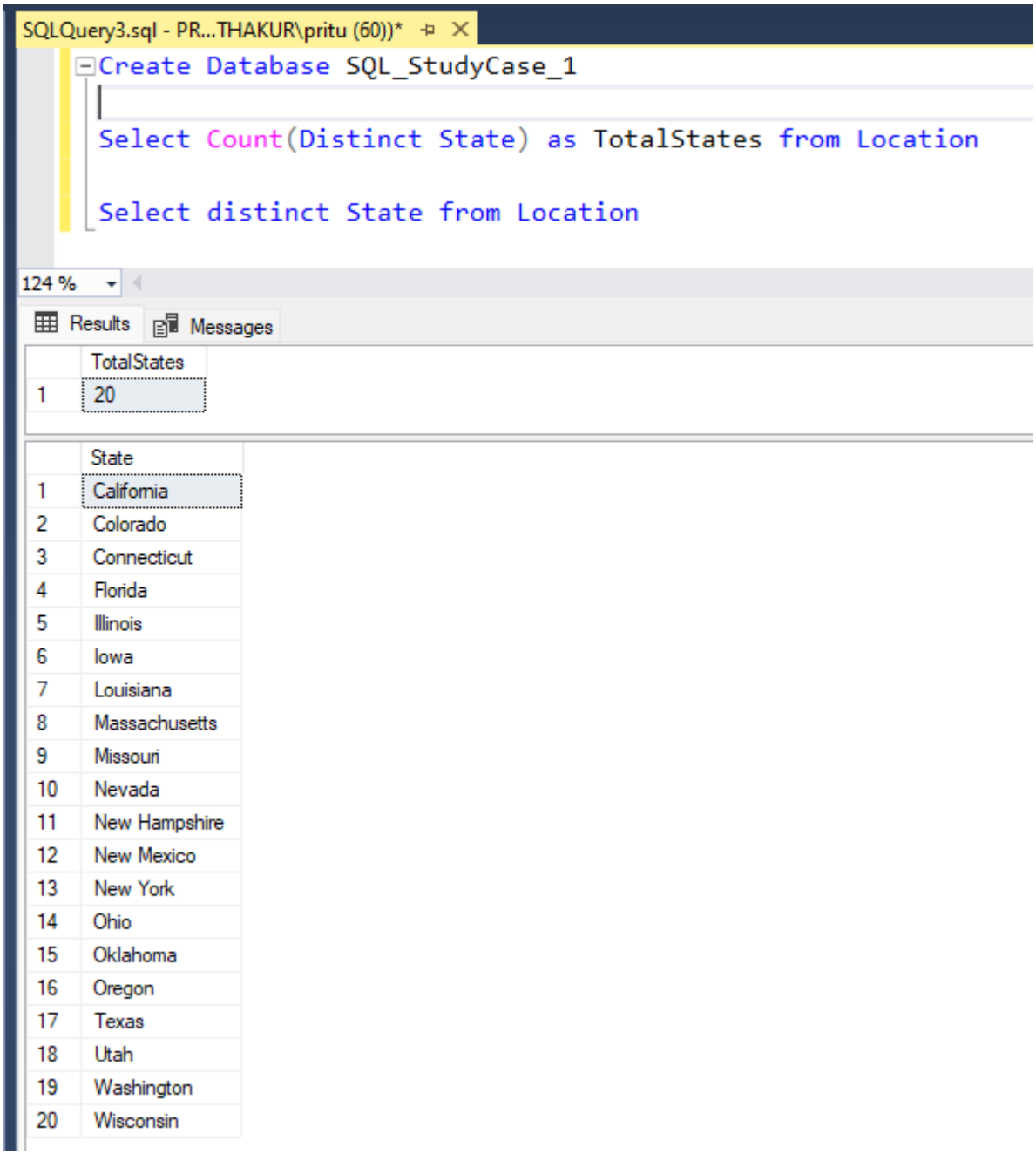
CASE Study 1

Problem Statement: You are a database administrator. You want to use the data to answer a few questions about your customers, especially about the sales and profit coming from different states, money spent in marketing and various other factors such as COGS (Cost of Goods Sold), budget profit etc. You plan on using these insights to help find out which items are being sold the most. You have been provided with the sample of the overall customer data due to privacy issues. But you hope that these samples are enough for you to write fully functioning SQL queries to help answer the questions. Dataset: The 3 key datasets for this case study: a. Fact Table: The Fact Table has 14 columns mentioned below and 4200 rows. Date, Product ID, Profit, Sales, Margin, COGS, Total Expenses, Marketing, Inventory, Budget Profit, Budget COGS, Budget Margin, Budget Sales, and Area Code Note: COGS stands for Cost of Goods Sold b. Product Table: The Product Table has four columns named Product Type, Product, Product ID, and Type. It has 13 rows which can be broken down into further details to retrieve the information mentioned in the Fact Table. c. Location Table: Finally, the Location Table has 156 rows and follows a similar approach to Product Table. It has four columns named Area Code, State, Market, and Market Size.

1.Display the number of states present in the Location Table.

Query: Select Count (Distinct State) as TotalStates from Location

Select distinct State from Location;



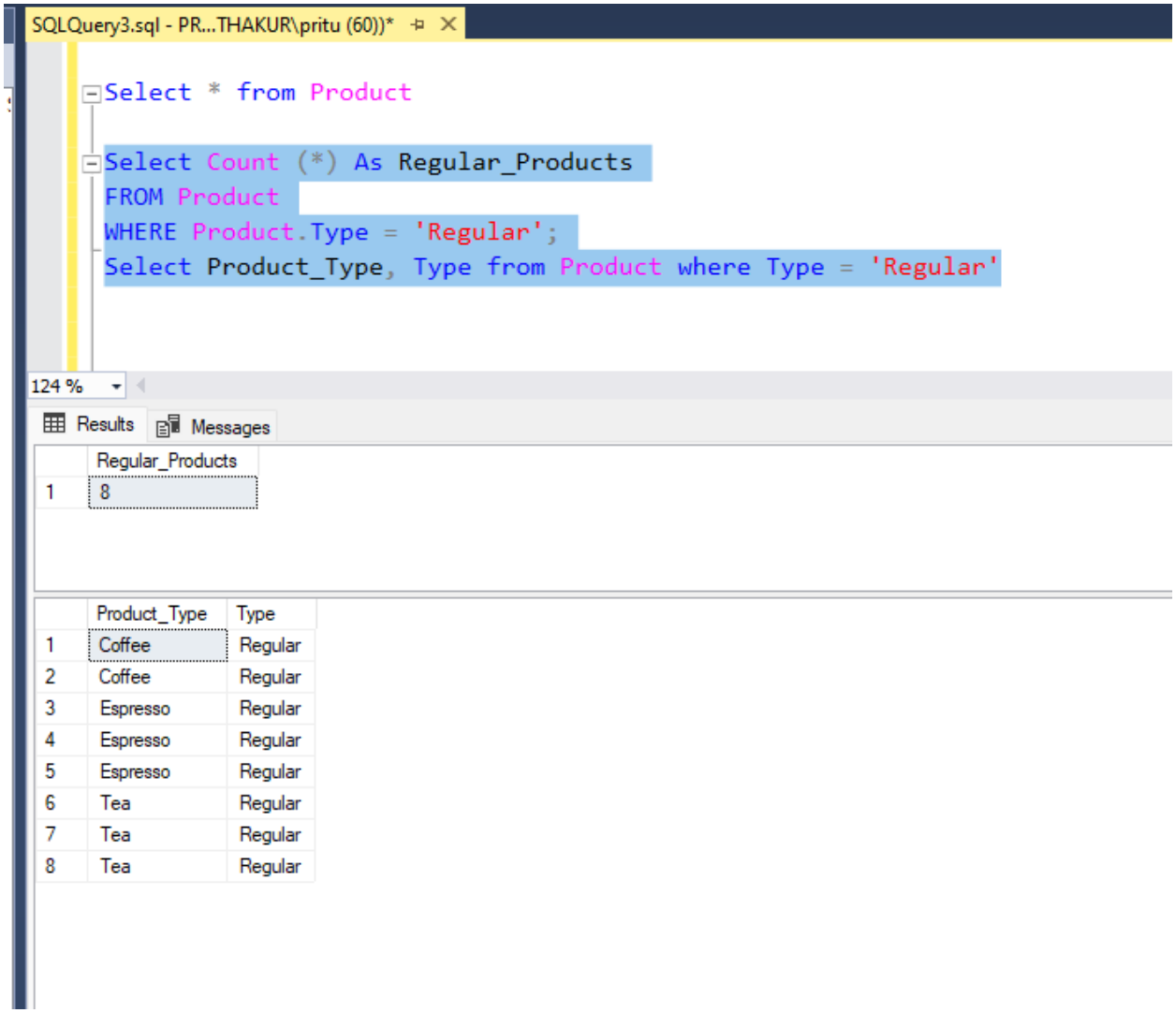
2. How many products are of regular type?

Query: Select Count (*) As Regular_Products

FROM Product

WHERE Product.Type = 'Regular';

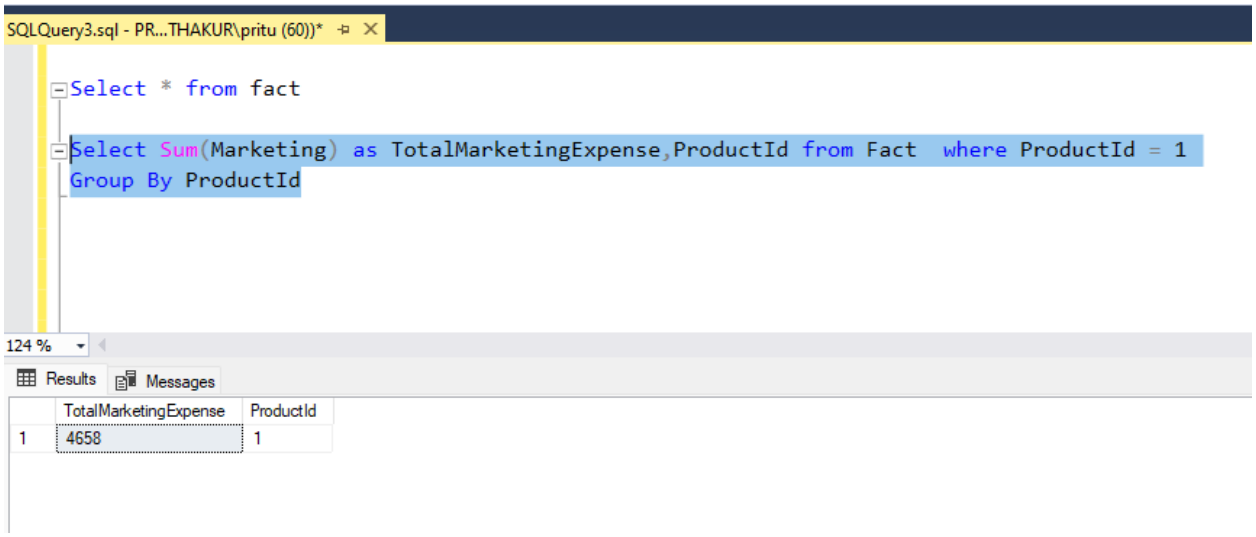
Select Product_Type, Type from Product where Type = 'Regular'



3. How much spending has been done on marketing of product ID 1?

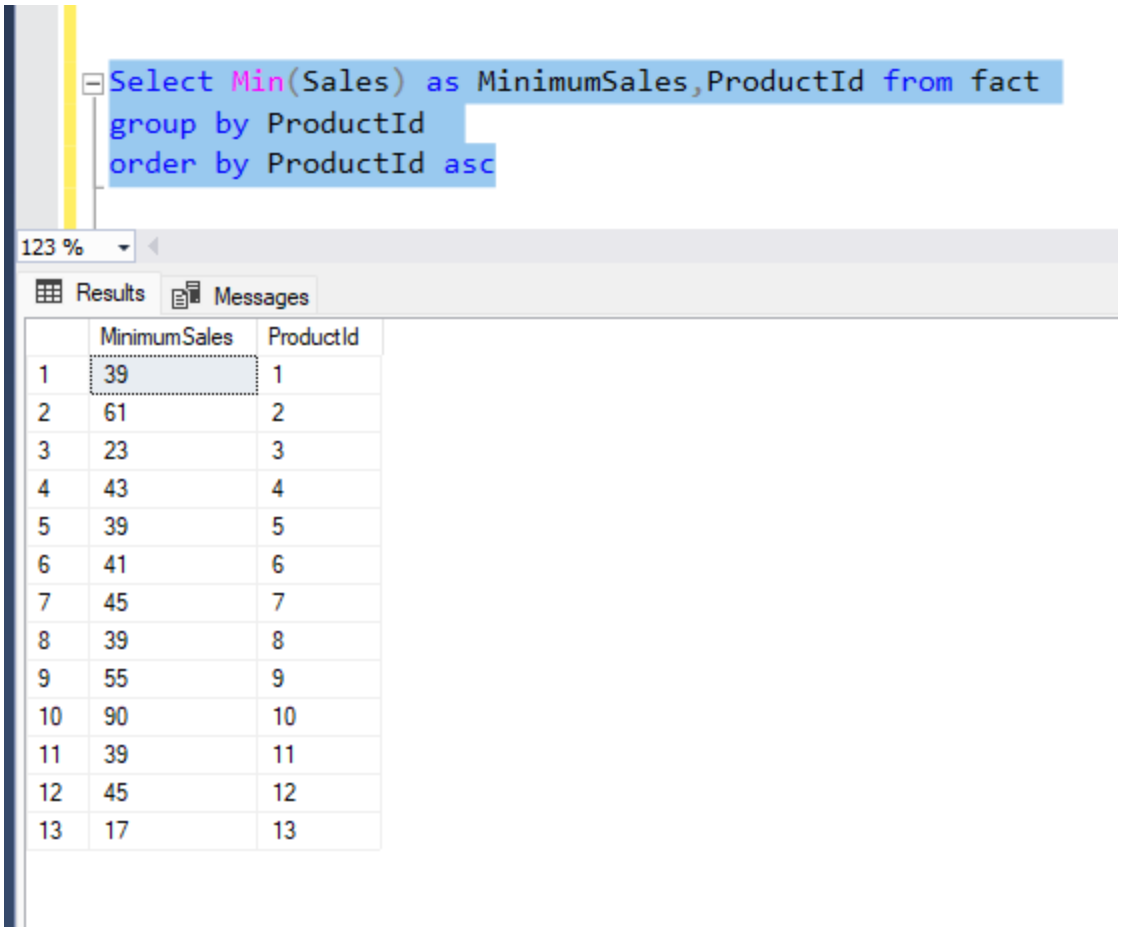
Query: Select Sum (Marketing) as TotalMarketingExpense,ProductId from Fact where ProductId = 1

Group By ProductId



4. What is the minimum sales of a product?

Query: Select Min (Sales) as MinimumSales,ProductId from fact group by ProductId order by ProductId asc



```
Select Min(Sales) as MinimumSales,ProductId from fact
group by ProductId
order by ProductId asc
```

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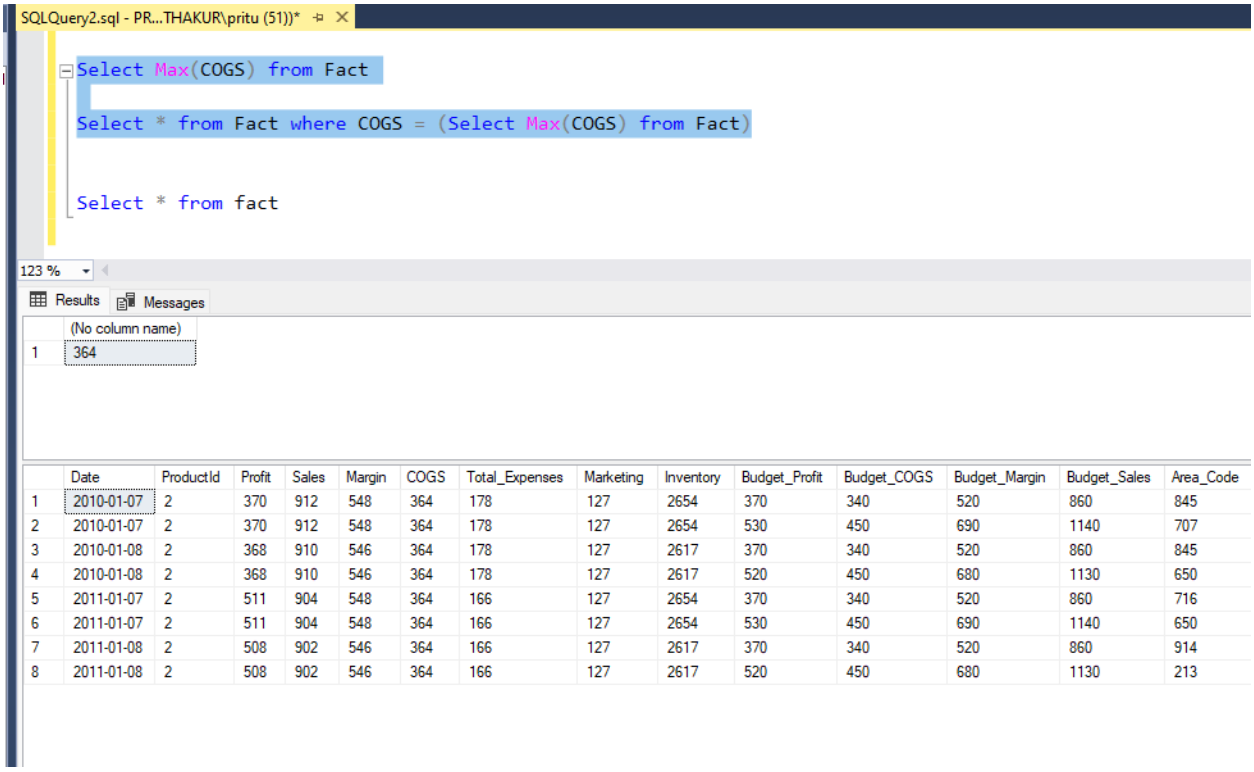
Results | Messages

	MinimumSales	ProductId
1	39	1
2	61	2
3	23	3
4	43	4
5	39	5
6	41	6
7	45	7
8	39	8
9	55	9
10	90	10
11	39	11
12	45	12
13	17	13

5. Display the max Cost of Goods Sold (COGS).

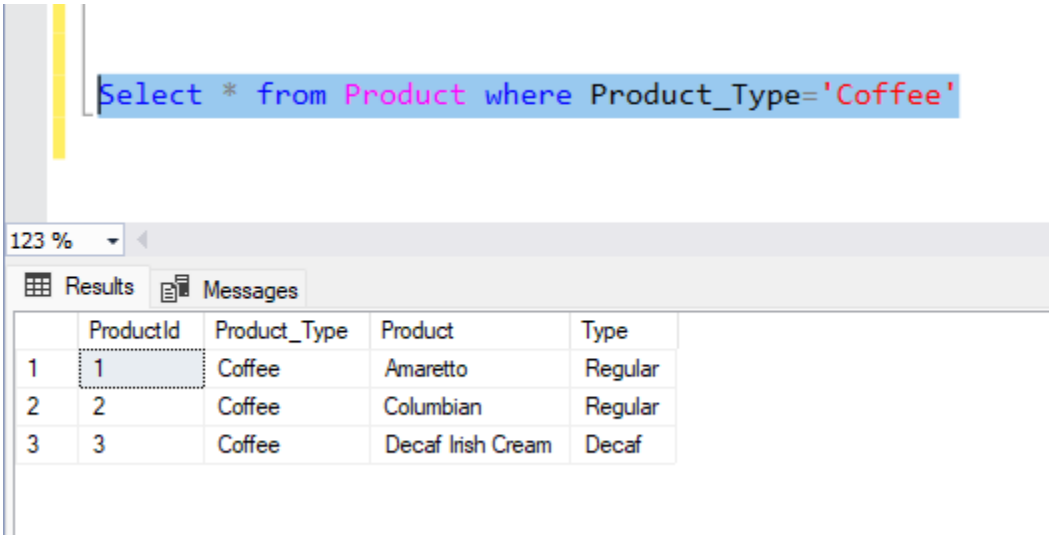
Query: 1). Select Max (COGS) from Fact

2). Select * from Fact where COGS = (Select Max(COGS) from Fact)



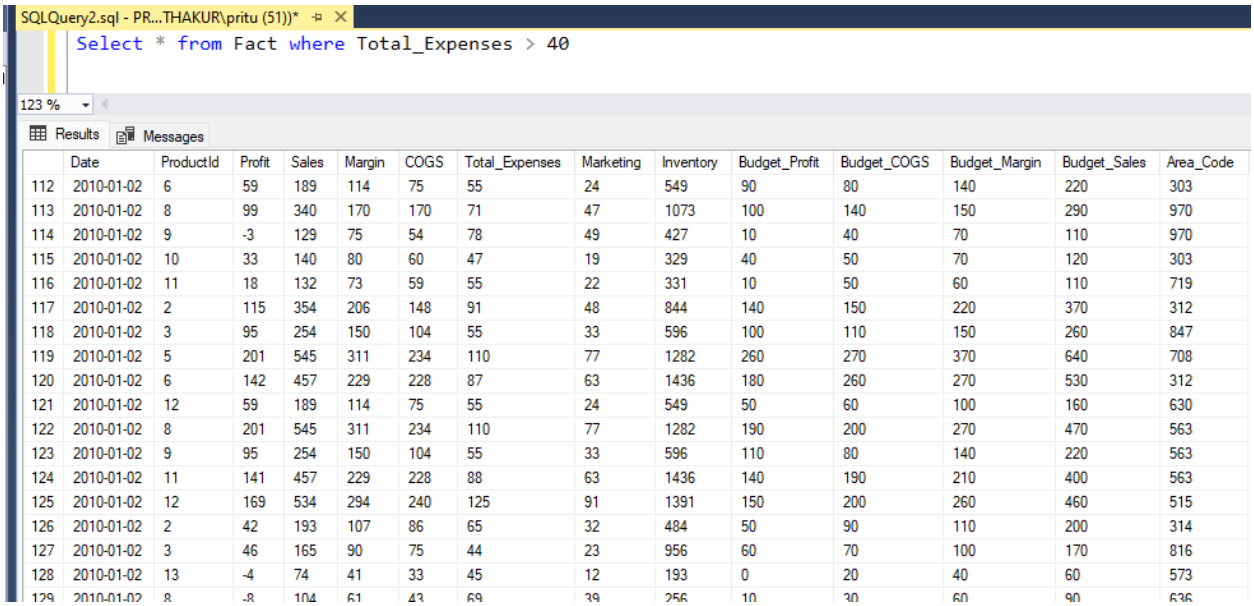
6. Display the details of the product where product type is coffee.

Query: Select * from Product where Product_Type='Coffee'



7. Display the details where total expenses are greater than 40.

Query: Select * from Fact where Total_Expenses > 40



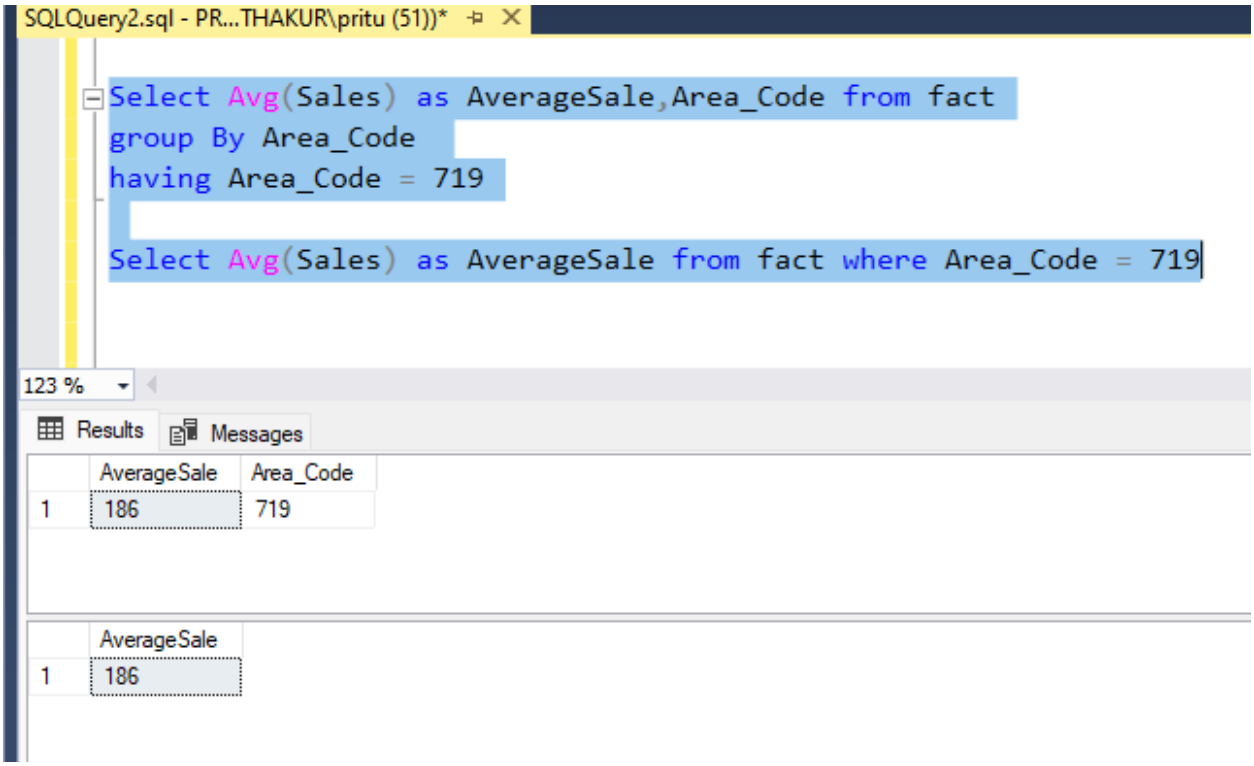
	Date	ProductId	Profit	Sales	Margin	COGS	Total_Expenses	Marketing	Inventory	Budget_Profit	Budget_COGS	Budget_Margin	Budget_Sales	Area_Code
112	2010-01-02	6	59	189	114	75	55	24	549	90	80	140	220	303
113	2010-01-02	8	99	340	170	170	71	47	1073	100	140	150	290	970
114	2010-01-02	9	-3	129	75	54	78	49	427	10	40	70	110	970
115	2010-01-02	10	33	140	80	60	47	19	329	40	50	70	120	303
116	2010-01-02	11	18	132	73	59	55	22	331	10	50	60	110	719
117	2010-01-02	2	115	354	206	148	91	48	844	140	150	220	370	312
118	2010-01-02	3	95	254	150	104	55	33	596	100	110	150	260	847
119	2010-01-02	5	201	545	311	234	110	77	1282	260	270	370	640	708
120	2010-01-02	6	142	457	229	228	87	63	1436	180	260	270	530	312
121	2010-01-02	12	59	189	114	75	55	24	549	50	60	100	160	630
122	2010-01-02	8	201	545	311	234	110	77	1282	190	200	270	470	563
123	2010-01-02	9	95	254	150	104	55	33	596	110	80	140	220	563
124	2010-01-02	11	141	457	229	228	88	63	1436	140	190	210	400	563
125	2010-01-02	12	169	534	294	240	125	91	1391	150	200	260	460	515
126	2010-01-02	2	42	193	107	86	65	32	484	50	90	110	200	314
127	2010-01-02	3	46	165	90	75	44	23	956	60	70	100	170	816
128	2010-01-02	13	-4	74	41	33	45	12	193	0	20	40	60	573
129	2010-01-02	8	-8	104	61	43	69	39	256	10	30	60	90	636

8. What is the average sales in area code 719?

Query: 1) Select Avg (Sales) as AverageSale,Area_Code from fact group By Area_Code having Area_Code = 719

Or

2) Select Avg (Sales) as AverageSale from fact where Area_Code = 719



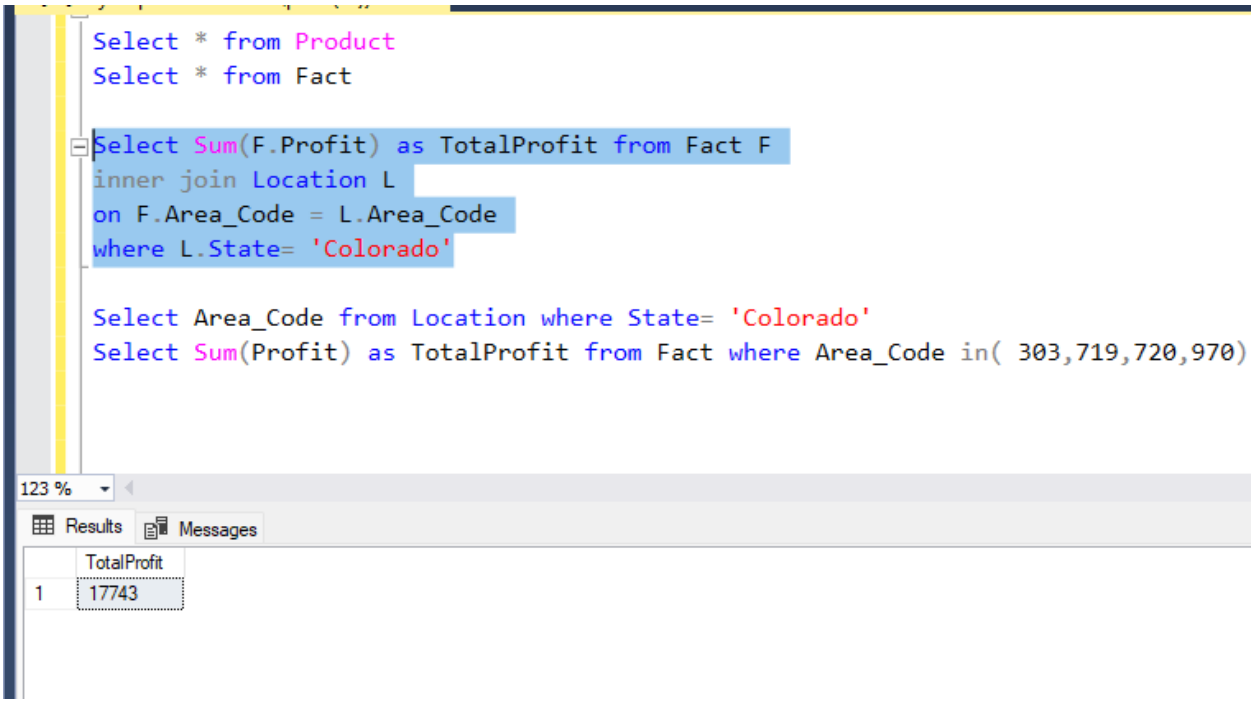
9. Find out the total profit generated by Colorado state.

Query: Select Sum(F.Profit) as TotalProfit from Fact F

inner join Location L

on F.Area_Code = L.Area_Code

where L.State= 'Colorado'



10. Display the average inventory for each product ID.

Query: Select ProductId,Avg(Inventory) as AverageInventory from Fact group by ProductId order by ProductId asc

```
Select * from Product
Select * from Fact

Select ProductId,Avg(Inventory) as AverageInventory from Fact
group by ProductId order by ProductId asc
```

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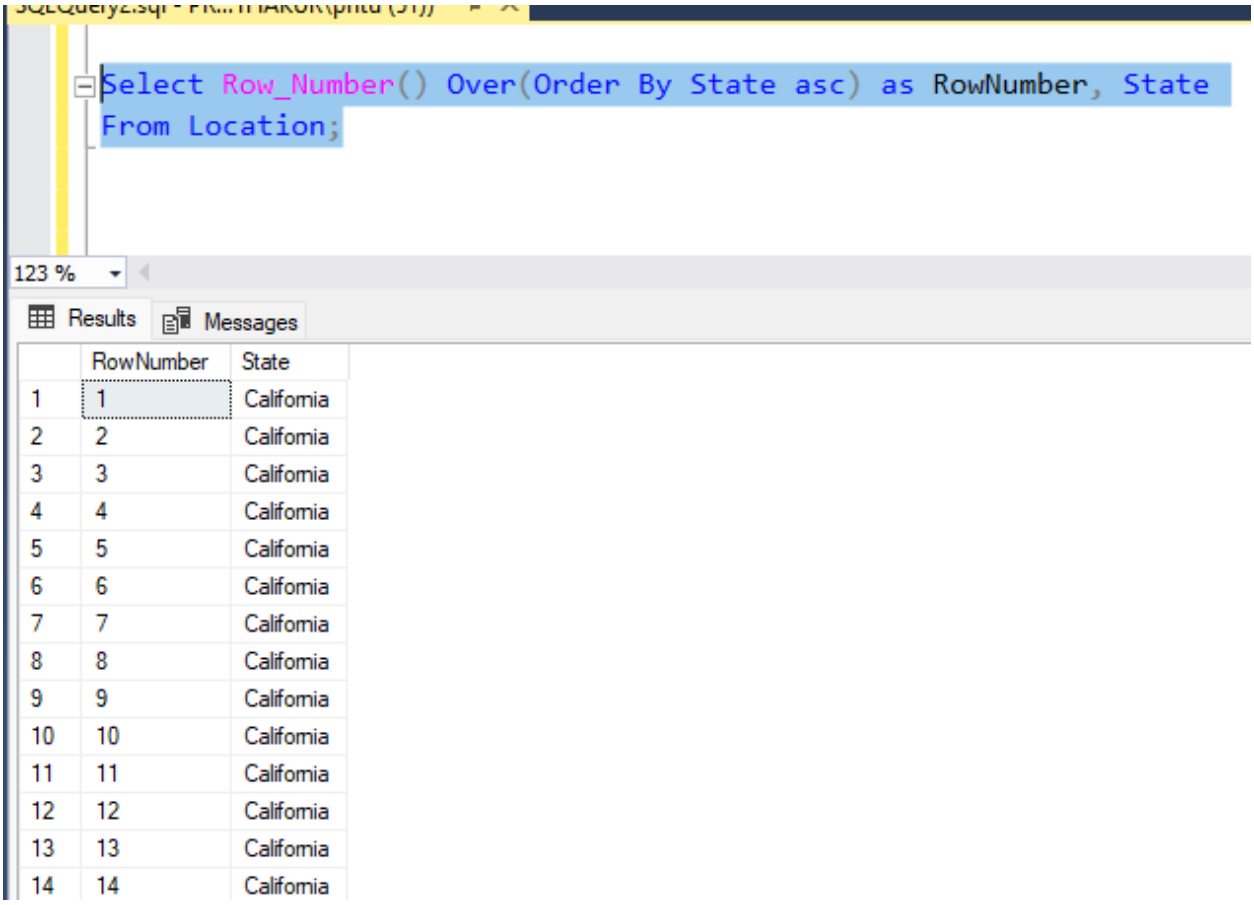
Results | Messages

	ProductId	AverageInventory
1	1	741
2	2	707
3	3	838
4	4	255
5	5	756
6	6	755
7	7	879
8	8	712
9	9	718
10	10	1095
11	11	737
12	12	757
13	13	900

11. Display state in a sequential order in a Location Table.

Query: Select Row_Number() Over(Order By State asc) as RowNumber, State From Location



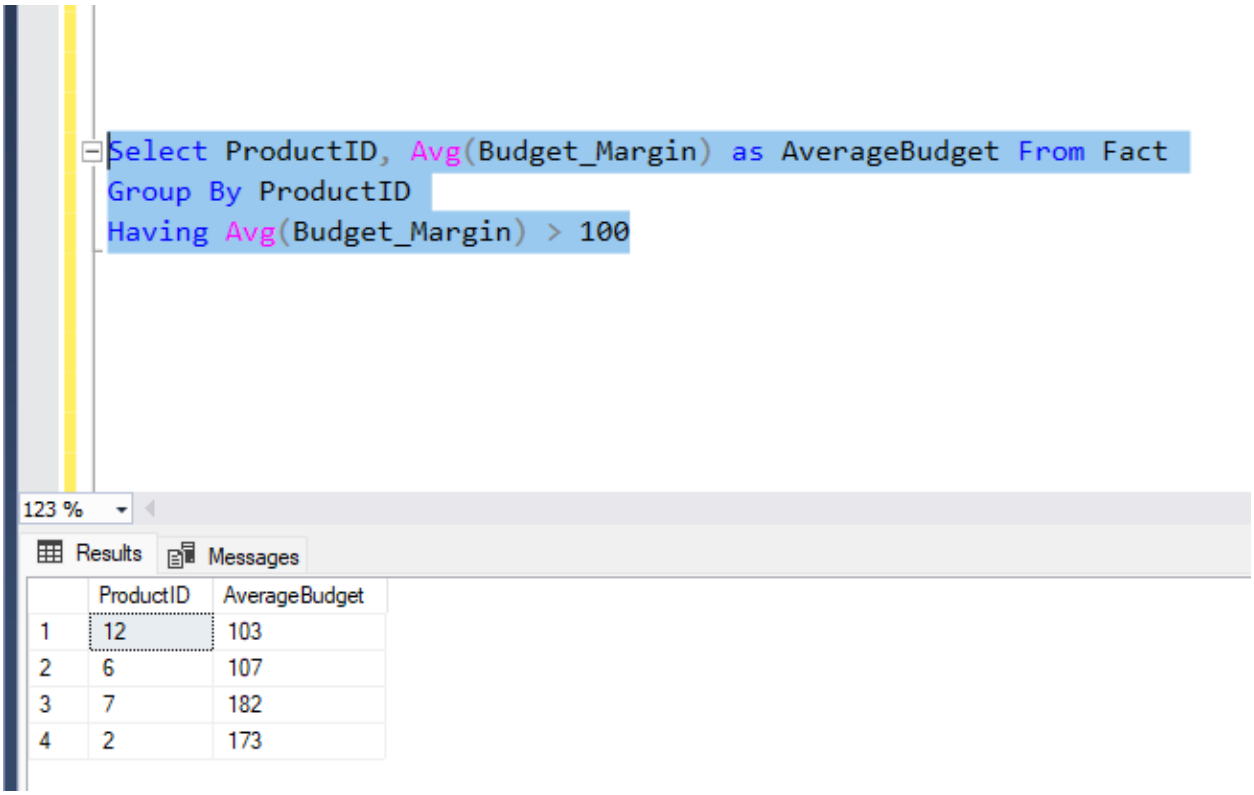
	RowNumber	State
1	1	California
2	2	California
3	3	California
4	4	California
5	5	California
6	6	California
7	7	California
8	8	California
9	9	California
10	10	California
11	11	California
12	12	California
13	13	California
14	14	California

12. Display the average budget of the Product where the average budget margin should be greater than 100.

Query:

Select ProductID, Avg(Budget_Margin) as AverageBudget From Fact Group By ProductID

Having Avg (Budget_Margin) > 100

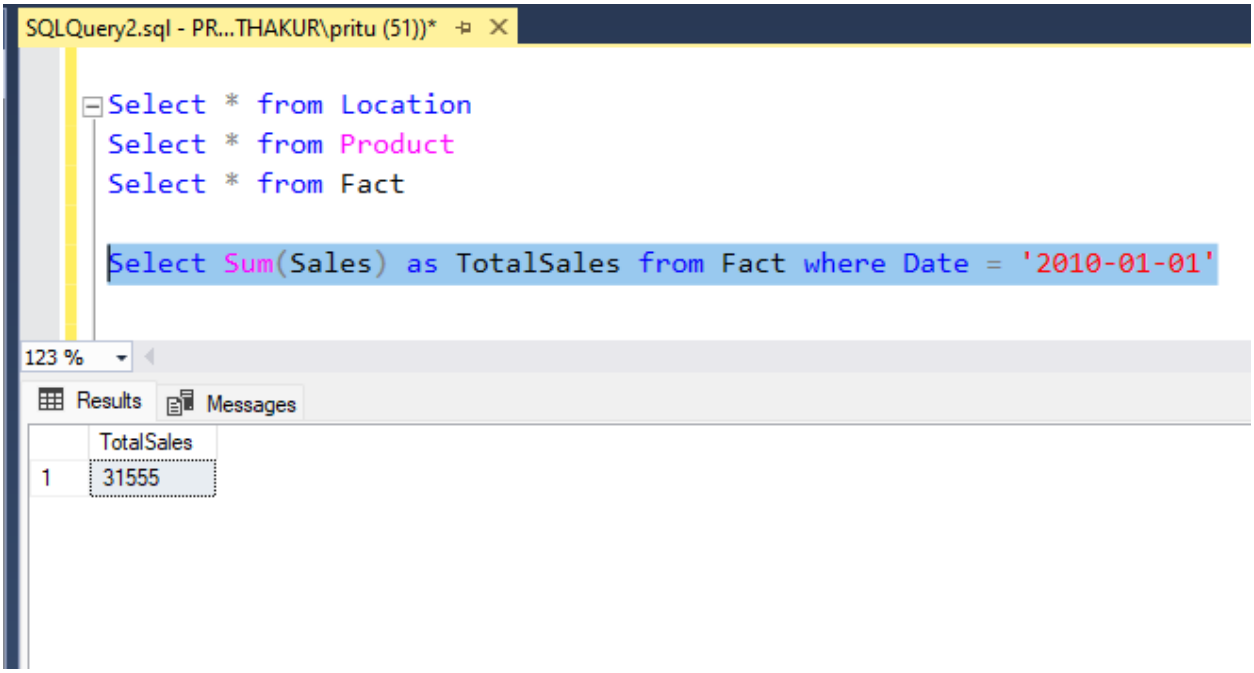


	ProductID	AverageBudget
1	12	103
2	6	107
3	7	182
4	2	173

13. What is the total sales done on date 2010-01-01?

Query:

Select Sum (Sales) as TotalSales from Fact where Date = '2010-01-01'



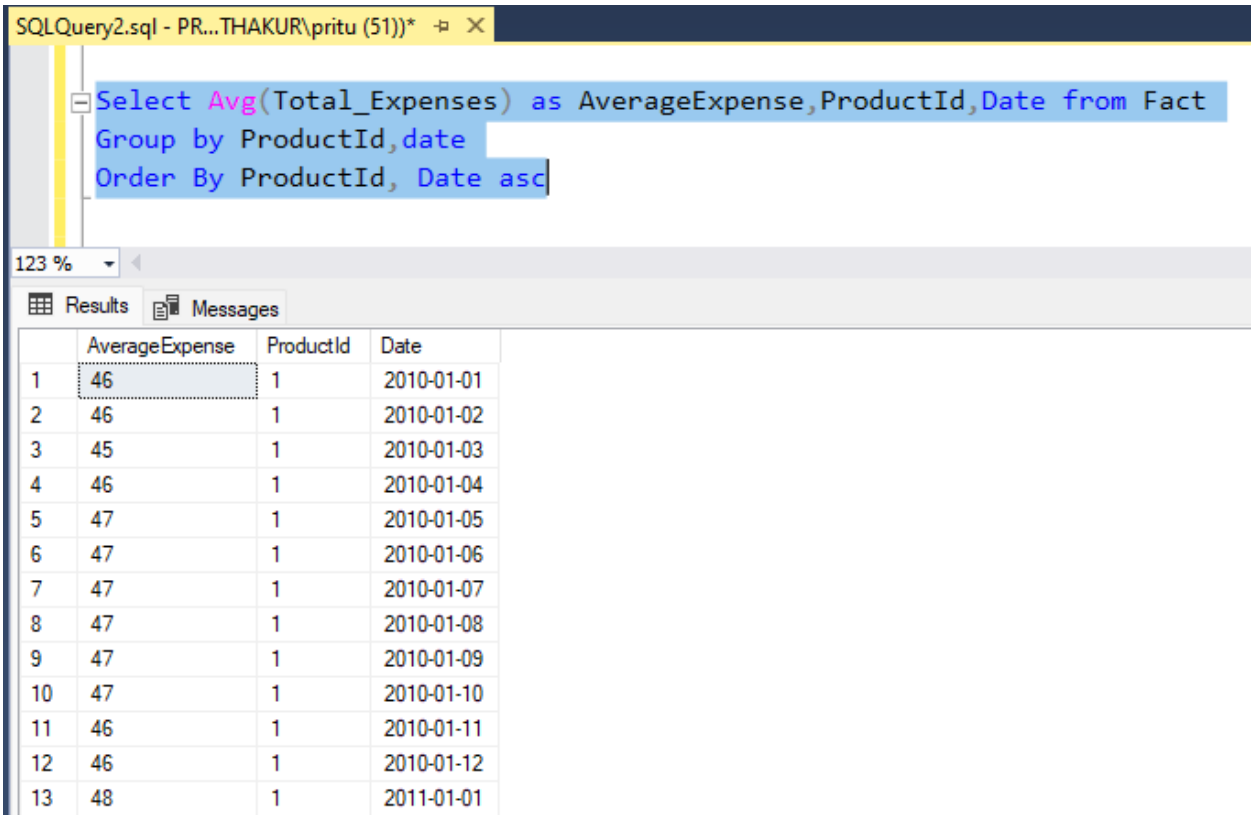
14. Display the average total expense of each product ID on an individual date.

Query:

Select Avg(Total_Expenses) as AverageExpense,ProductId,Date from Fact

Group by ProductId,date

Order By ProductId, Date asc;



	AverageExpense	ProductId	Date
1	46	1	2010-01-01
2	46	1	2010-01-02
3	45	1	2010-01-03
4	46	1	2010-01-04
5	47	1	2010-01-05
6	47	1	2010-01-06
7	47	1	2010-01-07
8	47	1	2010-01-08
9	47	1	2010-01-09
10	47	1	2010-01-10
11	46	1	2010-01-11
12	46	1	2010-01-12
13	48	1	2011-01-01

15. Display the table with the following attributes such as date, productID, product_type, product, sales, profit, state, area_code.

Query: Select F.Date, F.ProductID, P.Product_type,

P.Product, F.sales, F.Profit, L.State, L.area_code

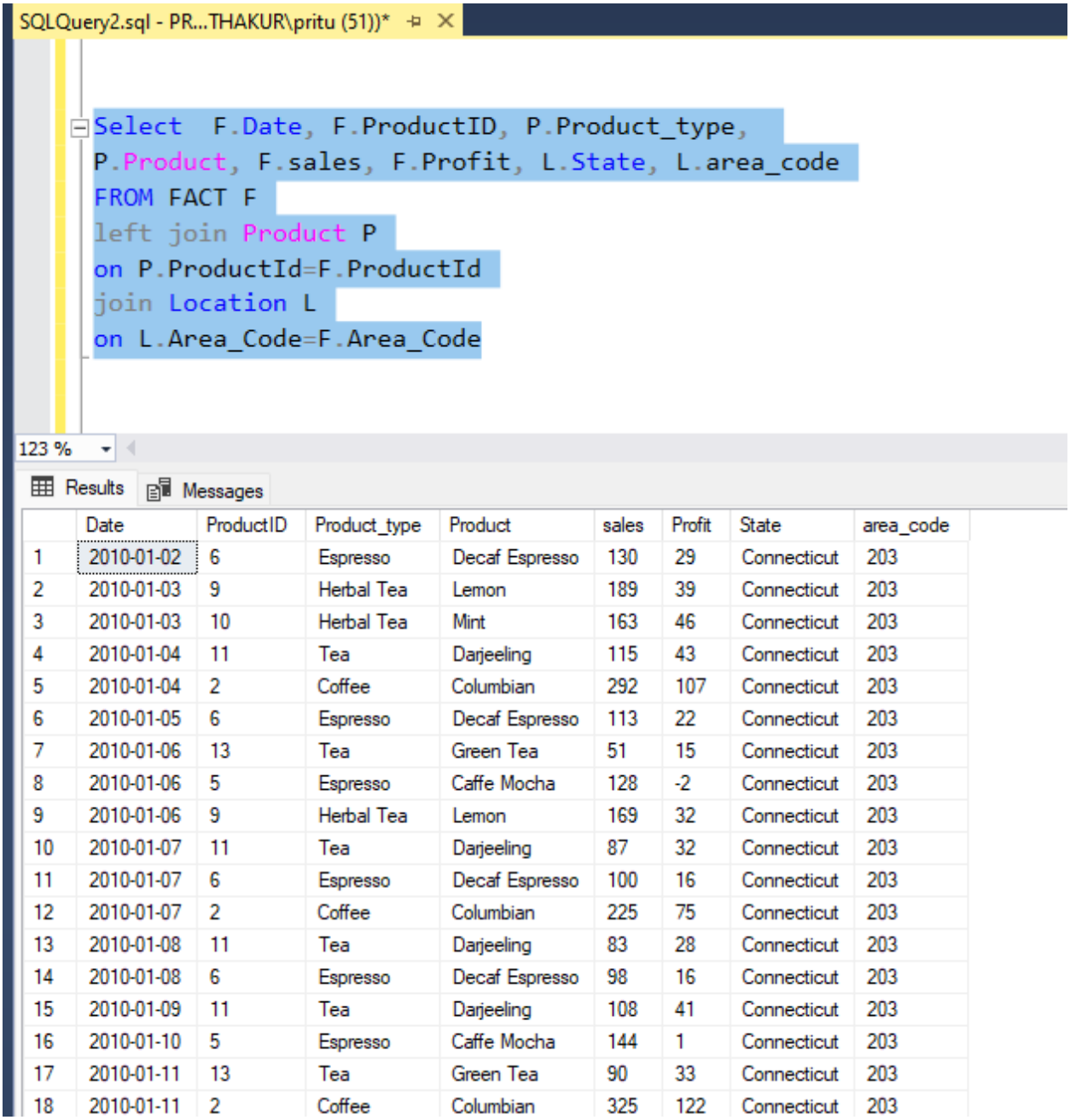
FROM FACT F

left join Product P

on P.ProductId=F.ProductId

join Location L

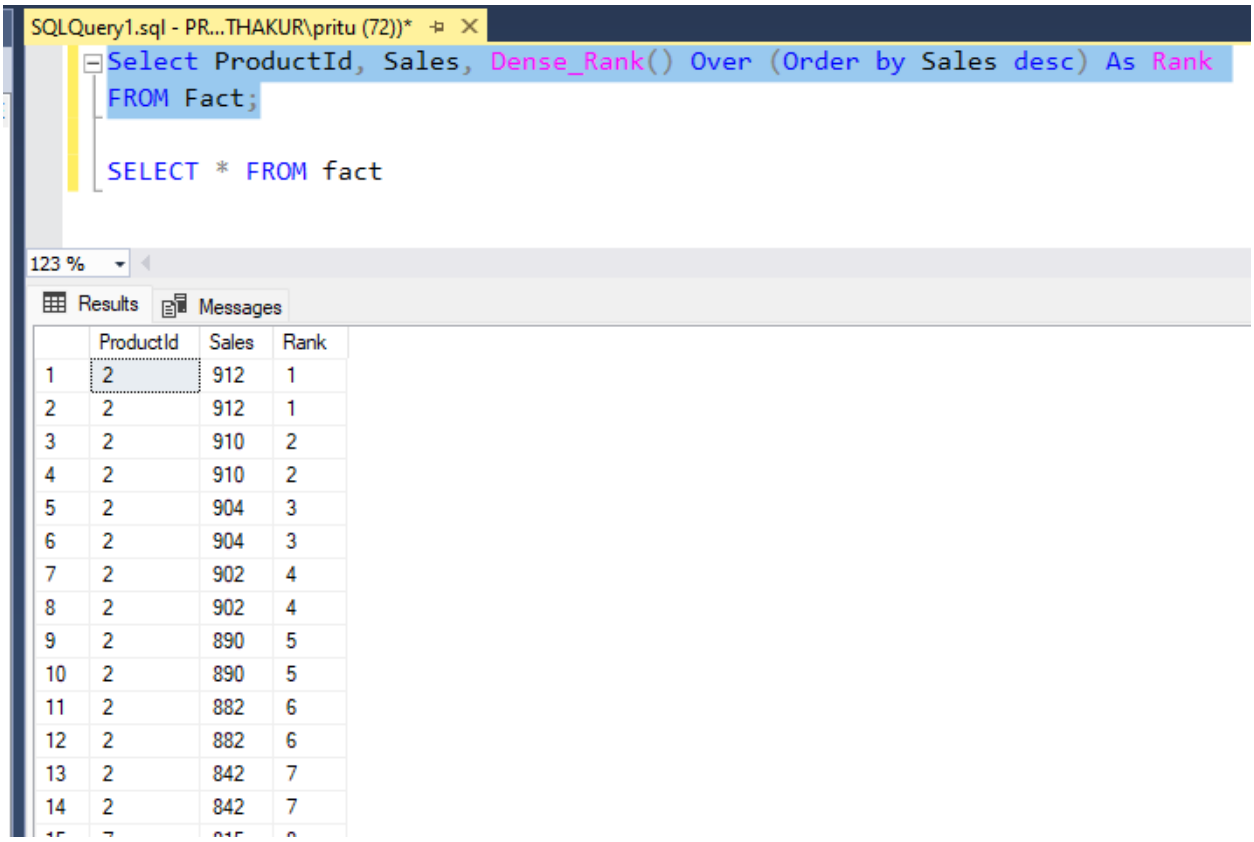
on L.Area_Code=F.Area_Code



	Date	ProductID	Product_type	Product	sales	Profit	State	area_code
1	2010-01-02	6	Espresso	Decaf Espresso	130	29	Connecticut	203
2	2010-01-03	9	Herbal Tea	Lemon	189	39	Connecticut	203
3	2010-01-03	10	Herbal Tea	Mint	163	46	Connecticut	203
4	2010-01-04	11	Tea	Darjeeling	115	43	Connecticut	203
5	2010-01-04	2	Coffee	Columbian	292	107	Connecticut	203
6	2010-01-05	6	Espresso	Decaf Espresso	113	22	Connecticut	203
7	2010-01-06	13	Tea	Green Tea	51	15	Connecticut	203
8	2010-01-06	5	Espresso	Caffe Mocha	128	-2	Connecticut	203
9	2010-01-06	9	Herbal Tea	Lemon	169	32	Connecticut	203
10	2010-01-07	11	Tea	Darjeeling	87	32	Connecticut	203
11	2010-01-07	6	Espresso	Decaf Espresso	100	16	Connecticut	203
12	2010-01-07	2	Coffee	Columbian	225	75	Connecticut	203
13	2010-01-08	11	Tea	Darjeeling	83	28	Connecticut	203
14	2010-01-08	6	Espresso	Decaf Espresso	98	16	Connecticut	203
15	2010-01-09	11	Tea	Darjeeling	108	41	Connecticut	203
16	2010-01-10	5	Espresso	Caffe Mocha	144	1	Connecticut	203
17	2010-01-11	13	Tea	Green Tea	90	33	Connecticut	203
18	2010-01-11	2	Coffee	Columbian	325	122	Connecticut	203

16. Display the rank without any gap to show the sales wise rank.

Query: Select ProductId, Sales, Dense_Rank() Over (Order by Sales desc) As Rank From Fact;



	ProductId	Sales	Rank
1	2	912	1
2	2	912	1
3	2	910	2
4	2	910	2
5	2	904	3
6	2	904	3
7	2	902	4
8	2	902	4
9	2	890	5
10	2	890	5
11	2	882	6
12	2	882	6
13	2	842	7
14	2	842	7

17. Find the state wise profit and sales.

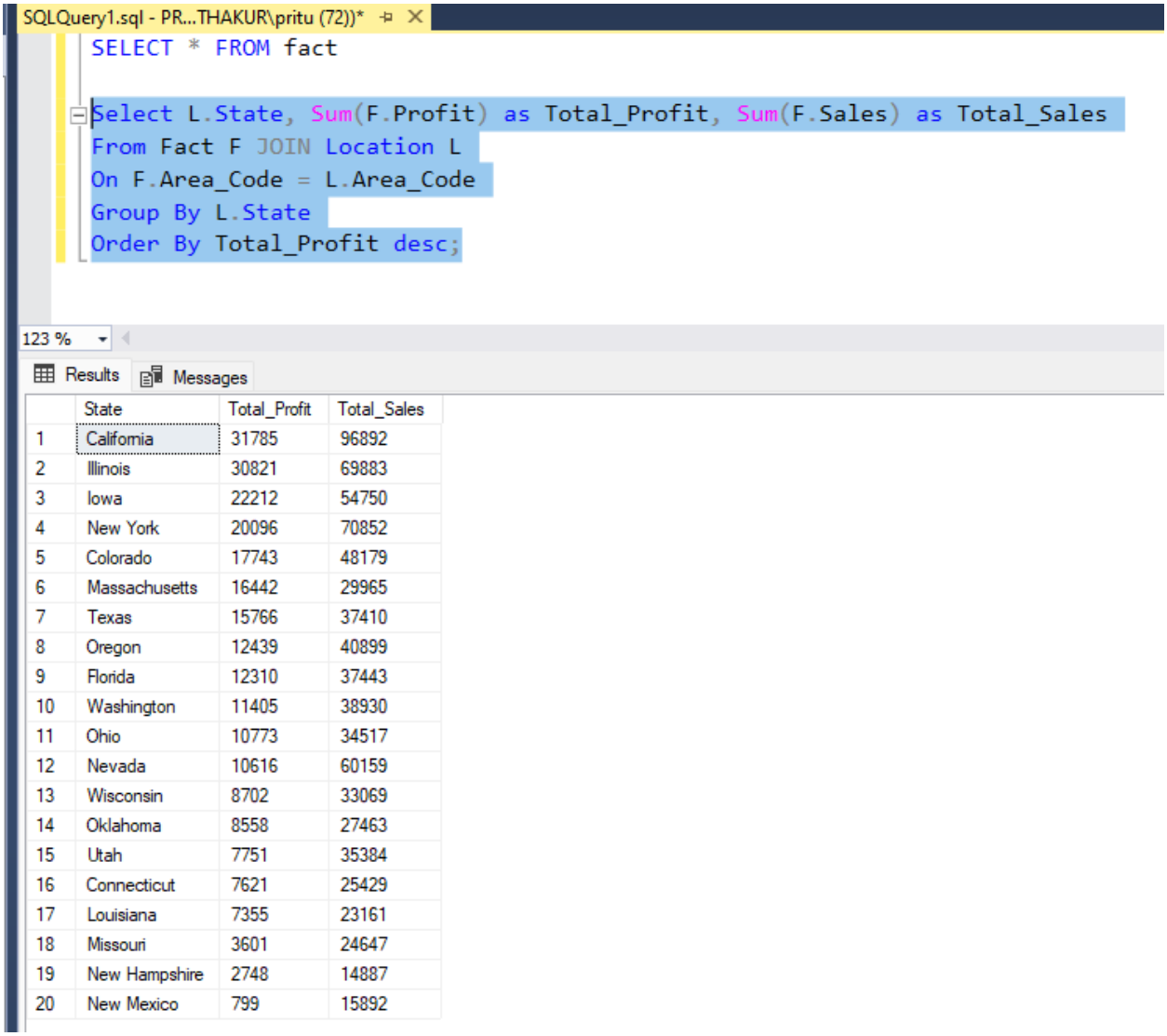
Query:

Select L.State, Sum(F.Profit) as Total_Profit, Sum(F.Sales) as Total_Sales
From Fact F JOIN Location L

On F.Area_Code = L.Area_Code

Group By L.State

Order By Total_Profit desc;



	State	Total_Profit	Total_Sales
1	California	31785	96892
2	Illinois	30821	69883
3	Iowa	22212	54750
4	New York	20096	70852
5	Colorado	17743	48179
6	Massachusetts	16442	29965
7	Texas	15766	37410
8	Oregon	12439	40899
9	Florida	12310	37443
10	Washington	11405	38930
11	Ohio	10773	34517
12	Nevada	10616	60159
13	Wisconsin	8702	33069
14	Oklahoma	8558	27463
15	Utah	7751	35384
16	Connecticut	7621	25429
17	Louisiana	7355	23161
18	Missouri	3601	24647
19	New Hampshire	2748	14887
20	New Mexico	799	15892

18. Find the state wise profit and sales along with the product name.

Query:

Select L.State,P.Product, Sum(F.Profit) as Total_Profit, Sum(F.Sales) as Total_Sales

From Fact F JOIN Location L

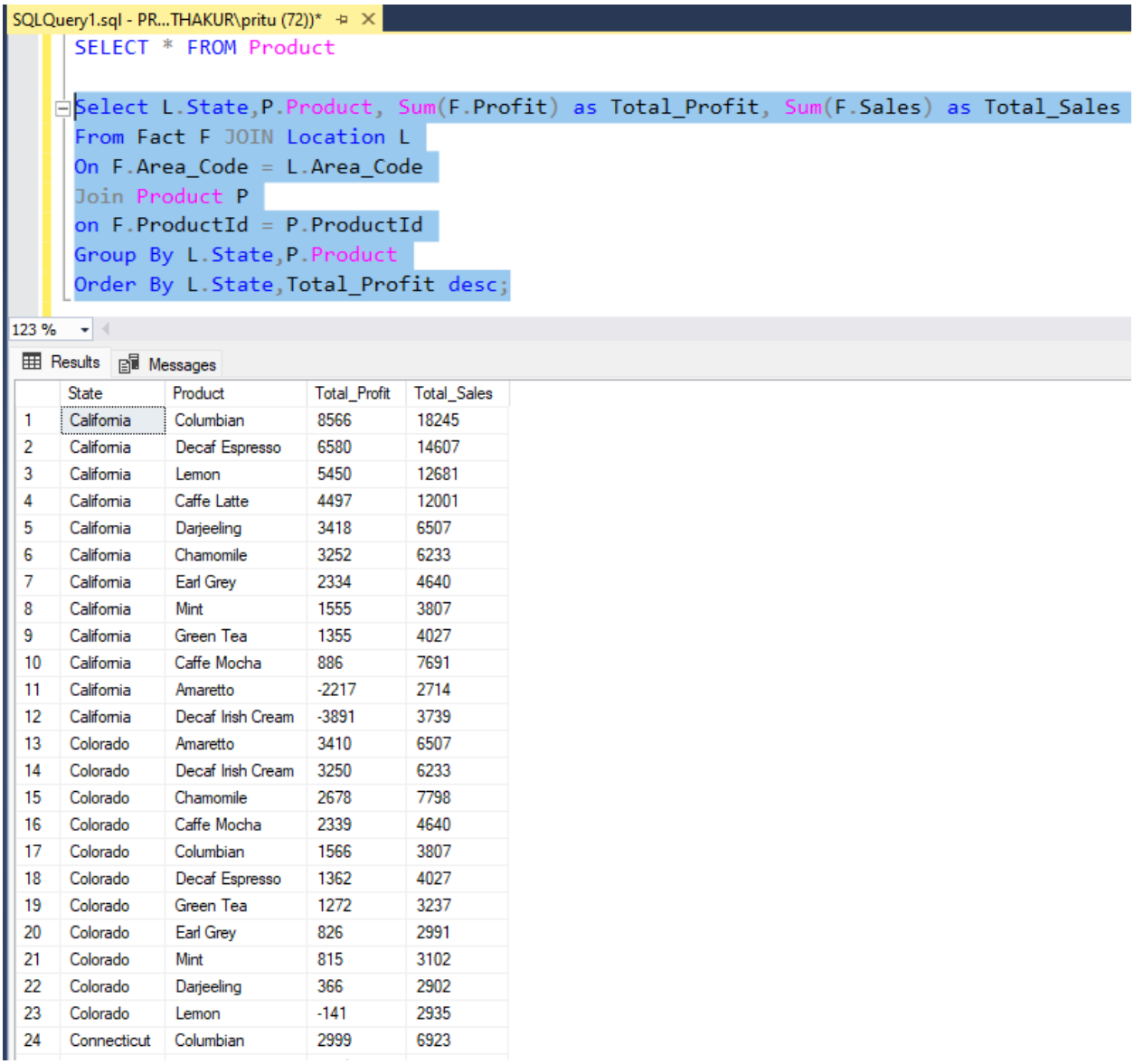
On F.Area_Code = L.Area_Code

Join Product P

on F.ProductId = P.ProductId

Group By L.State,P.Product

Order By L.State,Total_Profit desc;



	State	Product	Total_Profit	Total_Sales
1	California	Columbian	8566	18245
2	California	Decaf Espresso	6580	14607
3	California	Lemon	5450	12681
4	California	Caffe Latte	4497	12001
5	California	Darjeeling	3418	6507
6	California	Chamomile	3252	6233
7	California	Earl Grey	2334	4640
8	California	Mint	1555	3807
9	California	Green Tea	1355	4027
10	California	Caffe Mocha	886	7691
11	California	Amaretto	-2217	2714
12	California	Decaf Irish Cream	-3891	3739
13	Colorado	Amaretto	3410	6507
14	Colorado	Decaf Irish Cream	3250	6233
15	Colorado	Chamomile	2678	7798
16	Colorado	Caffe Mocha	2339	4640
17	Colorado	Columbian	1566	3807
18	Colorado	Decaf Espresso	1362	4027
19	Colorado	Green Tea	1272	3237
20	Colorado	Earl Grey	826	2991
21	Colorado	Mint	815	3102
22	Colorado	Darjeeling	366	2902
23	Colorado	Lemon	-141	2935
24	Connecticut	Columbian	2999	6923

19. If there is an increase in sales of 5%, calculate the increased sales.

Query:

```
----------Increased Sales with Product Name and state wise----------

Select L.State,P.Product,Sum(F.Sales) as Original_Sales,Sum(F.Sales) * 1.05 as Increased_Sales

From Fact F Join Location L On F.Area_Code = L.Area_Code

Join Product P On F.ProductID = P.ProductID

Group By L.State, P.Product

Order By L.State, Original_Sales desc;

----------Increased Sale from fact Table----------

Select ProductId,Sales as Original_Sales,Sales * 1.05 as Increased_Sales

From Fact;

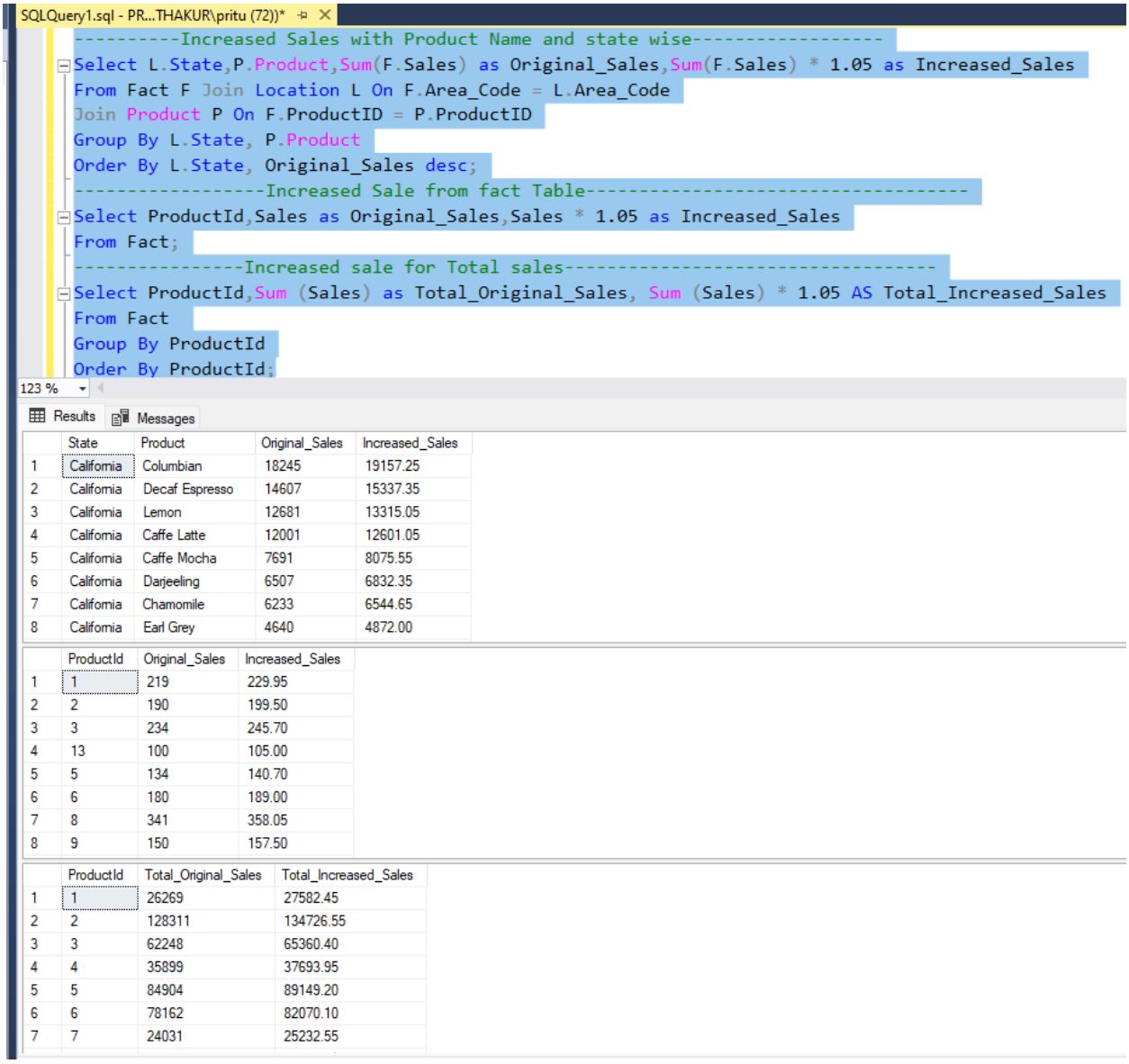
----------Increased sale for Total sales----------

Select ProductId,Sum (Sales) as Total_Original_Sales, Sum (Sales) * 1.05 AS Total_Increased_Sales

From Fact

Group By ProductId

Order By ProductId;
```



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----------Increased Sales with Product Name and state wise----------
Select L.State,P.Product,Sum(F.Sales) as Original_Sales,Sum(F.Sales) * 1.05 as Increased_Sales
From Fact F Join Location L On F.Area_Code = L.Area_Code
Join Product P On F.ProductID = P.ProductID
Group By L.State, P.Product
Order By L.State, Original_Sales desc;
----------Increased Sale from fact Table----------
Select ProductId,Sales as Original_Sales,Sales * 1.05 as Increased_Sales
From Fact;
----------Increased sale for Total sales----------
Select ProductId,Sum (Sales) as Total_Original_Sales, Sum (Sales) * 1.05 AS Total_Increased_Sales
From Fact
Group By ProductId
Order By ProductId;
```

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Results | Messages

	State	Product	Original_Sales	Increased_Sales
1	California	Columbian	18245	19157.25
2	California	Decaf Espresso	14607	15337.35
3	California	Lemon	12681	13315.05
4	California	Caffe Latte	12001	12601.05
5	California	Caffe Mocha	7691	8075.55
6	California	Darjeeling	6507	6832.35
7	California	Chamomile	6233	6544.65
8	California	Earl Grey	4640	4872.00

	ProductId	Original_Sales	Increased_Sales
1	1	219	229.95
2	2	190	199.50
3	3	234	245.70
4	13	100	105.00
5	5	134	140.70
6	6	180	189.00
7	8	341	358.05
8	9	150	157.50

	ProductId	Total_Original_Sales	Total_Increased_Sales
1	1	26269	27582.45
2	2	128311	134726.55
3	3	62248	65360.40
4	4	35899	37693.95
5	5	84904	89149.20
6	6	78162	82070.10
7	7	24031	25232.55

20. Find the maximum profit along with the product ID and product type.

Query:

```
SELECT F.ProductID,P.Product_Type,MAX(F.Profit) as Maximum_Profit
FROM Fact F
JOIN Product P
```

ON F.ProductID = P.ProductID

GROUP BY F.ProductID, P.Product_Type

ORDER BY ProductId,Maximum_Profit DESC;

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```
SELECT F.ProductID,P.Product_Type,MAX(F.Profit) as Maximum_Profit
FROM Fact F
JOIN Product P
ON F.ProductID = P.ProductID
GROUP BY F.ProductID, P.Product_Type
ORDER BY ProductId,Maximum_Profit DESC

Select * from Product
```

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Results | Messages

	ProductID	Product_Type	Maximum_Profit
1	1	Coffee	199
2	2	Coffee	778
3	3	Coffee	207
4	4	Espresso	233
5	5	Espresso	362
6	6	Espresso	362
7	7	Espresso	646
8	8	Herbal Tea	362
9	9	Herbal Tea	536
10	10	Herbal Tea	207
11	11	Tea	362
12	12	Tea	331
13	13	Tea	180

21.Create a stored procedure to fetch the result according to the product type from Product Table.

Query: Create Procedure DetailsByProduct

@InputProduct Nvarchar(100)

As

Begin

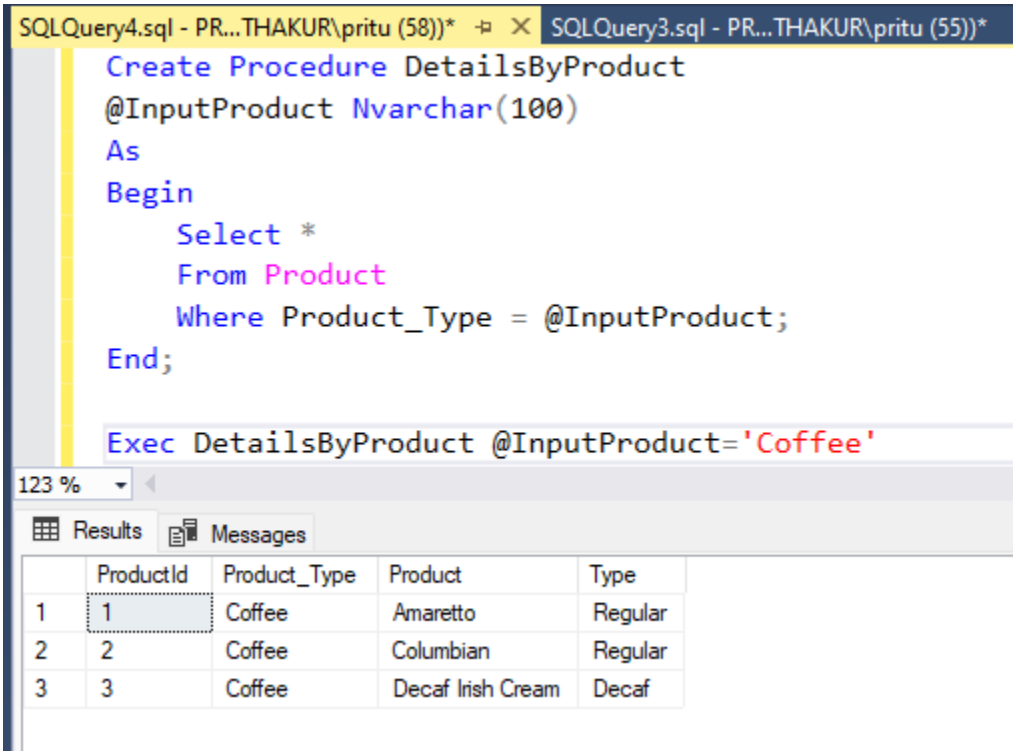
Select *

From Product

Where Product_Type = @InputProduct;

End;

Exec DetailsByProduct @InputProduct='Coffee'



	ProductId	Product_Type	Product	Type
1	1	Coffee	Amaretto	Regular
2	2	Coffee	Columbian	Regular
3	3	Coffee	Decaf Irish Cream	Decaf

22. Write a query by creating a condition in which if the total expenses is less than 60 then it is a profit or else loss.

Query:

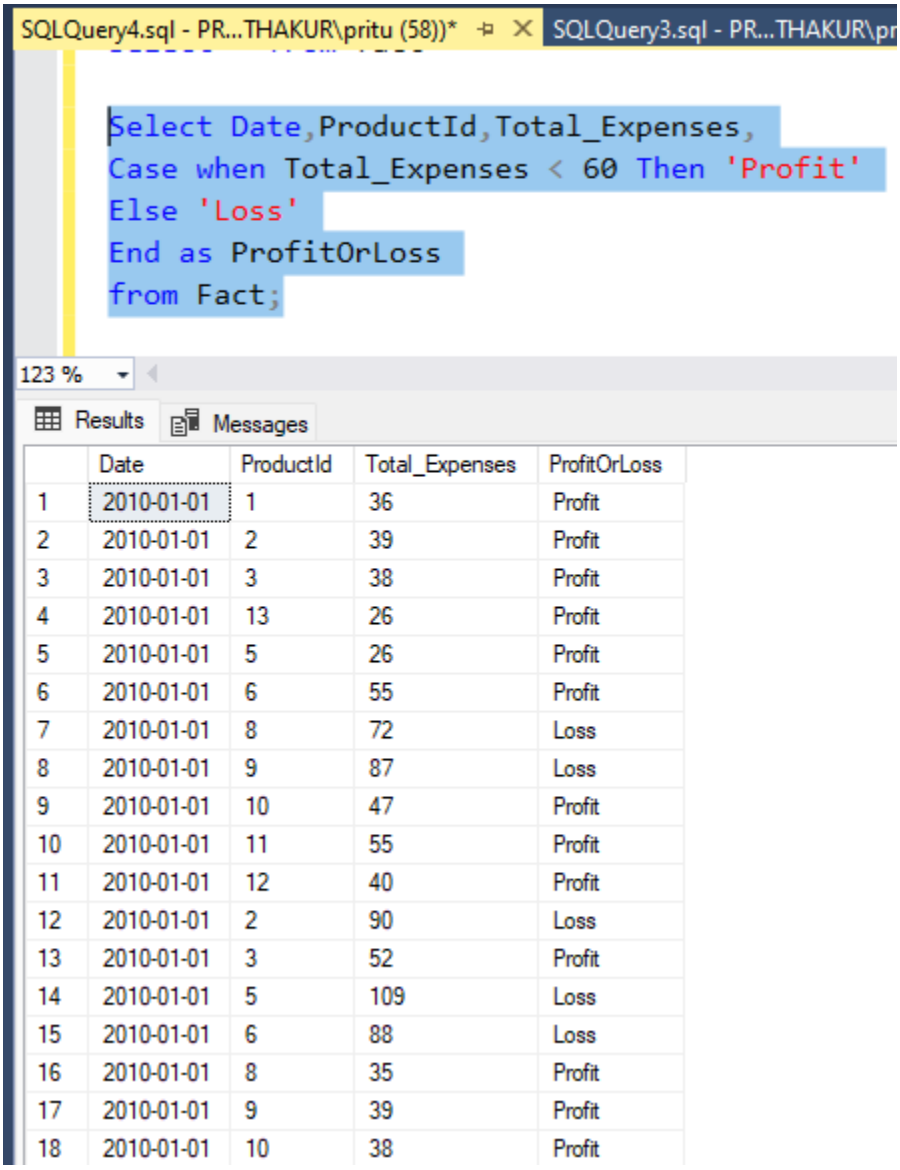
Select Date,ProductId,Total_Expenses,

Case when Total_Expenses < 60 Then 'Profit'

Else 'Loss'

End as ProfitOrLoss

from Fact;



	Date	ProductId	Total_Expenses	ProfitOrLoss
1	2010-01-01	1	36	Profit
2	2010-01-01	2	39	Profit
3	2010-01-01	3	38	Profit
4	2010-01-01	13	26	Profit
5	2010-01-01	5	26	Profit
6	2010-01-01	6	55	Profit
7	2010-01-01	8	72	Loss
8	2010-01-01	9	87	Loss
9	2010-01-01	10	47	Profit
10	2010-01-01	11	55	Profit
11	2010-01-01	12	40	Profit
12	2010-01-01	2	90	Loss
13	2010-01-01	3	52	Profit
14	2010-01-01	5	109	Loss
15	2010-01-01	6	88	Loss
16	2010-01-01	8	35	Profit
17	2010-01-01	9	39	Profit
18	2010-01-01	10	38	Profit

23. Give the total weekly sales value with the date and product ID details. Use roll-up to pull the data in hierarchical order.

Query: SELECT

```
    CONCAT(
        FORMAT(Date, 'yyyy-MM'), ' - Week ',
        DATEPART(WEEK, Date) - DATEPART(WEEK, DATEADD(MONTH, DATEDIFF(MONTH, 0, Date), 0)) + 1
    ) AS WeekOfMonthYear,
--      YEAR(Date) AS YearNum,
--      MONTH(Date) AS MonthNum,
    ProductID,
        SUM(Sales) AS TotalSales
FROM Fact
GROUP BY ROLLUP (
                CONCAT(
        FORMAT(Date, 'yyyy-MM'), ' - Week ',
        DATEPART(WEEK, Date) - DATEPART(WEEK, DATEADD(MONTH, DATEDIFF(MONTH, 0, Date), 0)) + 1
                        ),
                        ProductID)
ORDER BY TotalSales;
```

```sql
SELECT
    CONCAT(
       FORMAT(Date, 'yyyy-MM'), ' - Week ',
       DATEPART(WEEK, Date) - DATEPART(WEEK, DATEADD(MONTH, DATEDIFF(MONTH, 0, Date), 0)) + 1
    ) AS WeekOfMonthYear,
--  YEAR(Date) AS YearNum,
--  MONTH(Date) AS MonthNum,
    ProductID,
    SUM(Sales) AS TotalSales
FROM Fact
GROUP BY ROLLUP (
        CONCAT(
        FORMAT(Date, 'yyyy-MM'), ' - Week ',
        DATEPART(WEEK, Date) - DATEPART(WEEK, DATEADD(MONTH, DATEDIFF(MONTH, 0, Date), 0)) + 1
            ),
            ProductID)
ORDER BY TotalSales;
```

123 %

Results | Messages

	WeekOfMonthYear	ProductID	TotalSales
1	2011-01 - Week 1	7	1003
2	2011-01 - Week 1	1	1210
3	2011-01 - Week 1	13	1399
4	2011-01 - Week 1	10	1564
5	2011-01 - Week 1	4	1653
6	2010-01 - Week 1	7	1884
7	2010-01 - Week 1	1	2155
8	2010-01 - Week 1	13	2534
9	2011-01 - Week 1	3	2656
10	2010-01 - Week 1	10	2814
11	2011-01 - Week 1	12	2867
12	2010-01 - Week 1	4	2941
13	2011-01 - Week 1	11	3178
14	2010-01 - Week 3	7	3265
15	2010-01 - Week 3	1	3283

24. Apply union and intersection operator on the tables which consist of attribute area code.

Query:

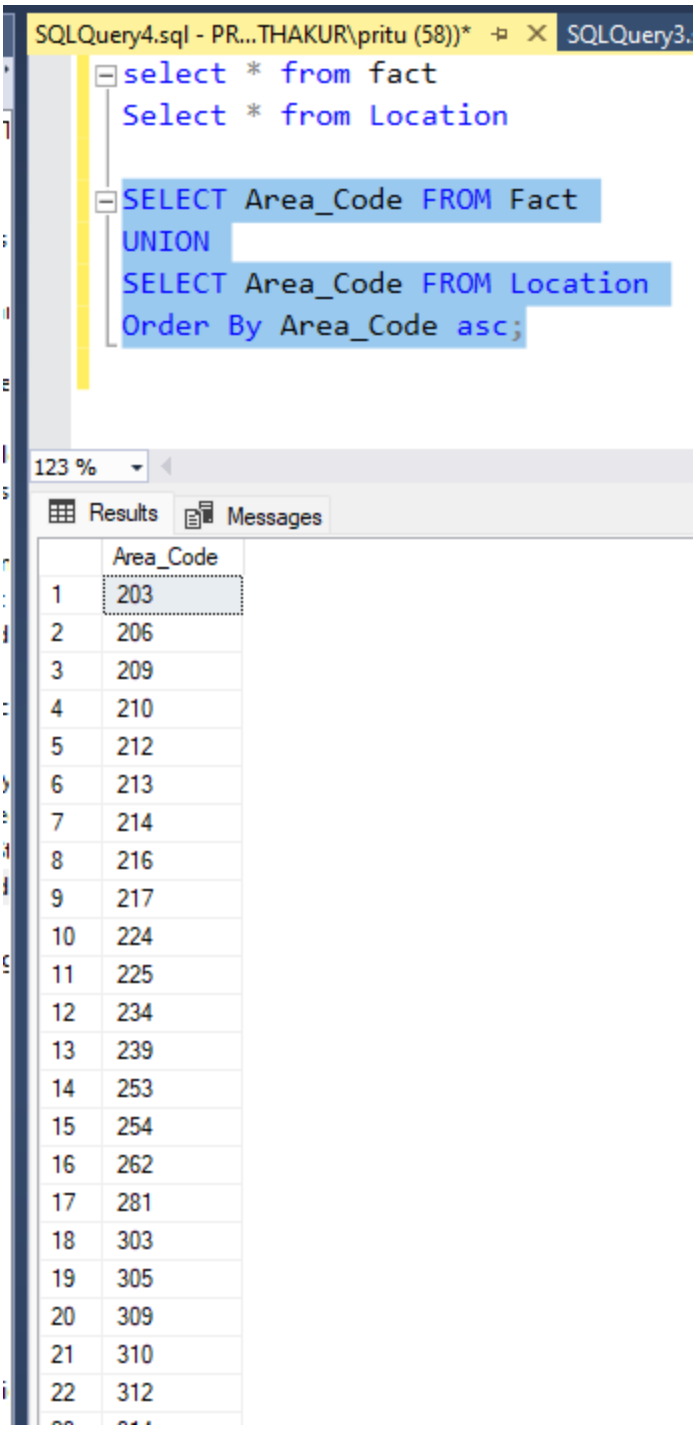
```sql
SELECT Area_Code FROM Fact

UNION

SELECT Area_Code FROM Location

Order By Area_Code asc;
```

```
SELECT Area_Code FROM Fact
INTERSECT
SELECT Area_Code FROM Location
ORDER BY AREA_CODE ASC;
```


SQLQuery4.sql - PR...THAKUR\pritu (58))*
SQLQuery3.
select * from fact
Select * from Location
SELECT Area_Code FROM Fact
UNION
SELECT Area_Code FROM Location
Order By Area_Code asc;
123 %
Results
Messages
Area_Code
1 203
2 206
3 209
4 210
5 212
6 213
7 214
8 216
9 217
10 224
11 225
12 234
13 239
14 253
15 254
16 262
17 281
18 303
19 305
20 309
21 310
22 312

SQLQuery4.sql - PR...THAKUR\pritu (58))* SQLQuery3

```
SELECT Area_Code FROM Fact
INTERSECT
SELECT Area_Code FROM Location
ORDER BY AREA_CODE ASC;
```

123 %

Results Messages

	Area_Code
1	203
2	206
3	209
4	210
5	212
6	213
7	214
8	216
9	217
10	224
11	225
12	234
13	239
14	253
15	254
16	262
17	281
18	303
19	305
20	309
21	310
22	312
23	314
24	315
25	318
26	319
27	321
28	323

25. Create a user-defined function for the product table to fetch a particular product type based upon the user's preference.

Query: CREATE FUNCTION DetailsByProductType

(@InputProduct VARCHAR(100))

RETURNS TABLE

AS

RETURN

(

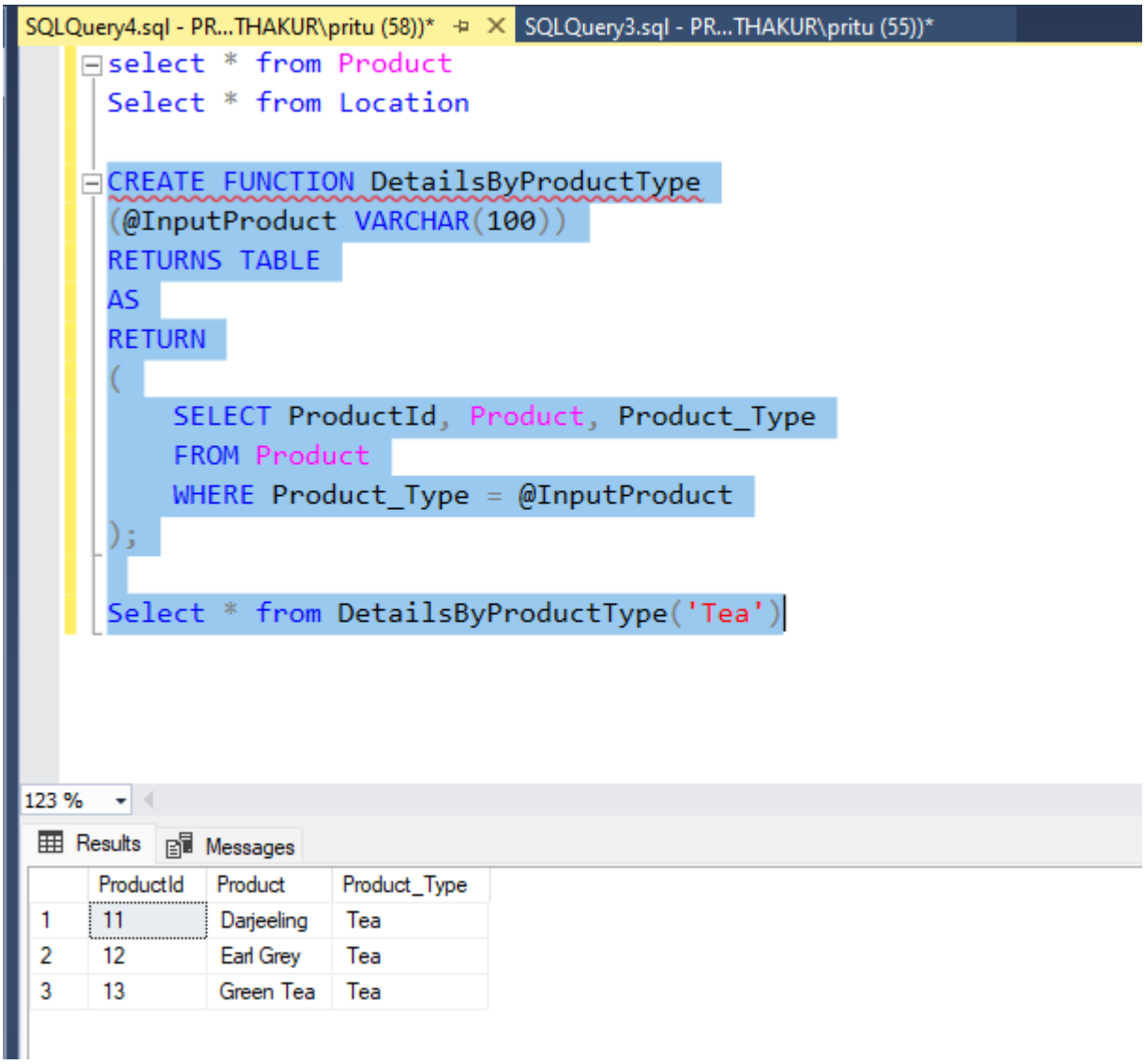
SELECT ProductId, Product, Product_Type

FROM Product

WHERE Product_Type = @InputProduct

);

Select * from DetailsByProductType('Tea')



26. Change the product type from coffee to tea where product ID is 1 and undo it.

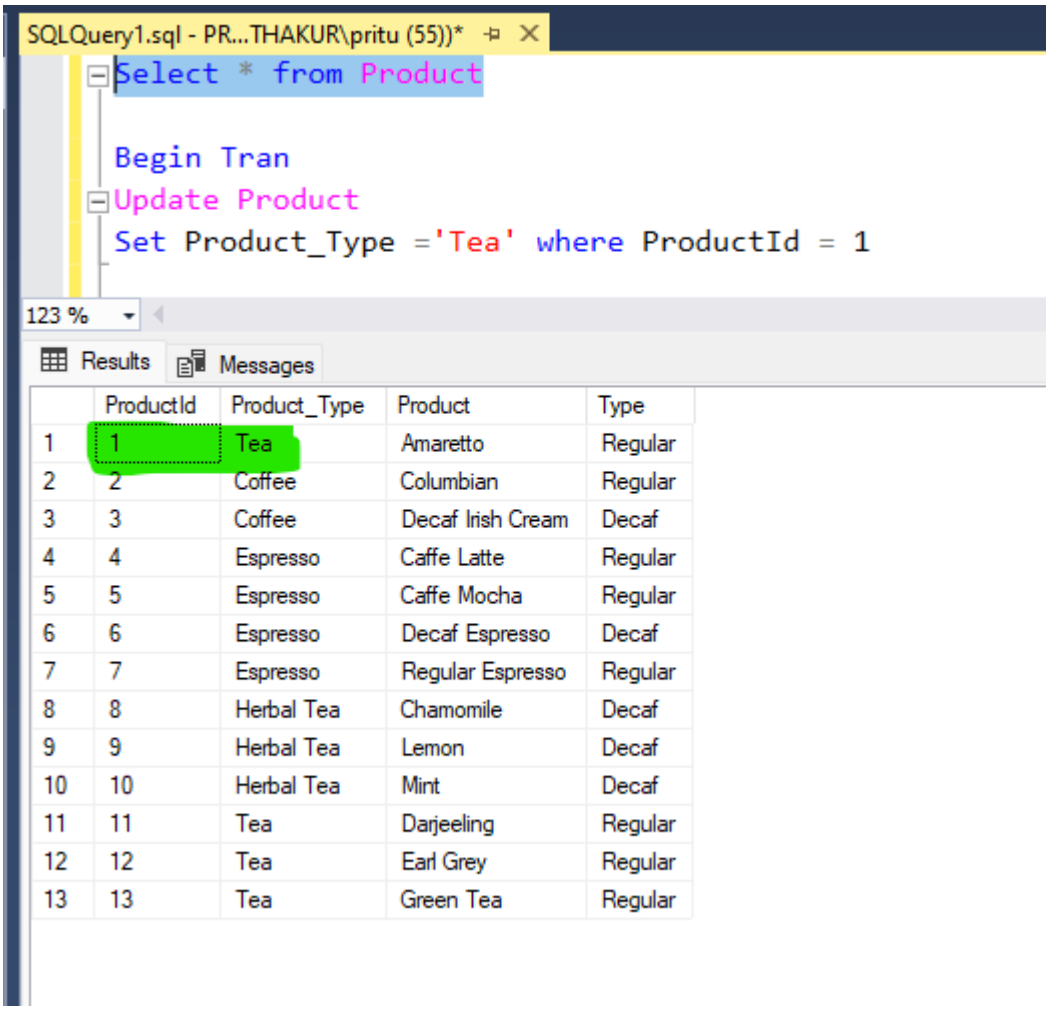
Query:

Begin Tran

Update Product

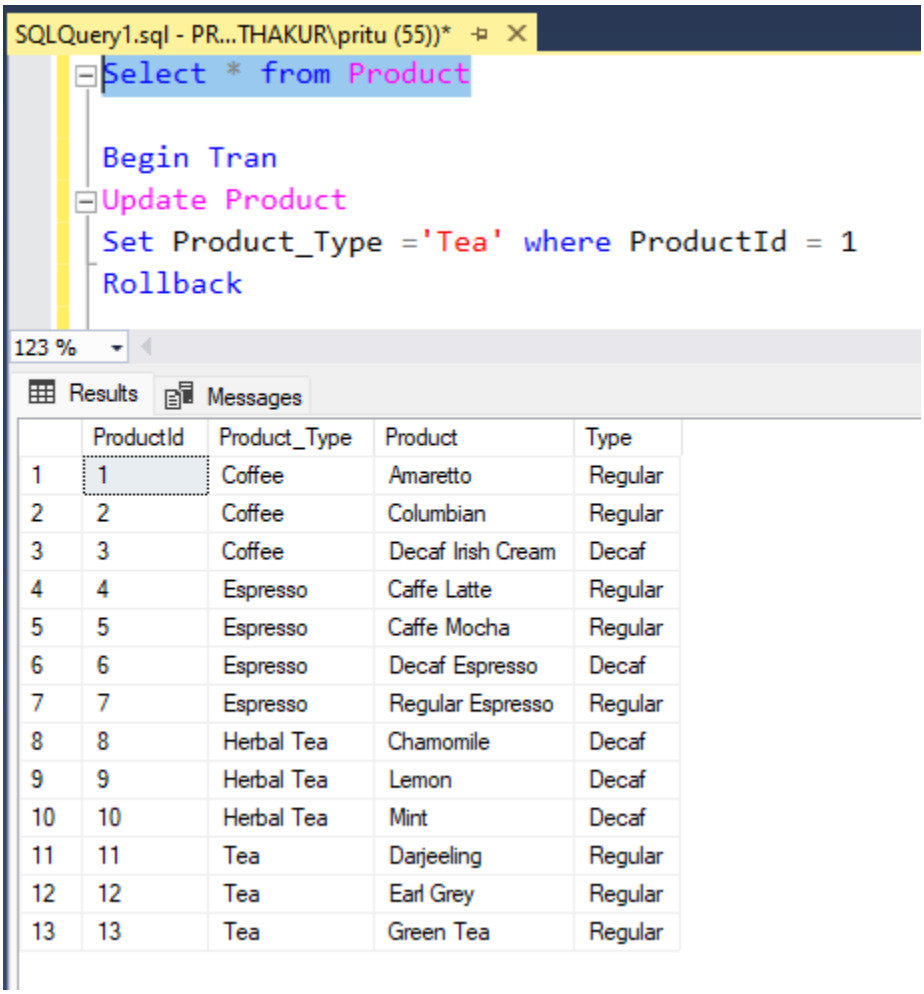
Set Product_Type ='Tea' where ProductId = 1

Rollback



	ProductId	Product_Type	Product	Type
1	1	Tea	Amaretto	Regular
2	2	Coffee	Columbian	Regular
3	3	Coffee	Decaf Irish Cream	Decaf
4	4	Espresso	Caffe Latte	Regular
5	5	Espresso	Caffe Mocha	Regular
6	6	Espresso	Decaf Espresso	Decaf
7	7	Espresso	Regular Espresso	Regular
8	8	Herbal Tea	Chamomile	Decaf
9	9	Herbal Tea	Lemon	Decaf
10	10	Herbal Tea	Mint	Decaf
11	11	Tea	Darjeeling	Regular
12	12	Tea	Earl Grey	Regular
13	13	Tea	Green Tea	Regular

Rollbacked



	ProductId	Product_Type	Product	Type
1	1	Coffee	Amaretto	Regular
2	2	Coffee	Columbian	Regular
3	3	Coffee	Decaf Irish Cream	Decaf
4	4	Espresso	Caffe Latte	Regular
5	5	Espresso	Caffe Mocha	Regular
6	6	Espresso	Decaf Espresso	Decaf
7	7	Espresso	Regular Espresso	Regular
8	8	Herbal Tea	Chamomile	Decaf
9	9	Herbal Tea	Lemon	Decaf
10	10	Herbal Tea	Mint	Decaf
11	11	Tea	Darjeeling	Regular
12	12	Tea	Earl Grey	Regular
13	13	Tea	Green Tea	Regular

27. Display the date, product ID and sales where total expenses are between 100 to 200.

Query:

Select Date,ProductID,Sales,Total_Expenses from Fact where Total_Expenses between 100 and 200.

SQLQuery1.sql - PR...THAKUR\pritu (55))*

```
Select Date,ProductID,Sales,Total_Expenses from Fact
where Total_Expenses between 100 and 200
```

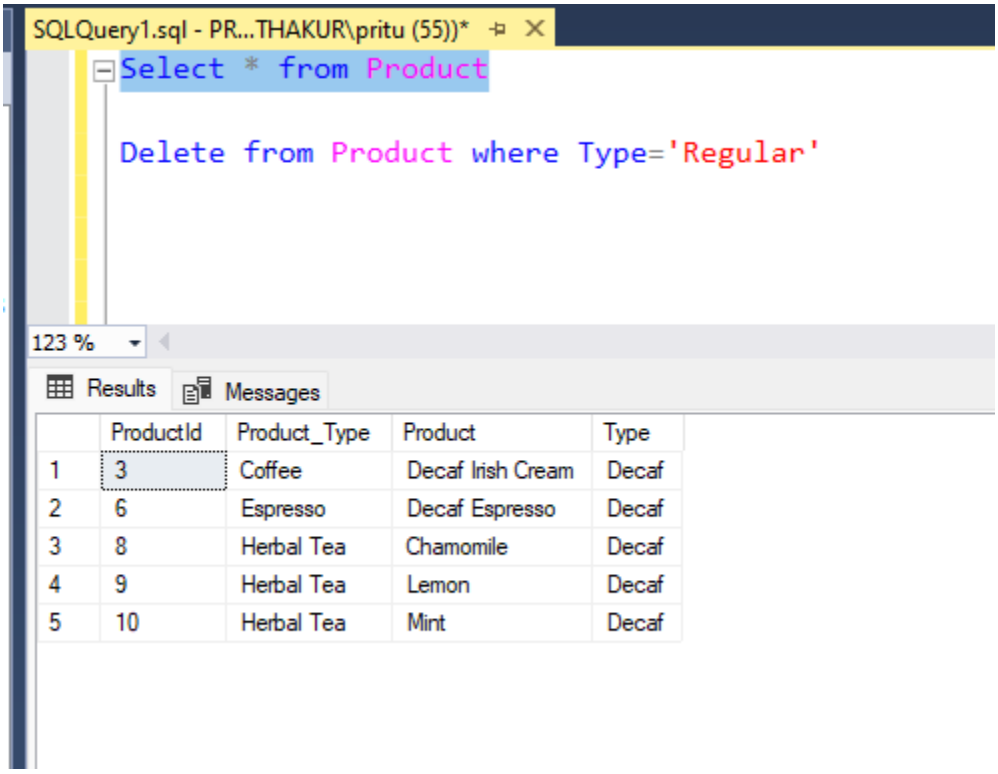
123 %

Results | Messages

	Date	ProductID	Sales	Total_Expenses
1	2010-01-01	5	546	109
2	2010-01-01	8	546	110
3	2010-01-01	12	546	126
4	2010-01-01	2	190	102
5	2010-01-01	5	190	102
6	2010-01-01	5	61	128
7	2010-01-01	2	678	145
8	2010-01-01	9	483	127
9	2010-01-01	9	190	101
10	2010-01-01	5	250	128
11	2010-01-01	6	546	109
12	2010-01-01	2	678	145
13	2010-01-01	8	250	129
14	2010-01-01	11	546	109
15	2010-01-01	13	17	126
16	2010-01-01	3	190	102
17	2010-01-02	5	545	110
18	2010-01-02	8	545	110
19	2010-01-02	12	534	125
20	2010-01-02	2	220	113
21	2010-01-02	5	220	112
22	2010-01-02	5	61	143
23	2010-01-02	2	645	142
24	2010-01-02	9	495	124
25	2010-01-02	9	220	113
26	2010-01-02	5	290	143
27	2010-01-02	6	545	109
28	2010-01-02	2	645	142
29	2010-01-02	8	290	143
30	2010-01-02	11	545	109
31	2010-01-02	13	23	125
32	2010-01-02	3	220	113
33	2010-01-03	5	567	113
34	2010-01-03	8	567	112
35	2010-01-03	12	546	126

28. Delete the records in the Product Table for regular type.

Query: Delete from Product where Type='Regular'



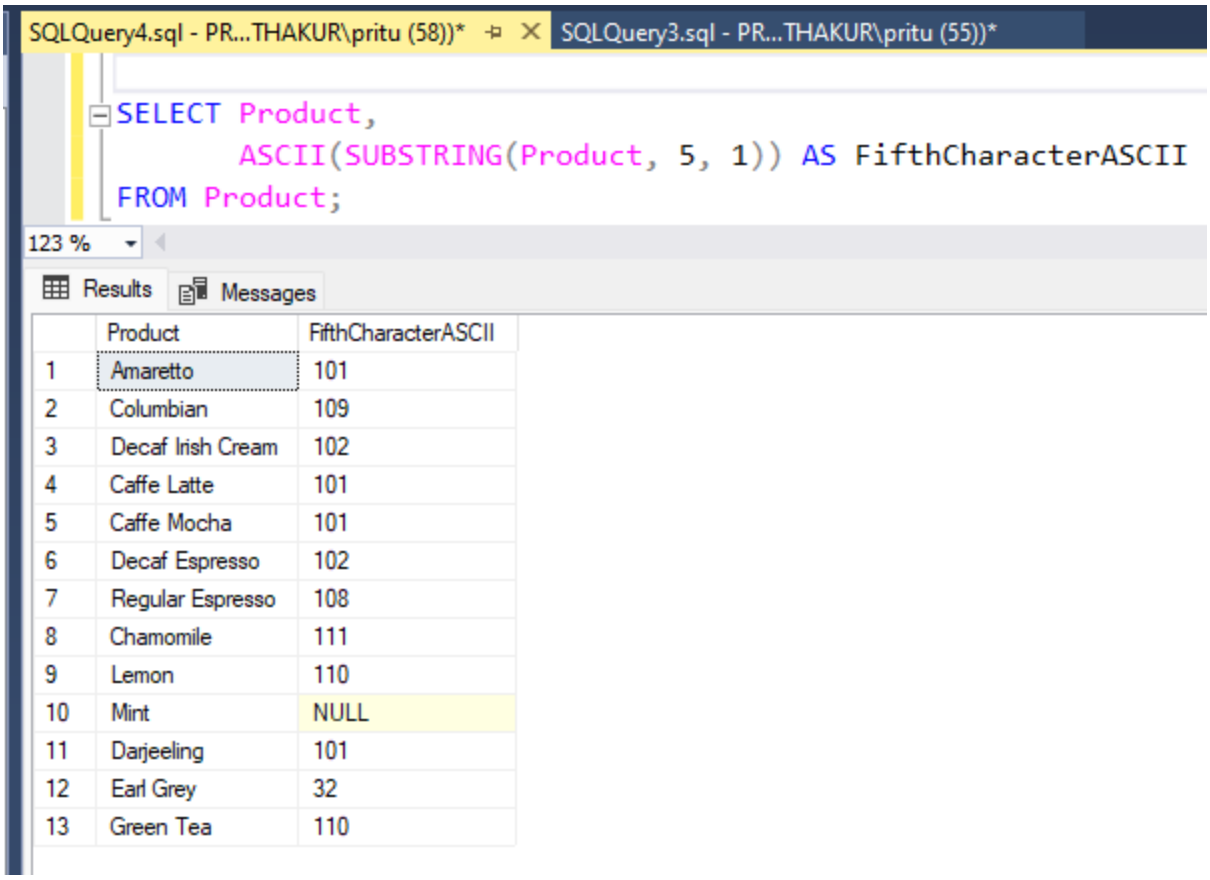
	ProductId	Product_Type	Product	Type
1	3	Coffee	Decaf Irish Cream	Decaf
2	6	Espresso	Decaf Espresso	Decaf
3	8	Herbal Tea	Chamomile	Decaf
4	9	Herbal Tea	Lemon	Decaf
5	10	Herbal Tea	Mint	Decaf

29. Display the ASCII value of the fifth character from the column Product.

Query: SELECT Product,

ASCII(SUBSTRING(Product, 5, 1)) AS FifthCharacterASCII

FROM Product;



	Product	FifthCharacterASCII
1	Amaretto	101
2	Columbian	109
3	Decaf Irish Cream	102
4	Caffe Latte	101
5	Caffe Mocha	101
6	Decaf Espresso	102
7	Regular Espresso	108
8	Chamomile	111
9	Lemon	110
10	Mint	NULL
11	Darjeeling	101
12	Earl Grey	32
13	Green Tea	110