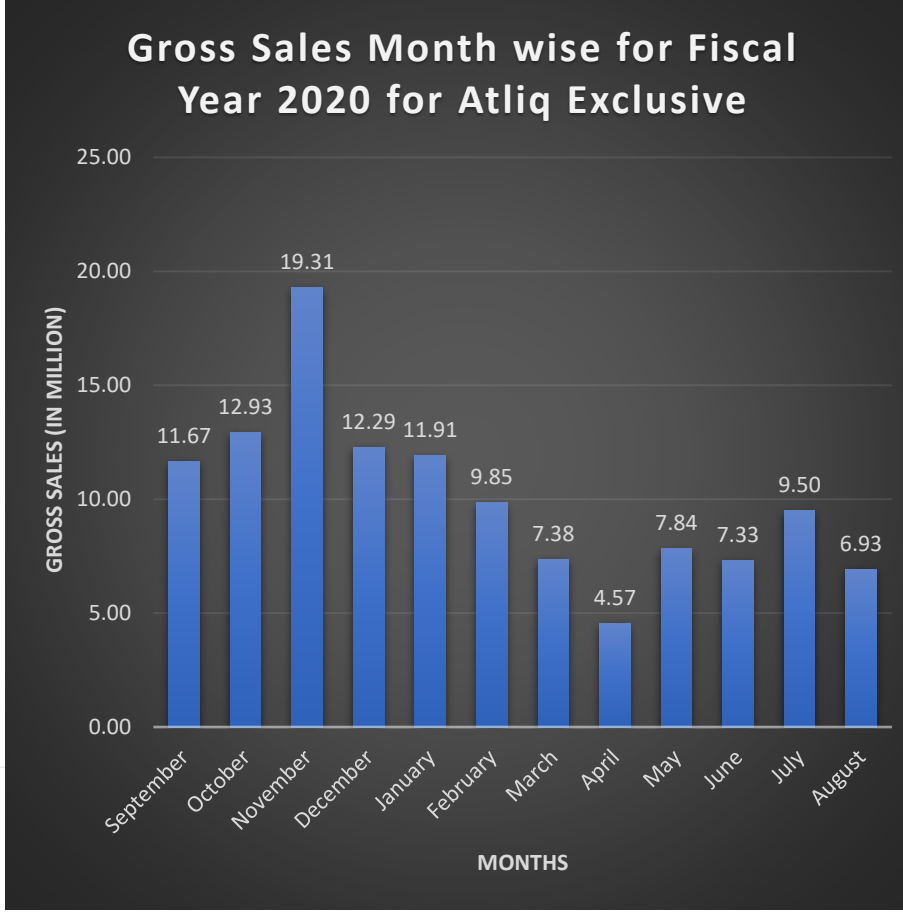
customer_code	customer	Average_Pre_invoice_discount_pct
90002009	Flipkart	0.31
90002006	Viveks	0.30
90002003	Ezone	0.30
90002002	Croma	0.30
90002016	Amazon	0.29

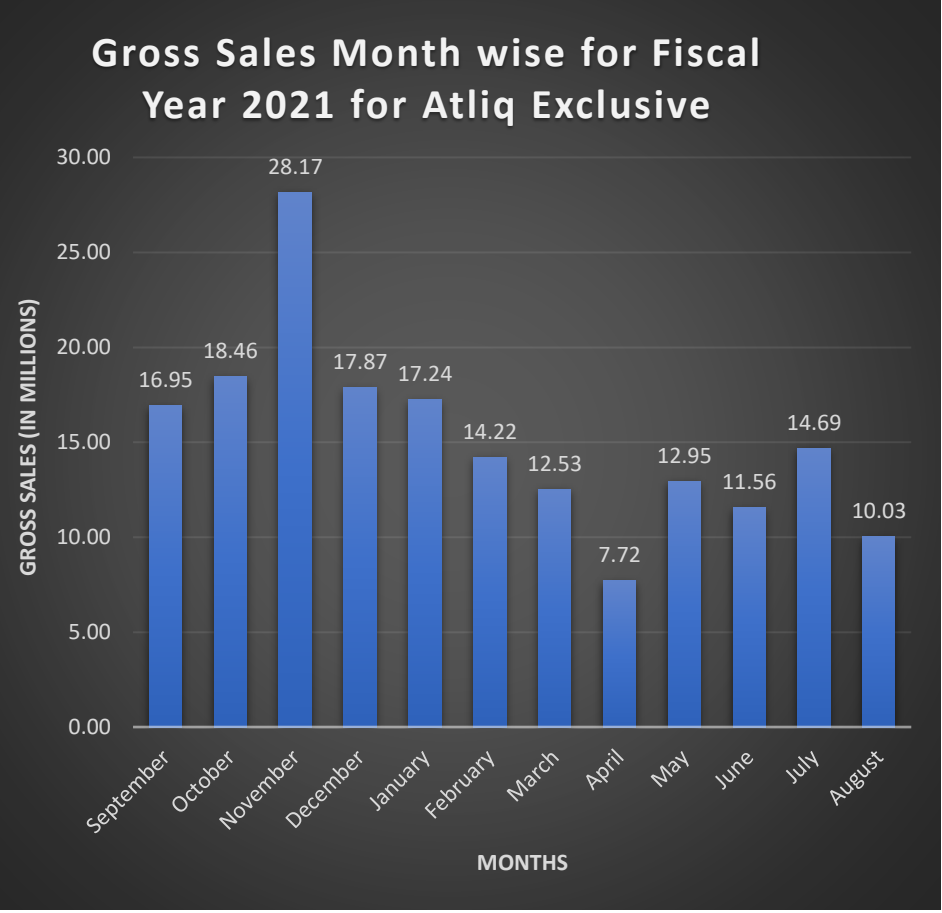
Q7. Get the complete report of the Gross sales amount for the customer “Atliq Exclusive” for each month. This analysis helps to get an idea of low and high-performing months and take strategic decisions.

- Output

```
15
16 •    select extract(month from date) as Month_Atliq,e.fiscal_year,
17          concat("₹"," ",round(sum(sold_quantity*gross_price)/1000000,2)," ","M") as Gross_Sales
18          from dim_customer d inner join fact_sales_monthly f on f.customer_code = d.customer_code
19          inner join fact_gross_price e on f.product_code = e.product_code
20          where d.customer = 'Atliq Exclusive'
21          group by Month_Atliq,e.fiscal_year
22          order by e.fiscal_year;
23
```

Month_Atliq	fiscal_year	Gross_Sales
9	2020	₹ 11.67 M
10	2020	₹ 12.93 M
11	2020	₹ 19.31 M
12	2020	₹ 12.29 M
1	2020	₹ 11.91 M
2	2020	₹ 9.85 M
3	2020	₹ 7.38 M
4	2020	₹ 4.57 M
5	2020	₹ 7.84 M
6	2020	₹ 7.33 M
7	2020	₹ 9.50 M
8	2020	₹ 6.93 M
9	2021	₹ 16.95 M
10	2021	₹ 18.46 M
11	2021	₹ 28.17 M
12	2021	₹ 17.87 M
1	2021	₹ 17.24 M
2	2021	₹ 14.22 M
3	2021	₹ 12.53 M
4	2021	₹ 7.72 M
5	2021	₹ 12.95 M
6	2021	₹ 11.56 M
7	2021	₹ 14.69 M
8	2021	₹ 10.03 M





The results Shows that in fiscal year of 2020 and 2021 the gross sales of the April is less as compared to the other months of that fiscal year, And in overall 2 fiscal Years:

Lowest Gross Sales = 4.57 M (April of Fiscal Year 2020)

Highest Gross Sales = 28.17 M (November of Fiscal Year 2021)

Q8. In which quarter of 2020, got the maximum total_sold_quantity?

- Output

```
142  with Quart as (
143      select date,product_code,customer_code,sold_quantity,fiscal_year,(case
144      when extract(month from date) between 09 and 11 then 'Q1'
145      when extract(month from date) = 12 or extract(month from date) between 01 and 02 and
146      extract(year from date) between extract(year from date) and extract(year from date)+1 then 'Q2'
147      when extract(month from date) between 03 and 05 then 'Q3'
148      when extract(month from date) between 06 and 08 then 'Q4' end) as Quarter_Year
149      from fact_sales_monthly order by date
150  )
151  select Quarter_Year,fiscal_year as YearU,concat(round(sum(sold_quantity)/1000000,2)," ","M") as Total_sold_quantity
152      from Quart where fiscal_year = 2020 group by Quarter_Year,YearU order by sum(sold_quantity) desc;
```

	Quarter_Year	YearU	Total_sold_quantity
▶	Q1	2020	7.01 M
	Q2	2020	6.65 M
	Q4	2020	5.04 M
	Q3	2020	2.08 M

	Quarter_Year	YearU	Total_sold_quantity
▶	Q1	2020	7.01 M

Apparently the results show that in 2020 the most Sold quantity was in Quarter 1. Accounting to 7.01 M.

Q9. Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution?

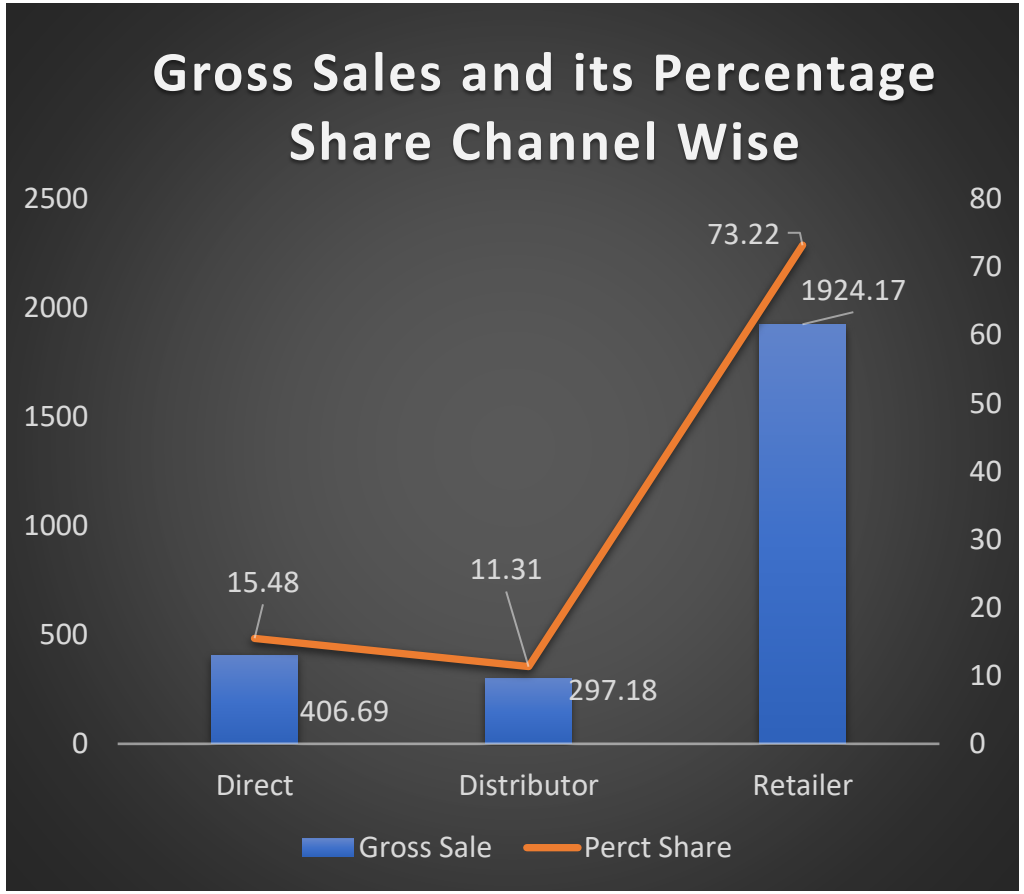
- Output

```
27  with Gross as (
28      select d.channel as Channel_P,sum(f.sold_quantity*e.gross_price) as Gross_Sales
29      from dim_customer d inner join fact_sales_monthly f
30      on f.customer_code = d.customer_code
31      inner join fact_gross_price e on f.product_code = e.product_code
32      where f.fiscal_year = 2021
33      group by channel
34  )
35  select channel_p,concat("₹"," ",round(Gross_Sales/1000000,2)," ","M") as Gross_Sales_Atliq,
36  concat(round(((Gross_Sales/sum(gross_sales) over())*100),2),"%") as Perct_Share
37  from Gross;
38
```

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

channel_p	Gross_Sales_Atliq	Perct_Share
Direct	₹ 406.69 M	15.47%
Distributor	₹ 297.18 M	11.31%
Retailer	₹ 1924.17 M	73.22%

	channel_p	Gross_Sales_Atliq	Perct_Share
▶	Direct	₹ 406.69 M	15.47%
	Distributor	₹ 297.18 M	11.31%
	Retailer	₹ 1924.17 M	73.22%



The Results are evident that the Retailer channel helped to bring more gross sales in the fiscal year 2021. Accounting to 73.22% and 1924.17 M in value.

Q10. Get the Top 3 products in each division that have a high total_sold_quantity in the fiscal_year 2021?

- Output

```sql
with rank_gross as (
    select d.division,d.product_code,d.product,f.sold_quantity
    from fact_sales_monthly f inner join dim_product d on f.product_code = d.product_code
    where f.fiscal_year = 2021)
(select division,product_code,product,sum(sold_quantity) as Total_Sold_Quantity,
    rank() over(order by sum(sold_quantity) desc) as Rank_Total_Sold_Quantity
    from rank_gross where division = 'N & S' group by division,product_code,product limit 3)
    union all
    (select division,product_code,product,sum(sold_quantity),
    rank() over(order by sum(sold_quantity) desc)
    from rank_gross where division = 'P & A' group by division,product_code,product limit 3)
    union all
    (select division,product_code,
    product,sum(sold_quantity),rank() over(order by sum(sold_quantity) desc)
    from rank_gross where division = 'PC' group by division,product_code,product limit 3);
```

division	product_code	product	Total_Sold_Quantity	Rank_Total_Sold_Quantity
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