

A. Create the different metrics like Sales, customer acquisitions, total no. of orders for each Year across the different states they serve.

Does all the metrics show similar trends or is there any disparity amongst each of them?

--A) Sales

```
WITH CTE1 AS(
SELECT YEAR(O.order_purchase_timestamp) Years, C.customer_state, ROUND(SUM(I.price), 2) Sales
FROM customers C
JOIN order1 O
ON C.customer_id = O.customer_id

JOIN order_items I
ON O.order_id = I.order_id

WHERE O.order_status NOT IN('unavailable', 'canceled')

GROUP BY C.customer_state, YEAR(O.order_purchase_timestamp)),
-- 

CTE2 AS(
SELECT *, ROW_NUMBER() OVER(PARTITION BY Years, customer_state ORDER BY
customer_state) Ranks
FROM CTE1)
-- 

SELECT Years, customer_state, sales FROM CTE2;
```

The screenshot shows the Microsoft SQL Server Management Studio interface. The query window displays the CTE1 and CTE2 definitions, and the results window shows a table with 17 rows of data. The table has three columns: Years, customer_state, and sales. The data is as follows:

Years	customer_state	sales
2016	AL	82.49
2016	BA	894.05
2016	CE	1689.38
2016	DF	1043.77
2016	ES	917.79
2016	GO	984.39
2016	IA	764.39
2016	MG	4852.22
2016	MT	327.79
2016	PA	1087.6
2016	PB	49.9
2016	PE	1369.1
2016	PI	210
2016	PR	2015.51
2016	RJ	9187.18
2016	RN	728.69
2016	RR	112.59

The status bar at the bottom indicates "Query executed successfully." The system tray shows the date and time as 10:01 AM 07/02/2022.

--B) Customer Acquisitions

WITH CTE3 AS(

```

SELECT
YEAR(O.order_purchase_timestamp)Years,C.customer_state,COUNT(C.customer_id)Customer_Acquisitions
FROM customers C
INNER JOIN order1 O
ON C.customer_id = O.customer_id

WHERE O.order_status NOT IN('unavailable','canceled')

GROUP BY C.customer_state,YEAR(O.order_purchase_timestamp)),
--C)
CTE4 AS(
SELECT *,ROW_NUMBER() OVER(PARTITION BY Years,customer_state ORDER BY customer_state)Ranks
FROM CTE3)
--C)
SELECT Years,customer_state,Customer_Acquisitions FROM CTE4;

```

The screenshot shows the Microsoft SQL Server Management Studio interface. A query window is open with the following content:

```

--B) Customer Acquisitions
WITH CTE3 AS(
SELECT YEAR(O.order_purchase_timestamp)Years,C.customer_state,COUNT(C.customer_id)Customer_Acquisitions
FROM customers C
INNER JOIN order1 O
ON C.customer_id = O.customer_id

WHERE O.order_status NOT IN('unavailable','canceled')

GROUP BY C.customer_state,YEAR(O.order_purchase_timestamp))
--C)
CTE4 AS(
SELECT *,ROW_NUMBER() OVER(PARTITION BY Years,customer_state ORDER BY customer_state)Ranks
FROM CTE3)
--C)
SELECT Years,customer_state,Customer_Acquisitions FROM CTE4;

--C) Total No of orders
WITH CTE5 AS(
SELECT DATEPART(YEAR,O.order_purchase_timestamp)Years,
C.customer_state,
COUNT(order_id)Total_no_of_orders
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id

WHERE O.order_status NOT IN('unavailable','canceled')

GROUP BY C.customer_state,YEAR(O.order_purchase_timestamp)),
--C)
CTE6 AS(
SELECT *,ROW_NUMBER() OVER(PARTITION BY Years,customer_state ORDER BY customer_state)Ranks

```

The results pane shows a table with the following data:

Years	customer_state	Customer_Acquisitions
1	AL	2
2	BA	4
3	CE	7
4	DF	6
5	ES	4
6	GO	8
7	MA	4
8	MG	39
9	MT	2
10	PA	4
11	PR	1
12	PE	7
13	PI	1
14	PR	20
15	RJ	43
16	RN	4
17	RR	2

```

--C) Total No of orders
WITH CTE5 AS(
SELECT DATEPART(YEAR,O.order_purchase_timestamp)Years,
C.customer_state,
COUNT(order_id)Total_no_of_orders
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id

WHERE O.order_status NOT IN('unavailable','canceled')

GROUP BY C.customer_state,YEAR(O.order_purchase_timestamp)),
--C)
CTE6 AS(
SELECT *,ROW_NUMBER() OVER(PARTITION BY Years,customer_state ORDER BY customer_state)Ranks

```

```

FROM CTE5)
-- 
SELECT Years, customer_state, Total_no_of_orders FROM CTE6;

```

```

--C) Total No of orders
WITH CTE5 AS(
SELECT DATEPART(YEAR,O.order_purchase_timestamp)Years,
       C.customer_state,
       COUNT(O.order_id)Total_no_of_orders
  FROM order1 O
 INNER JOIN customers C
    ON O.customer_id = C.customer_id
 WHERE O.order_status NOT IN('unavailable','canceled')
 GROUP BY C.customer_state, YEAR(O.order_purchase_timestamp))
-- 
CTE6 AS(
SELECT *, ROW_NUMBER() OVER(PARTITION BY Years,customer_state ORDER BY customer_state Ranks
  FROM CTE5)

```

Years	customer_state	Total_no_of_orders
2016	AL	2
2016	BA	4
2016	CE	7
2016	DF	6
2016	ES	4
2016	GO	8
2016	MA	4
2016	MI	39
2016	MT	2
2016	PA	4
2016	PB	1
2016	PE	7
2016	PI	1
2016	PR	20
2016	RJ	43
2016	RN	4
2016	RR	2

Query executed successfully.

C. For the States identified above, do the Root Cause analysis for their performance across a variety of metrics.

You can utilize the following metrics and explore a few yourself as well by analyzing the data.

i) Category level Sales and orders placed,

A) INCREASING

```

SELECT
YEAR(O.order_purchase_timestamp)Years,C.customer_state,P.product_category_name,COUNT(P.product_category_name)Order_palcde
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id
INNER JOIN order_items I
ON O.order_id = I.order_id
INNER JOIN products P
ON I.product_id = P.product_id
WHERE C.customer_state IN('AP','RR') And O.order_status NOT IN('unavailable','canceled')
GROUP BY YEAR(O.order_purchase_timestamp),C.customer_state,P.product_category_name

```

ORDER BY YEAR(0.order_purchase_timestamp), C.customer_state;

The screenshot shows the Microsoft SQL Server Management Studio interface. In the Object Explorer, a project named 'Project1' is selected. In the center pane, a query window titled 'SQL Project 1.sql... - DESKTOP-Q54KQDR\welcome (58) - Microsoft SQL Server Management Studio' contains the following T-SQL code:

```

A) INCREASING

SELECT YEAR(0.order_purchase_timestamp) Years, C.customer_state, P.product_category_name, COUNT(P.product_category_name) Order_palced
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id
INNER JOIN order_items I
ON O.order_id = I.order_id
INNER JOIN products P
ON I.product_id = P.product_id
WHERE C.customer_state IN('AP','RR') And O.order_status NOT IN('unavailable','canceled')
GROUP BY YEAR(0.order_purchase_timestamp), C.customer_state, P.product_category_name

```

The results grid shows the following data:

Year	Customer State	Product Category Name	Order_palced
1	2018	beleza_saude	1
2	2016	moveis_decoracao	2
3	2017	agro_industria_e_comercio	1
4	2017	automotivo	1
5	2017	beleza_saude	7
6	2017	brinquedos	2
7	2017	cama_mesa_banho	6
8	2017	cool_stuff	1
9	2017	eletronicos	3
10	2017	ferramentas_jardim	1
11	2017	informatica_acessorios	2
12	2017	instrumentos_musicais	1
13	2017	moveis_decoracao	2
14	2017	pet	1
15	2017	pet_shop	2
16	2017	religioso_presentes	1
17	2017	telefonia	1

At the bottom of the results grid, a message says "Query executed successfully." The status bar at the bottom right shows "DESKTOP-Q54KQDR (15.0 RTM) DESKTOP-Q54KQDR\welcome Project1 00:00:04 60 rows".

B) DECREASING

```

SELECT
YEAR(0.order_purchase_timestamp) Years, C.customer_state, P.product_category_name, COUNT(P.product_category_name) Order_palced
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id
INNER JOIN order_items I
ON O.order_id = I.order_id
INNER JOIN products P
ON I.product_id = P.product_id
WHERE C.customer_state IN('AC','SE') And O.order_status NOT IN('unavailable','canceled')
GROUP BY YEAR(0.order_purchase_timestamp), C.customer_state, P.product_category_name

```

ORDER BY YEAR(O.order_purchase_timestamp), C.customer_state;

Years	customer_state	product_category_name	Order_pcaled
1	2018	videogames	1
2	2018	informatica_acessorios	1
3	2016	movies_decoracao	1
4	2017	AC	0
5	2017	artigos_de_natal	1
6	2017	automotivo	4
7	2017	bebekitivo	3
8	2017	beleza_saude	4
9	2017	brinquedos	2
10	2017	cama_mesa_banho	4
11	2017	console_games	1
12	2017	cool_stuff	1
13	2017	eletronicos	3
14	2017	esportes_recreio	1
15	2017	export_import	7
16	2017	fashion_clothes	1
17	2017	informatica_acessorios	7

2)post-order reviews

A) Increasing

```
SELECT YEAR(O.order_purchase_timestamp)Years,C.customer_state,AVG(R.review_score)
Avg_Rating
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id

INNER JOIN order_reviews R
ON O.order_id = R.order_id

WHERE C.customer_state IN('AP','RR') And O.order_status NOT IN('unavailable','canceled')

GROUP BY YEAR(O.order_purchase_timestamp),C.customer_state
```

ORDER BY YEAR(0.order_purchase_timestamp), C.customer_state;

The screenshot shows the Microsoft SQL Server Management Studio interface. In the Object Explorer, a project named 'Project1' is selected. In the center pane, a query window displays the following T-SQL code:

```
SELECT Years,customer_state,Total_no_of_orders FROM CTE6;
-----3)
A) Increasing
SELECT YEAR(0.order_purchase_timestamp)Years,C.customer_state,Avg(R.review_score) Avg_Rating
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id
INNER JOIN order_reviews R
ON O.order_id = R.order_id
WHERE C.customer_state IN('AP','RR') And O.order_status NOT IN('unavailable','canceled')
GROUP BY YEAR(0.order_purchase_timestamp),C.customer_state
```

The results pane shows a table with the following data:

Year	Customer State	Avg_Rating
1	2018 RR	3
2	2017 AP	4
3	2017 RR	3
4	2018 AP	4
5	2018 RR	3

Below the results, a message says "Query executed successfully." The status bar at the bottom right shows "Activate Windows".

B) DECREASING

```
SELECT YEAR(0.order_purchase_timestamp)Years,C.customer_state,AVG(R.review_score)
Avg_Rating
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id
INNER JOIN order_reviews R
ON O.order_id = R.order_id
WHERE C.customer_state IN('AC','SE') And O.order_status NOT IN('unavailable','canceled')
GROUP BY YEAR(0.order_purchase_timestamp),C.customer_state
```

ORDER BY YEAR(O.order_purchase_timestamp), C.customer_state;

SQL Project 1.sql - DESKTOP-Q54KQQR\Project1 (DESKTOP-Q54KQQR\welcome (58)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Project1

Object Explorer

Connect ▾

DESKTOP-Q54KQQR (SQL Server 15.0.2000.5) ▾

- Databases
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

SQL Project 1.sql...4KQQR\welcome (58) ▾

ORDER BY YEAR(O.order_purchase_timestamp), C.customer_state;

B) DECREASING

```
SELECT YEAR(O.order_purchase_timestamp) Years, C.customer_state, AVG(R.review_score) Avg_Rating
FROM order1_0
INNER JOIN customers C
ON O.customer_id = C.customer_id
INNER JOIN order_reviews R
ON O.order_id = R.order_id
WHERE C.customer_state IN ('AC', 'SE') AND O.order_status NOT IN ('unavailable', 'canceled')
GROUP BY YEAR(O.order_purchase_timestamp), C.customer_state
ORDER BY YEAR(O.order_purchase_timestamp), C.customer_state
```

100 %

Results Messages

	Years	customer_state	Avg_Rating
1	2016	SE	4
2	2017	AC	3
3	2017	SE	3
4	2018	AC	4
5	2018	SE	3

Activate Windows

Query executed successfully.

DESKTOP-Q54KQQR (15.0 RTM) DESKTOP-Q54KQQR\welcome (58) Project1 00:00:03 | 5 rows

Ln 107 Col 1 Ch 1 INS

32°C 10:09 AM 07/02/2022

Type here to search

3) Seller performance in terms of deliveries,

A) INCREASING

```
SELECT YEAR(0.order_purchase_timestamp)Years , S.seller_id , C.customer_state ,
       DATEDIFF(DAY,0.order_delivered_carrier_date,0.order_delivered_customer_date)
  Del_days
 FROM sellers S
INNER JOIN order_items I
ON S.seller_id = I.seller_id

INNER JOIN order1 O
ON I.order_id = O.order_id

INNER JOIN customers C
ON O.customer_id = C.customer_id

WHERE C.customer_state IN('AP','RR') And O.order_status NOT IN('unavailable','canceled')
```

ORDER BY YEAR(0.order_purchase_timestamp) , S.seller_id , C.customer_state ;

The screenshot shows the Microsoft SQL Server Management Studio interface. A query window titled 'SQL Project 1.sql...4KQDR(welcome (58))' displays a T-SQL script for calculating seller performance. The results grid shows 17 rows of data, each containing a year, seller ID, customer state, and a 'Del_days' value. The data is sorted by year in descending order (2018 at the top, 2017 at the bottom). The 'customer_state' column includes values like RR, AP, and SR. The 'Del_days' column shows various numerical values.

Year	Seller_ID	customer_state	Del_days
2018	155440530120200ad5dbd42;3ab563	RR	NULL
2016	155440530120200ad5dbd42;3ab563	RR	NULL
3	Mahe7chca1484c3ab7bd34ddc01	RR	3
4	2017_13545d51653w4534094725e204465e	RR	6
5	1782c2d8723d4d5727d9e7a89104e1	RR	169
6	1d3aeb70d7899d1e69d9e08979723	AP	22
7	2138ccb85b1aae1e1e37afed1cbeda1f	AP	4
8	2138ccb85b1aae1e1e37afed1cbeda1f	RR	27
9	31ae077417hab000707cc5bede059	AP	13
10	37be57c751166bc58ccba4119a043	AP	14
11	40985cd15292077ha4f3bbcf02d3	AP	8
12	4x3c93156744e98593743b1493838	AP	13
13	2017_13545d51653w4534094725e204465e	AP	13
14	4d2ce01fb144ce9f6d974381493084	AP	13
15	4e1765da51969a022a2e79b04c2846	RR	20
16	4e022959aae0d043891493781e1e3985	AP	43
17	5324558516dc264302161853d8905	AP	15

B)DECREASING

```

SELECT YEAR(0.order_purchase_timestamp)Years , S.seller_id , C.customer_state ,
       DATEDIFF(DAY,0.order_delivered_carrier_date,0.order_delivered_customer_date)
De_l_days
FROM sellers S
INNER JOIN order_items I
ON S.seller_id = I.seller_id

INNER JOIN order1 O
ON I.order_id = O.order_id

INNER JOIN customers C
ON O.customer_id = C.customer_id

WHERE C.customer_state IN('AC','SE') And O.order_status NOT IN('unavailable','canceled')
    
```

ORDER BY YEAR(0.order_purchase_timestamp) , S.seller_id , C.customer_state ;

Year	seller_id	customer_state	Del_days
1	b335c59ab742f751a85bd9d411a86739	SE	18
2	ce27a3cc3c3c0e1ea79d11561e9eb66	SE	10
3	2016 d03698c2ed04a549382af6923a27fb	SE	2
4	2017 058d6c8a0a13a8971aef71dabb6	SE	17
5	2017 058d6c8a0a13a8971aef71dabb6	SE	19
6	2017 059929ed65a479202aa9a9e01238fb	SE	35
7	059929ed65a479202aa9a9e01238fb	SE	11
8	0ba98432e24e56fa4e0371h22454d91	AC	13
9	0d8594bd0039e17e43776c04544eb	SE	28
10	0d30349dfb3349ae6366ebcb3bb85	SE	10
11	0ea22c1dbdc7596989b5b49c9c10043	SE	16
12	10256e204447041afed5b6550e0bfa	AC	32
13	10256e204447041afed5b6550e0bfa	SE	13
14	128639473a139ac0059ade55873a5	SE	17
15	128639473a139ac0059ade55873a5	SE	29
16	12867680060000700e3a721824c0	SE	27
17	15544653019280aa9c580a0423ab563	SE	16

4)product-level sales & orders placed,

1)Increasing

```

SELECT
YEAR(0.order_purchase_timestamp)Years,C.customer_state,I.product_id,COUNT(I.product_id)Order_palced
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id

INNER JOIN order_items I
ON O.order_id = I.order_id

WHERE C.customer_state IN('AP','RR') AND O.order_status NOT IN('unavailable','canceled')

GROUP BY YEAR(0.order_purchase_timestamp),C.customer_state,I.product_id

```

ORDER BY YEAR(0.order_purchase_timestamp), C.customer_state;

The screenshot shows a Microsoft SQL Server Management Studio window. The title bar reads "SQL Project 1.sql - DESKTOP-Q54KQ0R\Project1 (DESKTOP-Q54KQ0R\welcome (58)) - Microsoft SQL Server Management Studio". The Object Explorer sidebar shows a connection to "DESKTOP-Q54KQ0R (SQL Server 15.0)". The main pane displays a query titled "1) Increasing" with the following T-SQL code:

```

SELECT YEAR(0.order_purchase_timestamp) Years, C.customer_state, I.product_id, COUNT(I.product_id) Order_palced
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id
INNER JOIN order_items I
ON O.order_id = I.order_id
WHERE C.customer_state IN('AP', 'RR') AND O.order_status NOT IN('unavailable', 'canceled')
GROUP BY YEAR(0.order_purchase_timestamp), C.customer_state, I.product_id
ORDER BY YEAR(0.order_purchase_timestamp), C.customer_state

```

The results grid shows data for years 2015 through 2017, categorized by customer state (AP or RR) and product ID. The columns are "Year", "Customer State", "Product ID", and "Order_palced". The data includes rows for various products across different years and states.

2) Decreasing

```

SELECT
YEAR(0.order_purchase_timestamp) Years, C.customer_state, I.product_id, COUNT(I.product_id) Order_palced
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id
INNER JOIN order_items I
ON O.order_id = I.order_id
WHERE C.customer_state IN('AC', 'SE') AND O.order_status NOT IN('unavailable', 'canceled')
GROUP BY YEAR(0.order_purchase_timestamp), C.customer_state, I.product_id

```

ORDER BY YEAR(0.order_purchase_timestamp), C.customer_state;

The screenshot shows a Microsoft SQL Server Management Studio window. The query window contains the following T-SQL code:

```

2) Decreasing
SELECT YEAR(0.order_purchase_timestamp)Years,C.customer_state,I.product_id,COUNT(I.product_id)Order_packed
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id

INNER JOIN order_items I
ON O.order_id = I.order_id

WHERE C.customer_state IN('AC','SE') AND O.order_status NOT IN('unavailable','canceled')

GROUP BY YEAR(0.order_purchase_timestamp),C.customer_state,I.product_id

ORDER BY YEAR(0.order_purchase_timestamp),C.customer_state

```

The results grid displays the following data:

Years	customer_state	product_id	Order_packed	
1	2016	SE	6d29252aa5baa5e439571dd0d748	1
2	2016	SE	05ea0b4d54a65d4371d76534136	1
3	2016	SE	d32445df30f1cd915eb14e44d	1
4	2017	AC	06ed9a00200000000000000000000000	1
5	2017	AC	0a5a0000000000000000000000000000	1
6	2017	AC	1d3b8f195c3e09324d4bc02c0993a9	1
7	2017	AC	3a3b0a3034a4e303858a1e4a1898f1	3
8	2017	AC	0a169909b5740d053d4d4d3e1673b	1
9	2017	AC	108e01163b75067924ec0a0d401b1a3	1
10	2017	AC	225dd422ea8cae54619917de852d5	1
11	2017	AC	46670e03948d0e12273d8889927c7	1
12	2017	AC	1a06cc924a8352ba5a19b6a4a0fc	1
13	2017	AC	29427de75a9e983d1dbd51ce559b4	1
14	2017	AC	292beec328ba10741bd5900a59ab	1
15	2017	AC	6d6bebea4196204a93e42016d1bb	1
16	2017	AC	3daeb3ae011b40803a08b23392a15a0	1
17	2017	AC	40e8b425d1a26e29eb77363523e05ce	1

At the bottom of the results grid, it says "Query executed successfully." The status bar at the bottom right shows "DESKTOP-Q54KQ0R (15.0 RTM) | DESKTOP-Q54KQ0R\welcome | Project1 | 00:00:01 | 399 rows".

5)% of orders delivered earlier than the expected date,

A) INCREASING/DECREASING

```

SELECT
YEAR(0.order_purchase_timestamp)Years,C.customer_state,COUNT(C.customer_state)Order_Delivered
FROM customers C
INNER JOIN order1 O
ON O.customer_id = C.customer_id

WHERE O.order_status IN('delivered') AND O.order_delivered_customer_date <
O.order_estimated_delivery_date

GROUP BY YEAR(0.order_purchase_timestamp),C.customer_state

```

ORDER BY YEAR(O.order_purchase_timestamp), C.customer_state;

Years	customer_state	Order_Delivered
1	2016	1
2	2016 BA	3
3	2016 CE	6
4	2016 DF	6
5	2016 ES	3
6	2016 GO	7
7	2016 MA	3
8	2016 MG	35
9	2016 MT	1
10	2016 PA	4
11	2016 PB	1
12	2016 PE	6
13	2016 RI	1
14	2016 PR	20
15	2016 RJ	40
16	2016 RN	4
17	2016 RR	1

6)% of orders delivered later than the expected date, etc.e

A) INCREASING/DECREASING

```
SELECT
YEAR(O.order_purchase_timestamp)Years,C.customer_state,COUNT(C.customer_state)Order_Delivered
FROM customers C
INNER JOIN order1 O
ON O.customer_id = C.customer_id

WHERE O.order_status IN('delivered') AND O.order_delivered_customer_date >
O.order_estimated_delivery_date

GROUP BY YEAR(O.order_purchase_timestamp),C.customer_state
```

```

ORDER BY YEAR(O.order_purchase_timestamp), C.customer_state;

```

SQL Project 1.sql - DESKTOP-Q54KQDR\welcome (SB) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Object Explorer

Connect to... New Query Task Panes Home Back Forward Stop Refresh

Execute

Quick Launch (Ctrl+Q)

Project1

SQL Project 1.sql...4KQR\welcome (SB) - X

YTD_TempO_order_purchase_timestamp,C.customer_state;

--% ORDER DELIVERED LATER

A) INCREASING/DECREASING

```

SELECT YEAR(O.order_purchase_timestamp)Years,C.customer_state,COUNT(C.customer_state)Order_Delivered
FROM customers C
INNER JOIN order1 O
ON O.customer_id = C.customer_id
WHERE O.order_status IN('delivered') AND O.order_delivered_customer_date > O.order_estimated_delivery_date
GROUP BY YEAR(O.order_purchase_timestamp),C.customer_state
ORDER BY YEAR(O.order_purchase_timestamp),C.customer_state

```

--Product Level

Results Messages

Years	customer_state	Order_Delivered
1	2016	9
2	2017 AC	2
3	2017 AL	41
4	2017 AM	1
5	2017 AP	2
6	2017 BA	153
7	2017 CE	55
8	2017 DF	38
9	2017 ES	70
10	2017 GO	48
11	2017 MA	56
12	2017 MG	143
13	2017 PR	9
14	2017 MT	29
15	2017 PA	31
16	2017 PB	30
17	2017 PE	68

Activate Windows

Ready Type here to search Lin 207 Col 1 Ch 1 INS 32°C 10:15 AM 07/02/2022

D. Do the above analysis for the top 2 cities which are causing the trend for each of the states identified in point (b)

1)Category level Sales and orders placed,

A) INCREASING

```

WITH CTE1 AS(
SELECT
YEAR(O.order_purchase_timestamp)Years,C.customer_state,C.customer_city,P.product_category_name,COUNT(P.product_category_name)Order_placed
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id

INNER JOIN order_items I
ON O.order_id = I.order_id

INNER JOIN products P
ON I.product_id = P.product_id

WHERE C.customer_state IN('AP','RR') And O.order_status NOT IN('unavailable','canceled')

GROUP BY
YEAR(O.order_purchase_timestamp),C.customer_state,C.customer_city,P.product_category_name
),

CTE2 AS(
SELECT * , DENSE_RANK() OVER(PARTITION BY Years,customer_state ORDER BY Order_placed DESC)Ranks
FROM CTE1)

```

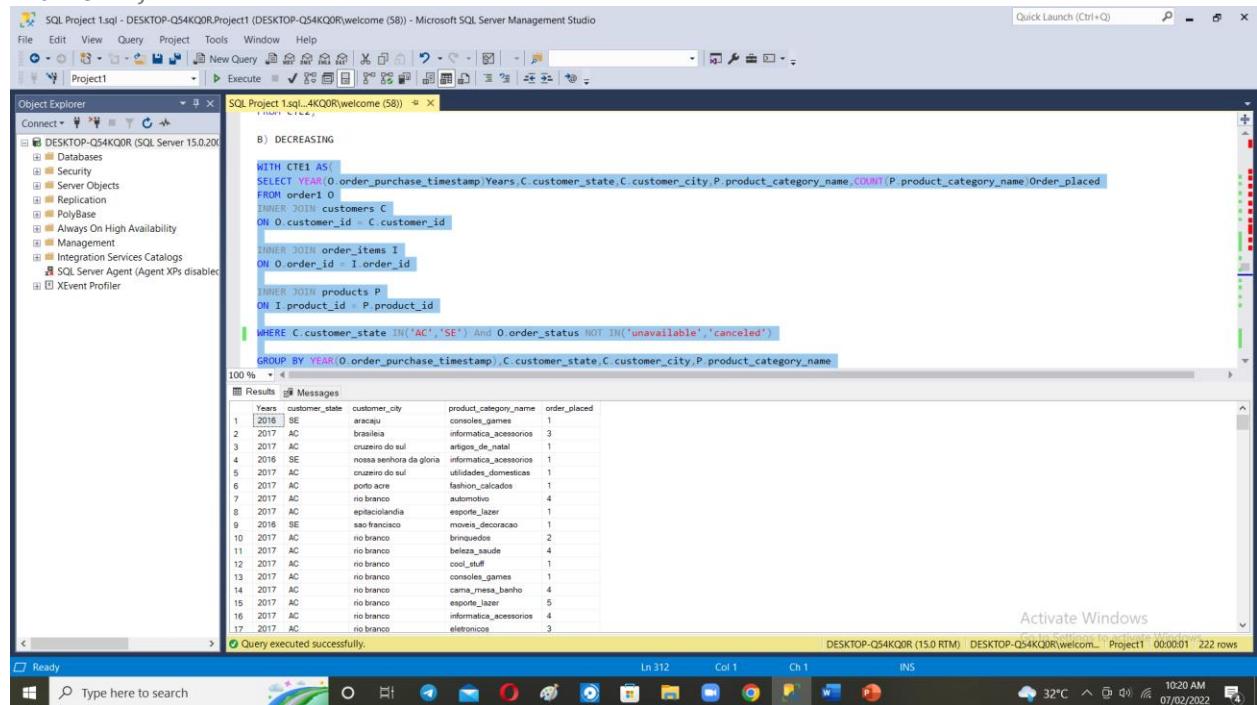
```
--  
SELECT Years, customer_state, customer_city, product_category_name, order_placed  
FROM CTE2;
```

Years	customer_state	customer_city	product_category_name	order_placed
2016	RR	boa vista	beleza_saude	1
2016	RR	boa vista	moveis_decoracao	2
2016	AP	laranjal do jari	beleza_saude	1
2017	AP	laranjal do jari	macaco	2
2017	AP	macapa	agro_industria_e_comercio	1
2017	AP	macapa	automotivo	1
2017	AP	macapa	beleza_saude	4
2017	AP	macapa	brinquedos	1
2017	AP	macapa	cama_mesa_banho	6
2017	AP	macapa	informatica_acessorios	2
2017	AP	macapa	instrumentos_musicais	1
2017	AP	macapa	moveis_decoracao	2
2017	AP	macapa	pcos	1
2017	AP	macapa	pet_shop	2
2017	AP	macapa	relogios_presentes	1
2017	AP	macapa	telefonia	1
2017	AP	macapa	utilidades_domesticas	1

B) DECREASING

```
WITH CTE1 AS(  
SELECT  
YEAR(O.order_purchase_timestamp) Years, C.customer_state, C.customer_city, P.product_category_name  
_name, COUNT(P.product_category_name) Order_placed  
FROM order1 O  
INNER JOIN customers C  
ON O.customer_id = C.customer_id  
  
INNER JOIN order_items I  
ON O.order_id = I.order_id  
  
INNER JOIN products P  
ON I.product_id = P.product_id  
  
WHERE C.customer_state IN('AC', 'SE') And O.order_status NOT IN('unavailable', 'canceled')  
GROUP BY  
YEAR(O.order_purchase_timestamp), C.customer_state, C.customer_city, P.product_category_name  
)  
--  
CTE2 AS(  
SELECT * , DENSE_RANK() OVER(PARTITION BY Years, customer_state ORDER BY Order_placed  
DESC)Ranks  
FROM CTE1  
--  
SELECT Years, customer_state, customer_city, product_category_name, order_placed
```

FROM CTE2;



The screenshot shows a Microsoft SQL Server Management Studio window. The title bar reads "SQL Project 1.sql - DESKTOP-Q54KQDR\Project1 (DESKTOP-Q54KQDR\welcome (58)) - Microsoft SQL Server Management Studio". The Object Explorer sidebar shows a connection to "DESKTOP-Q54KQDR (SQL Server 15.0.2000)". The main query editor contains a T-SQL script for a Common Table Expression (CTE) named CTE2. The results grid displays 22 rows of data from the query:

Year	customer_state	customer_city	product_category_name	order_placed	
1	2016	avaique	consoles_games	1	
2	2017	AC	brasilia	informatica_acessorios	3
3	2017	AC	cruzeiro do sul	artigos_de_natal	1
4	2016	SE	nossa senhora da gloria	informatica_acessorios	1
5	2017	AC	cruzeiro do sul	utilidades_domesticas	1
6	2017	AC	porto alegre	fashion_calçados	1
7	2017	AC	rio branco	automotivo	4
8	2017	AC	epidacilandia	esporte_lazer	1
9	2016	SE	sao francisco	movies_decoracao	1
10	2017	AC	no branco	brinquedos	2
11	2017	AC	no branco	beleza_saude	4
12	2017	AC	no branco	cool_stuff	1
13	2017	AC	no branco	consoles_games	1
14	2017	AC	no branco	canis_mesa_banho	4
15	2017	AC	no branco	esporte_lazer	5
16	2017	AC	no branco	informatica_acessorios	4
17	2017	AC	no branco	eletronicos	3

At the bottom of the results grid, a message says "Query executed successfully." The system tray at the bottom right shows the date as 07/02/2022, time as 10:20 AM, and temperature as 32°C.

2) post-order reviews,

A) Increasing

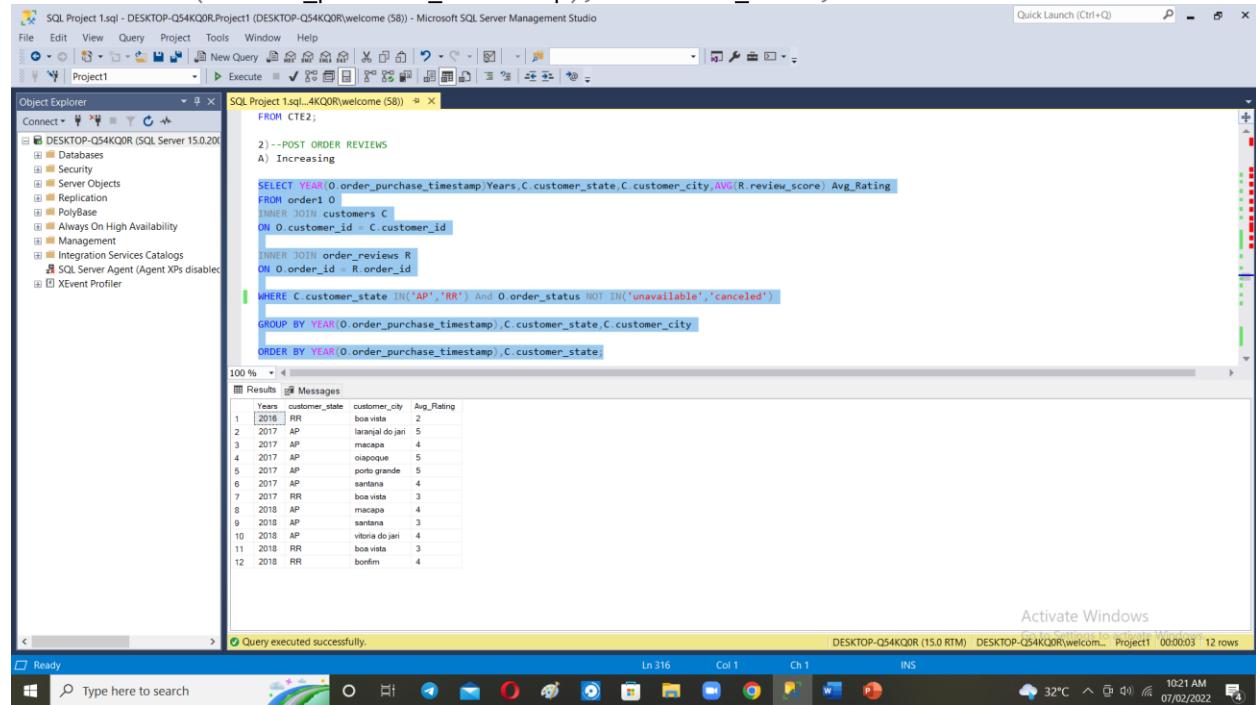
```
SELECT
YEAR(O.order_purchase_timestamp)Years,C.customer_state,C.customer_city,AVG(R.review_score)
) Avg_Rating
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id

INNER JOIN order_reviews R
ON O.order_id = R.order_id

WHERE C.customer_state IN('AP','RR') And O.order_status NOT IN('unavailable','canceled')

GROUP BY YEAR(O.order_purchase_timestamp),C.customer_state,C.customer_city
```

```
ORDER BY YEAR(O.order_purchase_timestamp), C.customer_state;
```



The screenshot shows the Microsoft SQL Server Management Studio interface. In the Object Explorer, a connection to 'DESKTOP-Q54KQDR' is selected. A query window titled 'SQL Project 1.sql - DESKTOP-Q54KQDR\welcome (58) - Microsoft SQL Server Management Studio' contains the following T-SQL code:

```
FROM CTE2;
2)--POST ORDER REVIEWS
A) Increasing

SELECT YEAR(O.order_purchase_timestamp)Years,C.customer_state,C.customer_city,AVG(R.review_score) Avg_Rating
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id

INNER JOIN order_reviews R
ON O.order_id = R.order_id

WHERE C.customer_state IN('AP','RR') And O.order_status NOT IN('unavailable','canceled')

GROUP BY YEAR(O.order_purchase_timestamp),C.customer_state,C.customer_city

ORDER BY YEAR(O.order_purchase_timestamp),C.customer_state
```

The results grid displays the following data:

Year	Customer State	Customer City	Avg_Rating	
1	2018	RN	boa vista	4
2	2017	AP	laranjal do jari	5
3	2017	AP	macapa	4
4	2017	AP	oiapoque	5
5	2017	AP	porto grande	5
6	2017	AP	santana	4
7	2017	RR	boa vista	3
8	2018	AP	macapa	4
9	2018	AP	santana	3
10	2018	AP	vitoria do jari	4
11	2018	RR	boa vista	3
12	2018	RR	borbim	4

Below the results grid, a message says 'Query executed successfully.' The taskbar at the bottom shows various pinned icons and the system status bar indicates it's 10:21 AM on 07/02/2022.

B) DECREASING

```
SELECT
YEAR(O.order_purchase_timestamp)Years,C.customer_state,C.customer_city,AVG(R.review_score)
) Avg_Rating
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id

INNER JOIN order_reviews R
ON O.order_id = R.order_id

WHERE C.customer_state IN('AC','SE') And O.order_status NOT IN('unavailable','canceled')

GROUP BY YEAR(O.order_purchase_timestamp),C.customer_state,C.customer_city
```

ORDER BY YEAR(O.order_purchase_timestamp), C.customer_state;

Years	customer_state	customer_city	Avg_Rating
1	2018	available	4
2	SE	nossa senhora da gloria	5
3	2016	san francisco	8
4	2017	AC	5
5	2017	caupi	5
6	2017	porto acre	5
7	2017	senador guimard	5
8	2017	cruzeiro do sul	4
9	2017	epitaciolandia	1
10	2017	mario urbano	5
11	2017	rio branco	3
12	2017	aracau	3
13	2017	barra dos coqueiros	1
14	SE	cedro	5
15	2017	luis Correa	5
16	2017	cedro de sao joao	3
17	2017	nossa senhora da gloria	3

Activate Windows

3) Seller performance in terms of deliveries,

A) INCREASING

```
SELECT YEAR(O.order_purchase_timestamp)Years , S.seller_id , C.customer_state
,C.customer_city,
       DATEDIFF(DAY,O.order_delivered_carrier_date,O.order_delivered_customer_date)
Del_days
FROM sellers S
INNER JOIN order_items I
ON S.seller_id = I.seller_id

INNER JOIN order1 O
ON I.order_id = O.order_id

INNER JOIN customers C
ON O.customer_id = C.customer_id

WHERE C.customer_state IN('AP','RR') And O.order_status NOT IN('unavailable','canceled')
```

ORDER BY YEAR(0.order_purchase_timestamp), C.customer_state , C.customer_city;

Year	seller_id	customer_state	customer_city	Del_days
1. 2018	15544053012600ad5dbd42;3ab563	RR	boa vista	NULL
2. 2016	15544053012600ad5dbd42;3ab563	RR	boa vista	NULL
3. 2016	Maha7chka81484c3ab7bd34bedd1	RR	boa vista	3
4. 2017	27e33d29b513b09f7bc4456d65	AP	laranjal do jac.	16
5. 2017	dd55fb7b78771440e7954c3be6d745	AP	laranjal do jac.	29
6. 2017	dd55fb7b78771440e7954c3be6d745	AP	laranjal do jac.	29
7. 2017	dd7ddca4b1b62c614352b33e2d2d	AP	macapa	14
8. 2017	dd7ddca4b1b62c614352b33e2d2d8	AP	macapa	14
9. 2017	910ee23d44b1d767caeef30e01ca	AP	macapa	41
10. 2017	9de44c3a8bde034m05621059a92273	AP	macapa	25
11. 2017	a416ba8a4fa1172439302541dedd5e	AP	macapa	21
12. 2017	de82c2b1eb77e7w28311ad59ab84a	AP	macapa	21
13. 2017	da82c2b1eb77e7w28311ad59ab84a	AP	macapa	21
14. 2017	cba3077e0e6b7712540-9ba2301906	AP	macapa	182
15. 2017	cba3077e0e6b7712540-9ba2301906	AP	macapa	182
16. 2017	cc44bb5d32a6fa2b7b06a4110311a43	AP	macapa	13
17. 2017	1d3a3eb70d789b91e6d90e88797c23	AP	macapa	22

Activate Windows

DESKTOP-Q54KQ0R (15.0 RTM) DESKTOP-Q54KQ0R\welcome... Project1 000003 133 rows

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B)DECREASING

```

SELECT YEAR(0.order_purchase_timestamp)Years , S.seller_id , C.customer_state ,
C.customer_city,
        DATEDIFF(DAY,0.order_delivered_carrier_date,0.order_delivered_customer_date)
Del_days
FROM sellers S
INNER JOIN order_items I
ON S.seller_id = I.seller_id

INNER JOIN order1 O
ON I.order_id = O.order_id

INNER JOIN customers C
ON O.customer_id = C.customer_id

WHERE C.customer_state IN('AC','SE') And O.order_status NOT IN('unavailable','canceled')
    
```

ORDER BY YEAR(0.order_purchase_timestamp), C.customer_state, C.customer_city;

Year	order_id	customer_state	customer_city	Del_days
2018	a27a3c3d5c1ea79a11e6f1e8eb6	SE	ana da	10
2016	d3690c0c4ef45a40202ad9a23a27b	SE	nossa senhora da gloria	2
2016	b335d9da74c971a15d4e811a68739	SE	sao francisco	18
2017	897060da89a21655304d504935913	AC	brasileia	26
2017	897060da89a21655304d504935913	AC	brasileia	26
2017	897060da89a21655304d504935913	AC	brasileia	26
2017	d3919d944b9d12086d3b399eac0	AC	cruzeiro do sul	31
2017	0be8ff3c2e56b4e0371b2245ed01	AC	cruzeiro do sul	13
2017	2745f98279e0e033adcc1a74776d7	AC	epitaciolandia	12
2017	7dddb464b5c1e2237ad7e7e111e4eb2	AC	manoel urbano	11
2017	7142540404d1e2237ad7e7e111e4eb2	AC	porto alegre	24
2017	1de38357146814b93b1e0d41	AC	no branco	8
2017	2017040404d1e2237ad7e7e111e4eb2	AC	no branco	21
2017	a8ee1405094b794848fb57734150b	AC	no branco	10
2017	5d0cc0120747e9295a79973d485ba	AC	no branco	23
2017	36a9fb54469534a4e97572688508	AC	no branco	21
2017	37e6e57c751166fb088ccba4119e043	AC	no branco	19

Activate Windows

4)product-level sales & orders placed,

1)Increasing

```

SELECT
YEAR(0.order_purchase_timestamp)Years,C.customer_state,C.customer_city,I.product_id,COUNT
(I.product_id)Order_palced
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id

INNER JOIN order_items I
ON O.order_id = I.order_id

WHERE C.customer_state IN('AP','RR') AND O.order_status NOT IN('unavailable','canceled')

GROUP BY YEAR(0.order_purchase_timestamp),C.customer_state,C.customer_city,I.product_id

```

ORDER BY YEAR(0.order_purchase_timestamp), C.customer_state;

The screenshot shows a Microsoft SQL Server Management Studio window. The title bar reads "SQL Project 1.sql - DESKTOP-Q54KQ0R\welcome (58) - Microsoft SQL Server Management Studio". The Object Explorer sidebar shows a connection to "DESKTOP-Q54KQ0R (SQL Server 15.0.2000)". The main pane displays a T-SQL query and its results.

```

6) Product_Level
1) Increasing

SELECT YEAR(0.order_purchase_timestamp)Years,C.customer_state,C.customer_city,I.product_id,COUNT(I.product_id)Order_palced
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id

INNER JOIN order_items I
ON O.order_id = I.order_id

WHERE C.customer_state IN('AP','RR') AND O.order_status NOT IN('unavailable','canceled')

GROUP BY YEAR(0.order_purchase_timestamp),C.customer_state,C.customer_city,I.product_id
ORDER BY YEAR(0.order_purchase_timestamp), C.customer_state
  
```

The results grid shows the following data:

Year	Customer State	Customer City	Product ID	Order_palced
2016	RR	boss vista	6eab0fb8e52630bd94cae5d55899202	1
2016	RR	boss vista	c1480092044db4bd5fb4eb4d595400	1
2016	RR	boss vista	c29334c723dbdfe4d22301e21c2c2	1
2017	AP	laranjal do jari	6f3aa861391bd01a389c9f5ea42c0	1
2017	AP	laranjal do jari	97502834ee3980e839eeb21c12029	2
2017	AP	macapa	130482ad9d9f75cc6575a007694a2d	1
2017	AP	macapa	1d52a166ed7327a5042a23421981	1
2017	AP	macapa	372645c74399661bbad4120a9a2e2c	1
2017	AP	macapa	3e309c7b4d81744a159a4713c224	1
2017	AP	macapa	5215e690e01a0c178e552e6e2d06a	1
2017	AP	macapa	58851bb6c377e7695b7b22a04888	1
2017	AP	macapa	6cd53843498922905446678091595	1
2017	AP	macapa	718a0a0a0a0a0a0a0a0a0a0a0a0a0a0a	1
2017	AP	macapa	72a08f8ac991a34fd899870c191029	1
2017	AP	macapa	750a4fa036a413cc04a781309a032	3
2017	AP	macapa	780a0859a4544137a88764ff0d5d4	1
2017	AP	macapa	a62e25e09e05e0f031d9920e61aa3d1	1

Activate Windows

Query executed successfully.

2) Decreasing

```

SELECT
YEAR(0.order_purchase_timestamp)Years,C.customer_state,C.customer_city,I.product_id,COUNT
(I.product_id)Order_palced
FROM order1 O
INNER JOIN customers C
ON O.customer_id = C.customer_id

INNER JOIN order_items I
ON O.order_id = I.order_id

WHERE C.customer_state IN('AC','SE') AND O.order_status NOT IN('unavailable','canceled')

GROUP BY YEAR(0.order_purchase_timestamp),C.customer_state,C.customer_city,I.product_id
  
```

ORDER BY YEAR(0.order_purchase_timestamp), C.customer_state;

Years	customer_state	customer_city	product_id	Order_packed
1	2018	avaijau	8d3920253aa5bae08e439971d0d4748	1
2	2018	SE	0f5a09b4e454a5f1d371db7d534136	1
3	2016	SE	d33c44b49d3ff1cd915ed14ee44cf	1
4	2017	AC	fe6614ba020ca2a28x31090245ecdf5	1
5	2017	AC	3a19bd303a3e33555a1a3e188d81	3
6	2017	AC	e9188846b204a4e0329baeaceaa025	1
7	2017	AC	40eb4a25d1a2e29db773d3523a05ce	1
8	2017	AC	0a4de0eaae5b78949a4e6e660	1
9	2017	AC	baa1fbcb7467e19e2a2b76388e55	1
10	2017	AC	09dbbe2c4026a4d560ea0499532	1
11	2017	AC	46670e3948d81e12273d3889927c7	1
12	2017	AC	108e01163b7586c7924ed8cd8d81b63	1
13	2017	AC	108e01163b7586c7924ed8cd8d81b63	1
14	2017	AC	0a1189a574d2d1f5cb4d45d1197b	1
15	2017	AC	83059a4396a077bcb33ab5b4a103a	1
16	2017	AC	1a9edc24a452b1fa19b5afef40fc	1
17	2017	AC	29427de79b9ee983d98bc51ce569e4	1

Activate Windows

DESKTOP-Q54KQ0R (15.0 RTM) DESKTOP-Q54KQ0R\welcome... Project1 00:00:04 415 rows

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5)% of orders delivered earlier than the expected date,

A) INCREASING

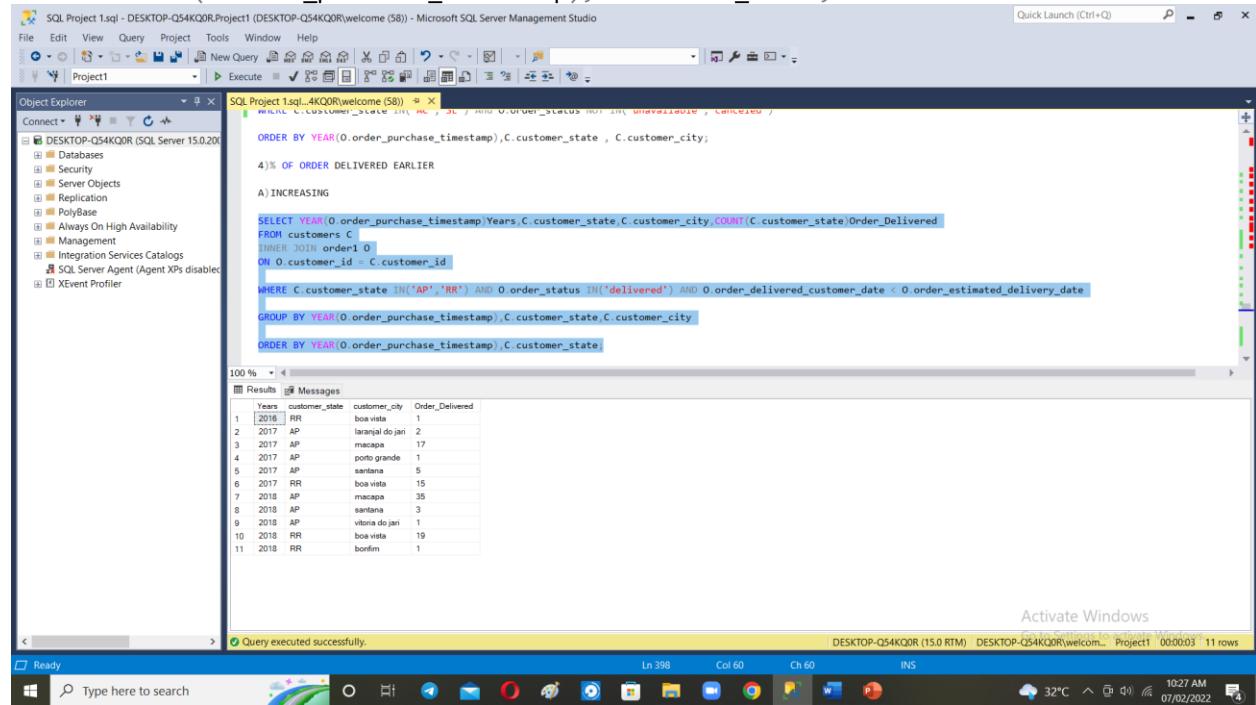
```

SELECT
YEAR(0.order_purchase_timestamp)Years,C.customer_state,C.customer_city,COUNT(C.customer_state)Order_Delivered
FROM customers C
INNER JOIN order1 O
ON O.customer_id = C.customer_id

WHERE C.customer_state IN('AP','RR') AND O.order_status IN('delivered') AND
O.order_delivered_customer_date < O.order_estimated_delivery_date

GROUP BY YEAR(0.order_purchase_timestamp),C.customer_state,C.customer_city
    
```

```
ORDER BY YEAR(0.order_purchase_timestamp),C.customer_state;
```



The screenshot shows the Microsoft SQL Server Management Studio interface. In the Object Explorer, a project named 'Project1' is selected, connected to 'DESKTOP-Q54KQDR (SQL Server 15.0.2000)'. A query window titled 'SQL Project 1.sql - DESKTOP-Q54KQDR\welcome (SB)' displays the following T-SQL code:

```
SELECT YEAR(0.order_purchase_timestamp)Years,C.customer_state,C.customer_city,COUNT(C.customer_state)Order_Delivered
FROM customers C
INNER JOIN order1 O
ON O.customer_id = C.customer_id
WHERE C.customer_state IN('AC','SE') AND O.order_status IN('delivered') AND O.order_delivered_customer_date < O.order_estimated_delivery_date
GROUP BY YEAR(0.order_purchase_timestamp),C.customer_state,C.customer_city
ORDER BY YEAR(0.order_purchase_timestamp),C.customer_state;
```

The results grid shows the following data:

Year	Customer State	Customer City	Order Delivered	
1	2018	RR	boa vista	1
2	2017	AP	laranjal do jari	2
3	2017	AP	macapa	17
4	2017	AP	ponta grande	1
5	2017	AP	santana	5
6	2017	RR	boa vista	15
7	2018	AP	macapa	35
8	2018	AP	santana	3
9	2018	AP	vitoria do jari	1
10	2018	RR	boa vista	19
11	2018	RR	bonfim	1

B) DECREASING

```
SELECT
YEAR(0.order_purchase_timestamp)Years,C.customer_state,C.customer_city,COUNT(C.customer_s
tate)Order_Delivered
FROM customers C
INNER JOIN order1 O
ON O.customer_id = C.customer_id

WHERE C.customer_state IN('AC','SE') AND O.order_status IN('delivered') AND
O.order_delivered_customer_date < O.order_estimated_delivery_date

GROUP BY YEAR(0.order_purchase_timestamp),C.customer_state,C.customer_city
```

ORDER BY YEAR(O.order_purchase_timestamp), C.customer_state;

Years	customer_state	customer_city	Order_Delivered
1	2018	areia	1
2	2016	nossa senhora da gloria	1
3	2016	sao francisco	1
4	2017	ac	1
5	2017	cruzeiro do sul	2
6	2017	epitaciolandia	1
7	2017	manuel urbano	1
8	2017	porto acre	1
9	2017	rio branco	42
10	2017	senador guomard	2
11	2017	xapuri	1
12	2017	aquidabá	1
13	2017	aracaju	104
14	2016	centro de brito	1
15	2017	capela	2
16	2017	cedro de sao joao	1
17	2017	estancia	6

Activate Windows

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6)% of orders delivered later than the expected date, etc.e

A) INCREASING

```

SELECT
YEAR(O.order_purchase_timestamp)Years,C.customer_state,C.customer_city,COUNT(C.customer_s
tate)Order_Delivered
FROM customers C
INNER JOIN order1 O
ON O.customer_id = C.customer_id

WHERE C.customer_state IN('AP', 'RR') AND O.order_status IN('delivered') AND
O.order_delivered_customer_date > O.order_estimated_delivery_date

GROUP BY YEAR(O.order_purchase_timestamp),C.customer_state,C.customer_city
    
```

```
ORDER BY YEAR(O.order_purchase_timestamp), C.customer_state;
```

The screenshot shows the Microsoft SQL Server Management Studio interface. In the Object Explorer, a connection to 'DESKTOP-Q54KQ0R' is selected. A query window titled 'SQL Project 1.sql... - DESKTOP-Q54KQ0R\welcome (58)' displays the following T-SQL code:

```
ORDER BY YEAR(O.order_purchase_timestamp), C.customer_state;
5)% OF ORDER DELIVERED LATER
A) INCREASING
SELECT YEAR(O.order_purchase_timestamp)Years,C.customer_state,C.customer_city,COUNT(C.customer_state)Order_Delivered
FROM customers C
INNER JOIN order1 O
ON O.customer_id = C.customer_id
WHERE C.customer_state IN('AP','RR') AND O.order_status IN('delivered') AND O.order_delivered_customer_date > O.order_estimated_delivery_date
GROUP BY YEAR(O.order_purchase_timestamp),C.customer_state,C.customer_city
ORDER BY YEAR(O.order_purchase_timestamp),C.customer_state

B) DECREASING
```

The results pane shows the output of the query:

Year	customer_state	customer_city	Order_Delivered
1	2017	masapao	1
2	2017	santos	1
3	2017	boa vista	3
4	2018	boa vista	2

Below the results, a message says 'Query executed successfully.' The status bar at the bottom right shows 'Activate Windows' and the system date and time as '07/02/2022 10:29 AM'.

B)DECREASING

```
SELECT
YEAR(O.order_purchase_timestamp)Years,C.customer_state,C.customer_city,COUNT(C.customer_s
tate)Order_Delivered
FROM customers C
INNER JOIN order1 O
ON O.customer_id = C.customer_id

WHERE C.customer_state IN('AC','SE') AND O.order_status IN('delivered') AND
O.order_delivered_customer_date > O.order_estimated_delivery_date

GROUP BY YEAR(O.order_purchase_timestamp),C.customer_state,C.customer_city
```

```
ORDER BY YEAR(O.order_purchase_timestamp),C.customer_state;
```

SQL Project 1.sql - DESKTOP-Q54KQDR\welcome (S8) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

New Query Home Back Forward Stop Refresh

Project1 Execute

Object Explorer

Connect Connect...

DESKTOP-Q54KQDR (SQL Server 15.0.2000.5)

- Databases
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

SQL Project 1.sql...4KQR\welcome (S8)

```
WHERE C.customer_state IN('AP','RR') AND O.order_status IN('delivered') AND O.order_delivered_customer_date > O.order_estimated_delivery_date
GROUP BY YEAR(O.order_purchase_timestamp),C.customer_state,C.customer_city
ORDER BY YEAR(O.order_purchase_timestamp),C.customer_state;

B)DECREASING

SELECT YEAR(O.order_purchase_timestamp)Years,C.customer_state,C.customer_city,COUNT(C.customer_state)Order_Delivered
FROM customers C
INNER JOIN order1 O
ON O.customer_id = C.customer_id

WHERE C.customer_state IN('AC','SE') AND O.order_status IN('delivered') AND O.order_delivered_customer_date > O.order_estimated_delivery_date
GROUP BY YEAR(O.order_purchase_timestamp),C.customer_state,C.customer_city
ORDER BY YEAR(O.order_purchase_timestamp),C.customer_state;
```

100% 4 Results Messages

Year	customer_state	customer_city	Order_Delivered
1	2017	rio branco	2
2	2017	aracaju	13
3	2017	barna dos coqueiros	1
4	2017	cedro de sao joao	1
5	2017	estancia	1
6	2017	indianoba	1
7	2017	itaporanga d'ajuda	1
8	2017	lagarto	2
9	2017	macambira	1
10	2017	nossa senhora do socorro	4
11	2017	pinhao	1
12	2017	umbauiba	1
13	2018	AC	1
14	2018	aracaju	16
15	2018	barna dos coqueiros	1
16	2018	capela	1
17	2018	carmesolis	1

Activate Windows

Ready Type here to search

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