Database Management System

Home Tasks 04

Session: 2022 – 2026

Submitted by:
ALEENA SHEIKH 2022-CS-130
Supervised by:
Prof. NAZEEF

Department of Computer Science
University of Engineering and Technology
Lahore

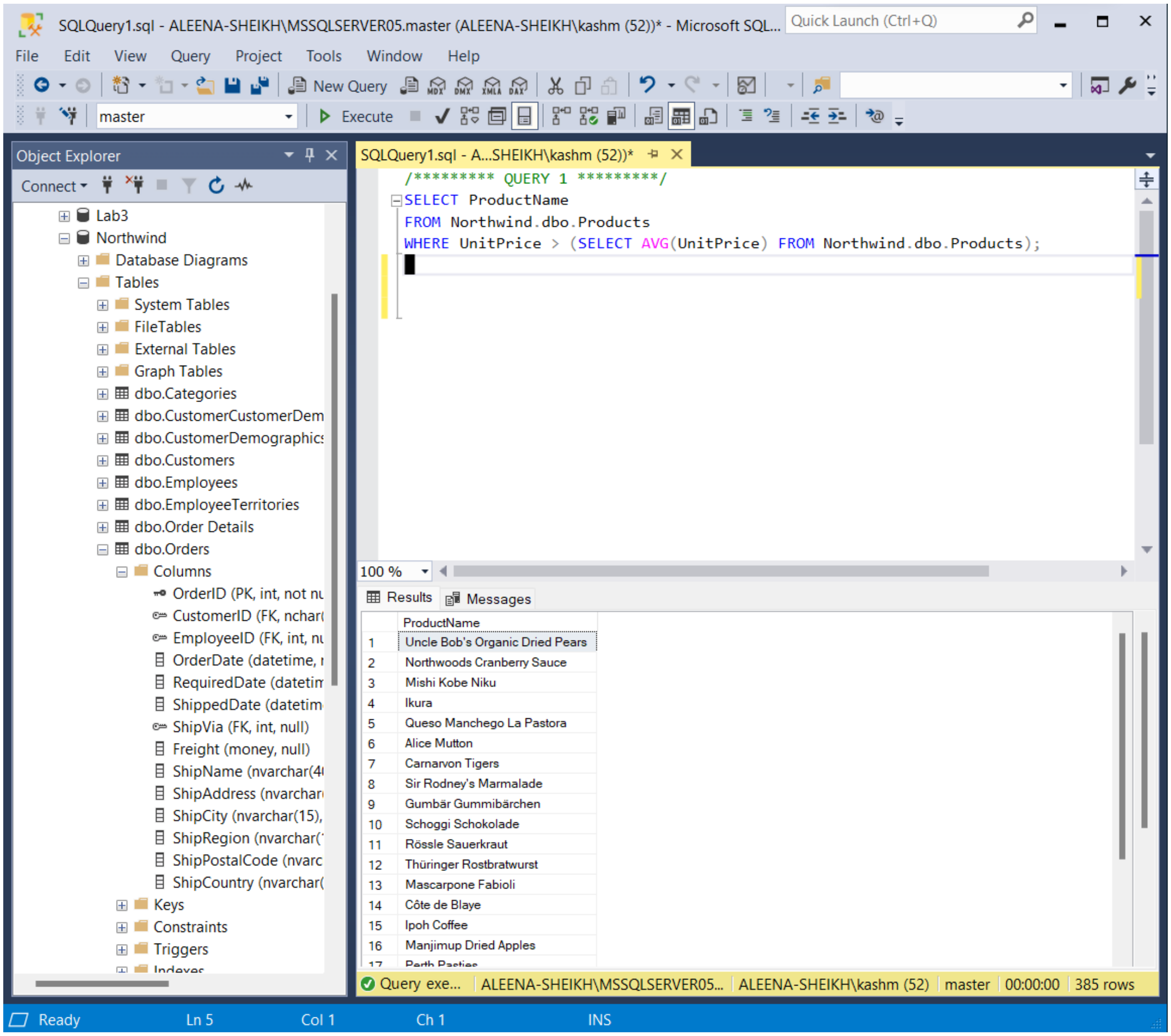
Lab 04 Home Task Queries

Question 01

List name of all the products whose price is above average. (Product Name)

Query:

```
SELECT ProductName
FROM Northwind.dbo.Products
WHERE UnitPrice > (SELECT AVG(UnitPrice) FROM Northwind.dbo.Products);
```



```
/********* QUERY 1 *********/
SELECT ProductName
FROM Northwind.dbo.Products
WHERE UnitPrice > (SELECT AVG(UnitPrice) FROM Northwind.dbo.Products);
```

	ProductName
1	Uncle Bob's Organic Dried Pears
2	Northwoods Cranberry Sauce
3	Mishi Kobe Niku
4	Ikura
5	Queso Manchego La Pastora
6	Alice Mutton
7	Carnarvon Tigers
8	Sir Rodney's Marmalade
9	Gumbär Gummibärchen
10	Schoggi Schokolade
11	Rössle Sauerkraut
12	Thüringer Rostbratwurst
13	Mascarpone Fabioli
14	Côte de Blaye
15	Ipoh Coffee
16	Manjimup Dried Apples
17	Perth Pasties

Query exe... | ALEENA-SHEIKH\MSSQLSERVER05... | ALEENA-SHEIKH\kashm (52) | master | 00:00:00 | 385 rows

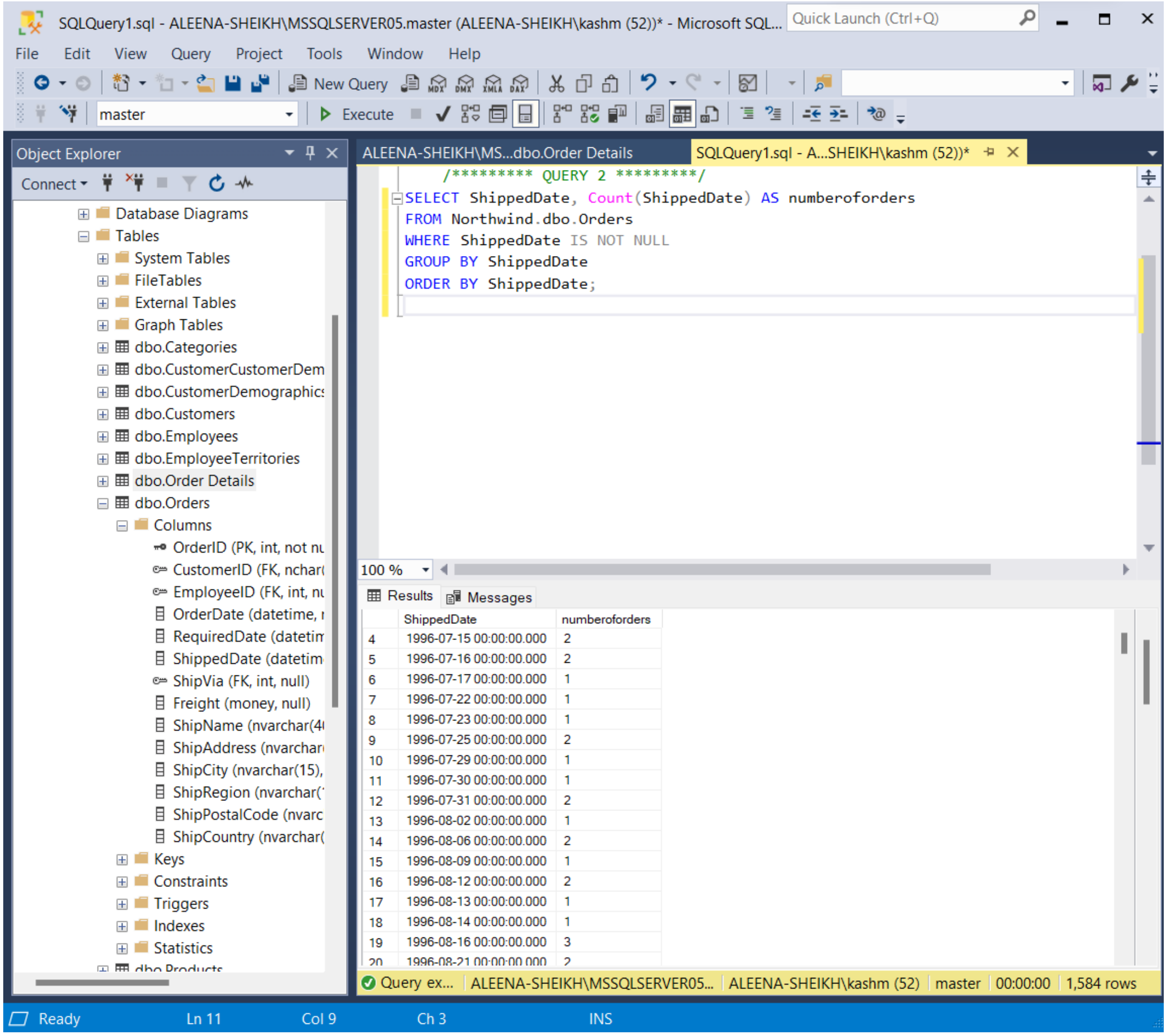
Figure 1: Query 01

Question 02

Write a query to generate report showing date wise orders shipped. (ShippedDate, numberoforders) .

Query:

```
SELECT ShippedDate, Count(ShippedDate) AS numberoforders
FROM Northwind.dbo.Orders
WHERE ShippedDate IS NOT NULL
GROUP BY ShippedDate
ORDER BY ShippedDate;
```



```
/********* QUERY 2 *********/
SELECT ShippedDate, Count(ShippedDate) AS numberoforders
FROM Northwind.dbo.Orders
WHERE ShippedDate IS NOT NULL
GROUP BY ShippedDate
ORDER BY ShippedDate;
```

	ShippedDate	numberoforders
4	1996-07-15 00:00:00.000	2
5	1996-07-16 00:00:00.000	2
6	1996-07-17 00:00:00.000	1
7	1996-07-22 00:00:00.000	1
8	1996-07-23 00:00:00.000	1
9	1996-07-25 00:00:00.000	2
10	1996-07-29 00:00:00.000	1
11	1996-07-30 00:00:00.000	1
12	1996-07-31 00:00:00.000	2
13	1996-08-02 00:00:00.000	1
14	1996-08-06 00:00:00.000	2
15	1996-08-09 00:00:00.000	1
16	1996-08-12 00:00:00.000	2
17	1996-08-13 00:00:00.000	1
18	1996-08-14 00:00:00.000	1
19	1996-08-16 00:00:00.000	3
20	1996-08-21 00:00:00.000	2

Query ex... | ALEENA-SHEIKH\MSSQLSERVER05... | ALEENA-SHEIKH\kashm (52) | master | 00:00:00 | 1,584 rows

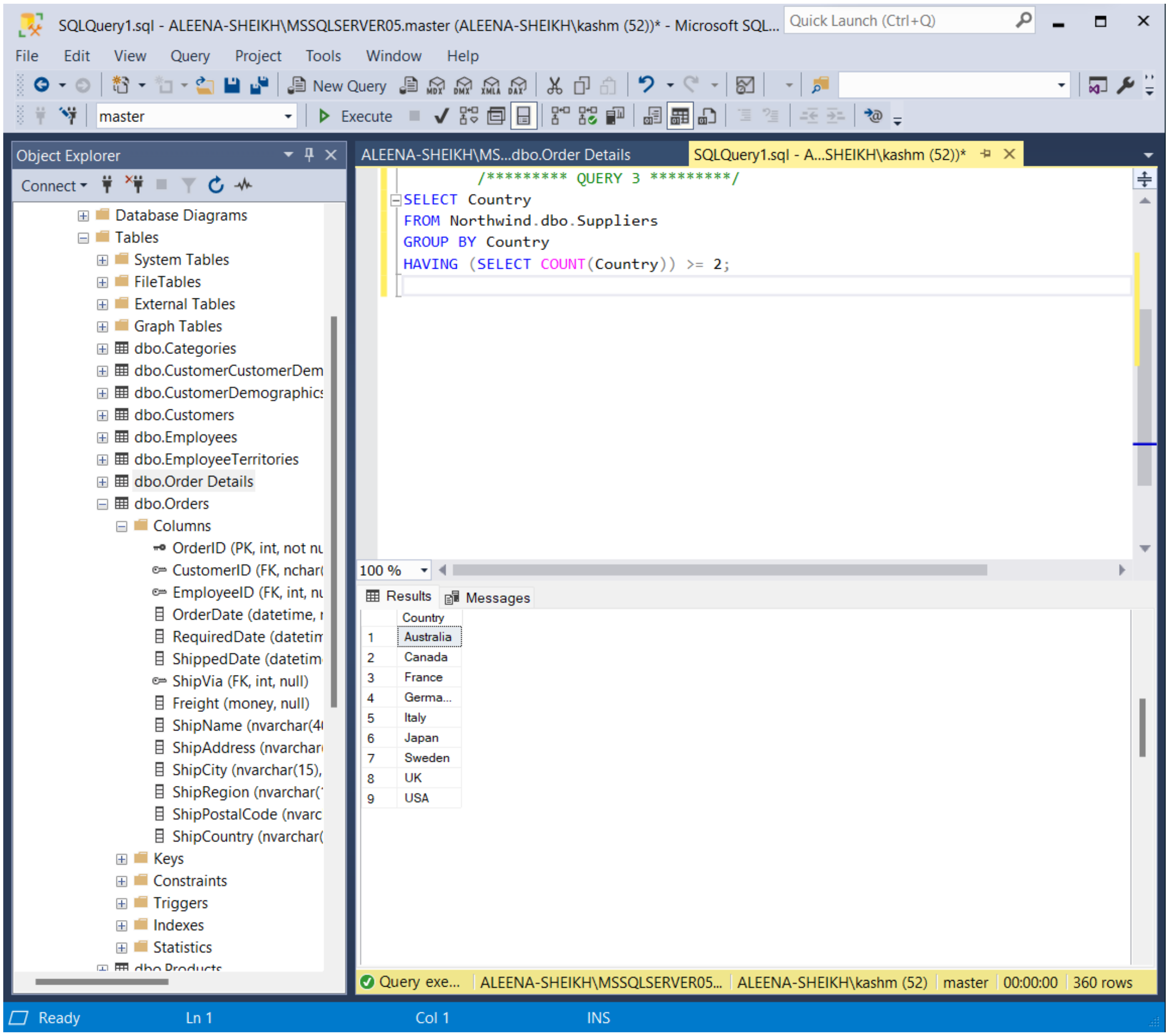
Figure 2: Query 02

Question 03

List name of all countries from where two or more suppliers belong to. (Country)

Query:

```
SELECT Country
FROM Northwind.dbo.Suppliers
GROUP BY Country
HAVING (SELECT COUNT(Country)) >= 2;
```



```
        /********* QUERY 3 *********/
SELECT Country
FROM Northwind.dbo.Suppliers
GROUP BY Country
HAVING (SELECT COUNT(Country)) >= 2;
```

	Country
1	Australia
2	Canada
3	France
4	Germa...
5	Italy
6	Japan
7	Sweden
8	UK
9	USA

Query exe... | ALEENA-SHEIKH\MSSQLSERVER05... | ALEENA-SHEIKH\kashm (52) | master | 00:00:00 | 360 rows

Figure 3: Query 03

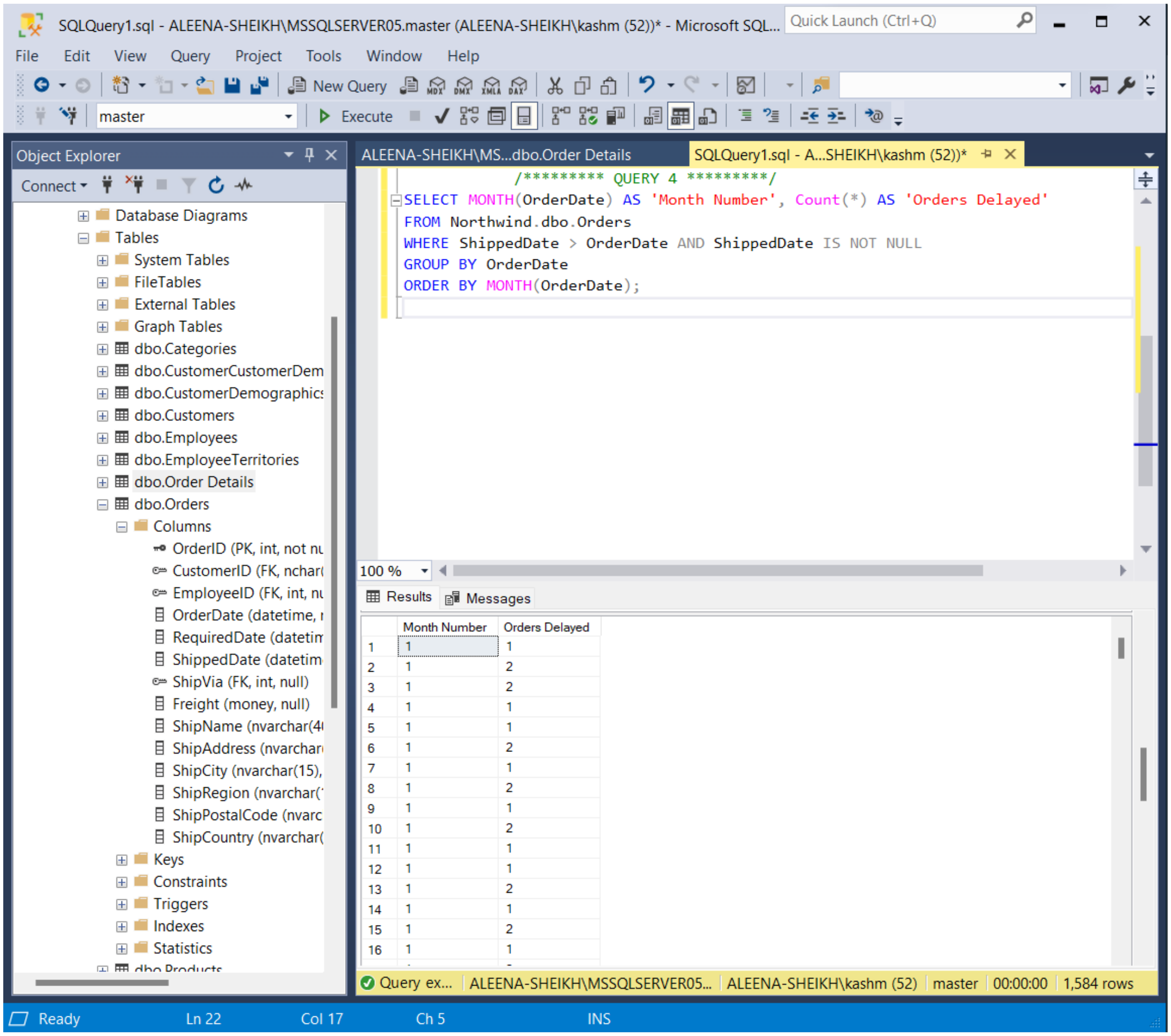
Question 04

Write a query to generate report showing month wise orders delayed shipped. Your output should look like this (Month Number, Orders Delayed)

```
Month Number                    Orders Delayed
   1                                 75
   2                                 75
   12                                55
```

Query:

```
SELECT MONTH(OrderDate) AS 'Month Number', Count(*) AS 'Orders Delayed'
FROM Northwind.dbo.Orders
WHERE ShippedDate > OrderDate AND ShippedDate IS NOT NULL
GROUP BY OrderDate
ORDER BY MONTH(OrderDate);
```



```
/********* QUERY 4 *********/
SELECT MONTH(OrderDate) AS 'Month Number', Count(*) AS 'Orders Delayed'
FROM Northwind.dbo.Orders
WHERE ShippedDate > OrderDate AND ShippedDate IS NOT NULL
GROUP BY OrderDate
ORDER BY MONTH(OrderDate);
```

	Month Number	Orders Delayed
1	1	1
2	1	2
3	1	2
4	1	1
5	1	1
6	1	2
7	1	1
8	1	2
9	1	1
10	1	2
11	1	1
12	1	1
13	1	2
14	1	1
15	1	2
16	1	1

Query ex... | ALEENA-SHEIKH\MSSQLSERVER05... | ALEENA-SHEIKH\kashm (52) | master | 00:00:00 | 1,584 rows

Figure 4: Query 04

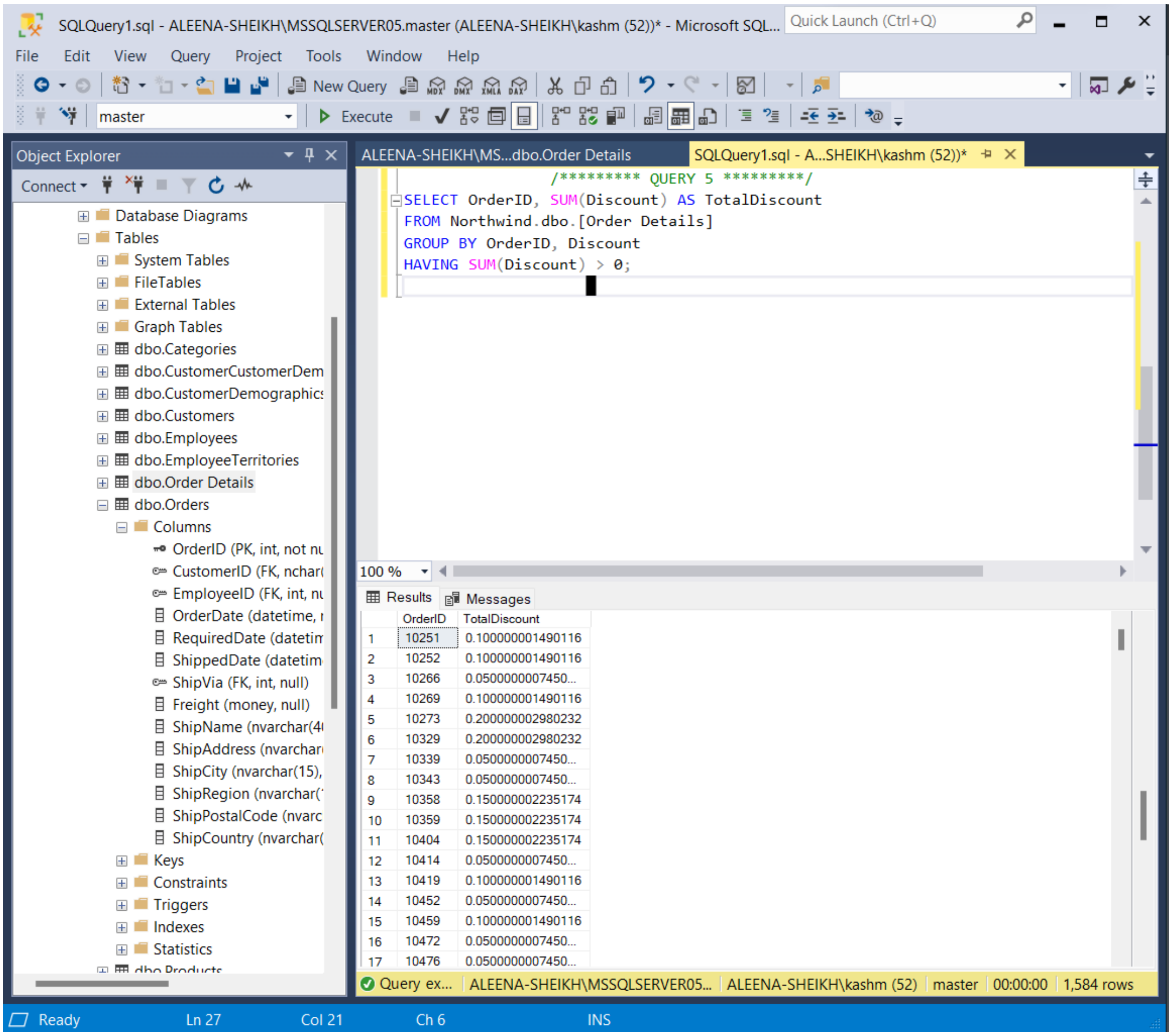
Question 05

Report all the orders which have been discounted. Your result should show the total discount against each order. Output should look like this (Order ID, Discount)

```
OrderID                                    Discount
10250                                   0.300000011920929
10251                                   0.100000001490116
```

Query:

```
SELECT OrderID, SUM(Discount) AS TotalDiscount
FROM Northwind.dbo.[Order Details]
GROUP BY OrderID, Discount
HAVING SUM(Discount) > 0;
```



```
/********* QUERY 5 *********/
SELECT OrderID, SUM(Discount) AS TotalDiscount
FROM Northwind.dbo.[Order Details]
GROUP BY OrderID, Discount
HAVING SUM(Discount) > 0;
```

	OrderID	TotalDiscount
1	10251	0.100000001490116
2	10252	0.100000001490116
3	10266	0.0500000007450...
4	10269	0.100000001490116
5	10273	0.200000002980232
6	10329	0.200000002980232
7	10339	0.0500000007450...
8	10343	0.0500000007450...
9	10358	0.150000002235174
10	10359	0.150000002235174
11	10404	0.150000002235174
12	10414	0.0500000007450...
13	10419	0.100000001490116
14	10452	0.0500000007450...
15	10459	0.100000001490116
16	10472	0.0500000007450...
17	10476	0.0500000007450...

Query ex... | ALEENA-SHEIKH\MSSQLSERVER05... | ALEENA-SHEIKH\kashm (52) | master | 00:00:00 | 1,584 rows

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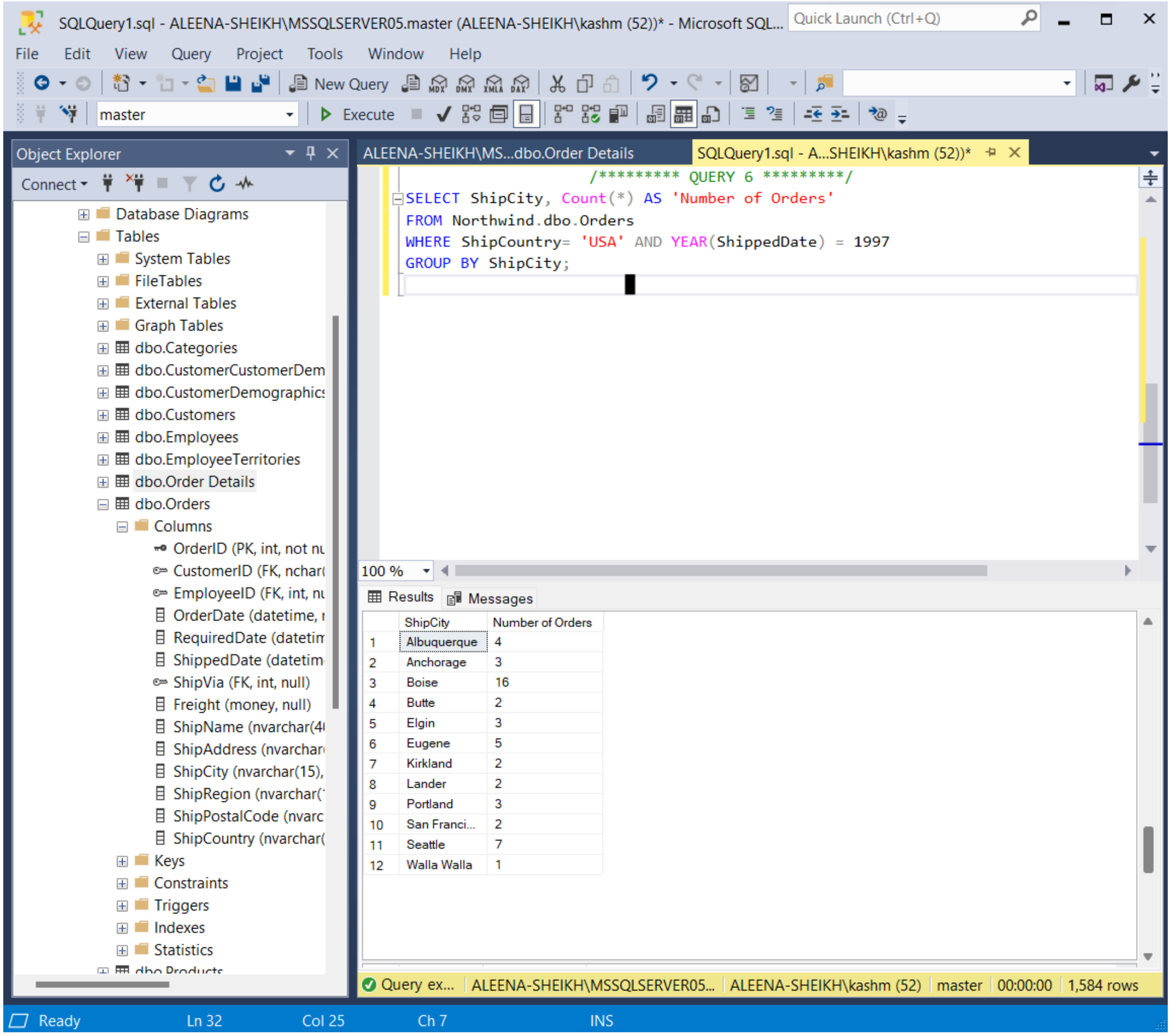
Figure 5: Query 05

Question 06

Write a query to list the number of orders which were shipped in the cities of USA in 1997. Show the number of order against each city. (Ship City, Number of orders)

Query:

```
SELECT ShipCity, Count(*) AS 'Number of Orders'
FROM Northwind.dbo.Orders
WHERE ShipCountry= 'USA' AND YEAR(ShippedDate) = 1997
GROUP BY ShipCity;
```



SQLQuery1.sql - ALEENA-SHEIKH\MSSQLSERVER05.master (ALEENA-SHEIKH\kashm (52))* - Microsoft SQL...

```
/********* QUERY 6 *********/
SELECT ShipCity, Count(*) AS 'Number of Orders'
FROM Northwind.dbo.Orders
WHERE ShipCountry= 'USA' AND YEAR(ShippedDate) = 1997
GROUP BY ShipCity;
```

	ShipCity	Number of Orders
1	Albuquerque	4
2	Anchorage	3
3	Boise	16
4	Butte	2
5	Elgin	3
6	Eugene	5
7	Kirkland	2
8	Lander	2
9	Portland	3
10	San Franci...	2
11	Seattle	7
12	Walla Walla	1

Query ex... | ALEENA-SHEIKH\MSSQLSERVER05... | ALEENA-SHEIKH\kashm (52) | master | 00:00:00 | 1,584 rows

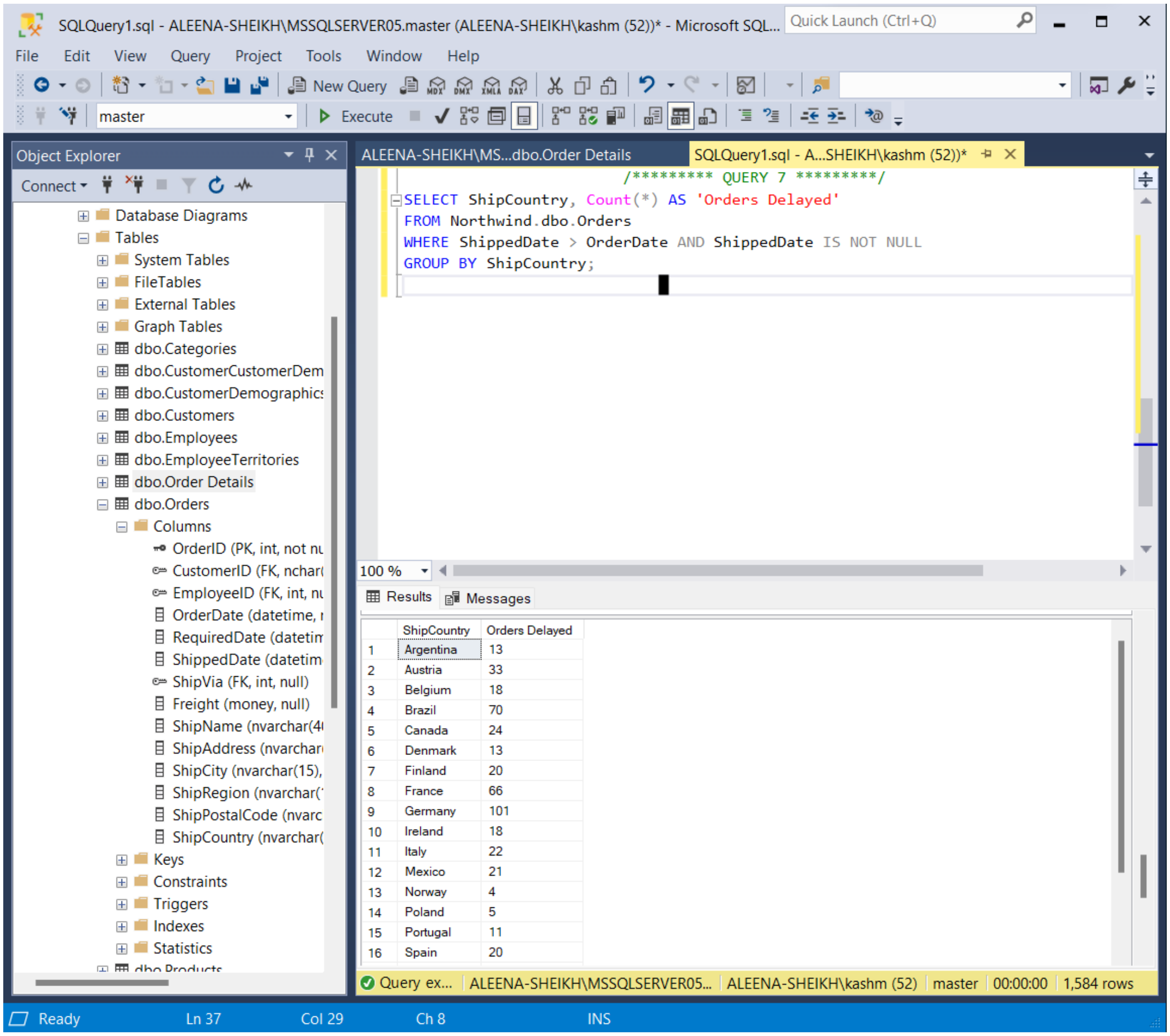
Figure 6: Query 06

Question 07

```
Write a query to generate report showing country wise orders delayed shipped. Your output
should look like this: (Country, Orders Delayed)
 Country                       Orders Delayed
   UK                                 75
   USA                                75
   China                              55
```

Query:

```
SELECT ShipCountry, Count(*) AS 'Orders Delayed'
FROM Northwind.dbo.Orders
WHERE ShippedDate > OrderDate AND ShippedDate IS NOT NULL
GROUP BY ShipCountry;
```



```
                    /********* QUERY 7 *********/
SELECT ShipCountry, Count(*) AS 'Orders Delayed'
FROM Northwind.dbo.Orders
WHERE ShippedDate > OrderDate AND ShippedDate IS NOT NULL
GROUP BY ShipCountry;
```

	ShipCountry	Orders Delayed
1	Argentina	13
2	Austria	33
3	Belgium	18
4	Brazil	70
5	Canada	24
6	Denmark	13
7	Finland	20
8	France	66
9	Germany	101
10	Ireland	18
11	Italy	22
12	Mexico	21
13	Norway	4
14	Poland	5
15	Portugal	11
16	Spain	20

Query ex... | ALEENA-SHEIKH\MSSQLSERVER05... | ALEENA-SHEIKH\kashm (52) | master | 00:00:00 | 1,584 rows

Figure 7: Query 07

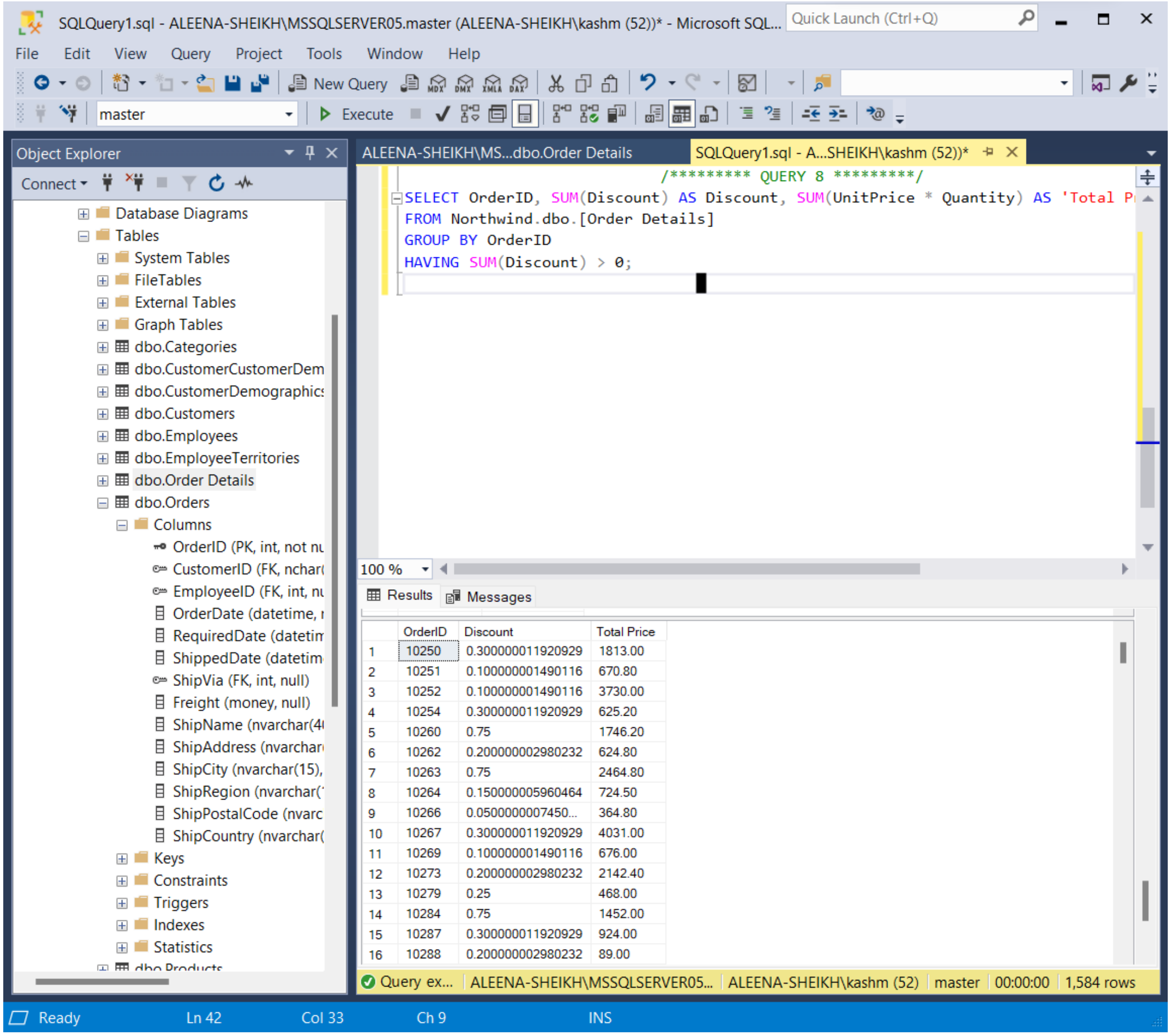
Question 08

Report all the orders which have been discounted with total price of order. Your result should show the total discount against each order. Output should look like this:
(Order ID, Discount, Total Price)

```
OrderID                 Discount                Total Price
10250               0.300000011920929              1854
10251               0.100000001490116              435
```

Query:

```
SELECT OrderID, SUM(Discount) AS Discount, SUM(UnitPrice * Quantity) AS 'Total Price'
FROM Northwind.dbo.[Order Details]
GROUP BY OrderID
HAVING SUM(Discount) > 0;
```



```
/********* QUERY 8 *********/
SELECT OrderID, SUM(Discount) AS Discount, SUM(UnitPrice * Quantity) AS 'Total P
FROM Northwind.dbo.[Order Details]
GROUP BY OrderID
HAVING SUM(Discount) > 0;
```

	OrderID	Discount	Total Price
1	10250	0.300000011920929	1813.00
2	10251	0.100000001490116	670.80
3	10252	0.100000001490116	3730.00
4	10254	0.300000011920929	625.20
5	10260	0.75	1746.20
6	10262	0.200000002980232	624.80
7	10263	0.75	2464.80
8	10264	0.150000005960464	724.50
9	10266	0.0500000007450...	364.80
10	10267	0.300000011920929	4031.00
11	10269	0.100000001490116	676.00
12	10273	0.200000002980232	2142.40
13	10279	0.25	468.00
14	10284	0.75	1452.00
15	10287	0.300000011920929	924.00
16	10288	0.200000002980232	89.00

Query ex... | ALEENA-SHEIKH\MSSQLSERVER05... | ALEENA-SHEIKH\kashm (52) | master | 00:00:00 | 1,584 rows

Figure 8: Query 08

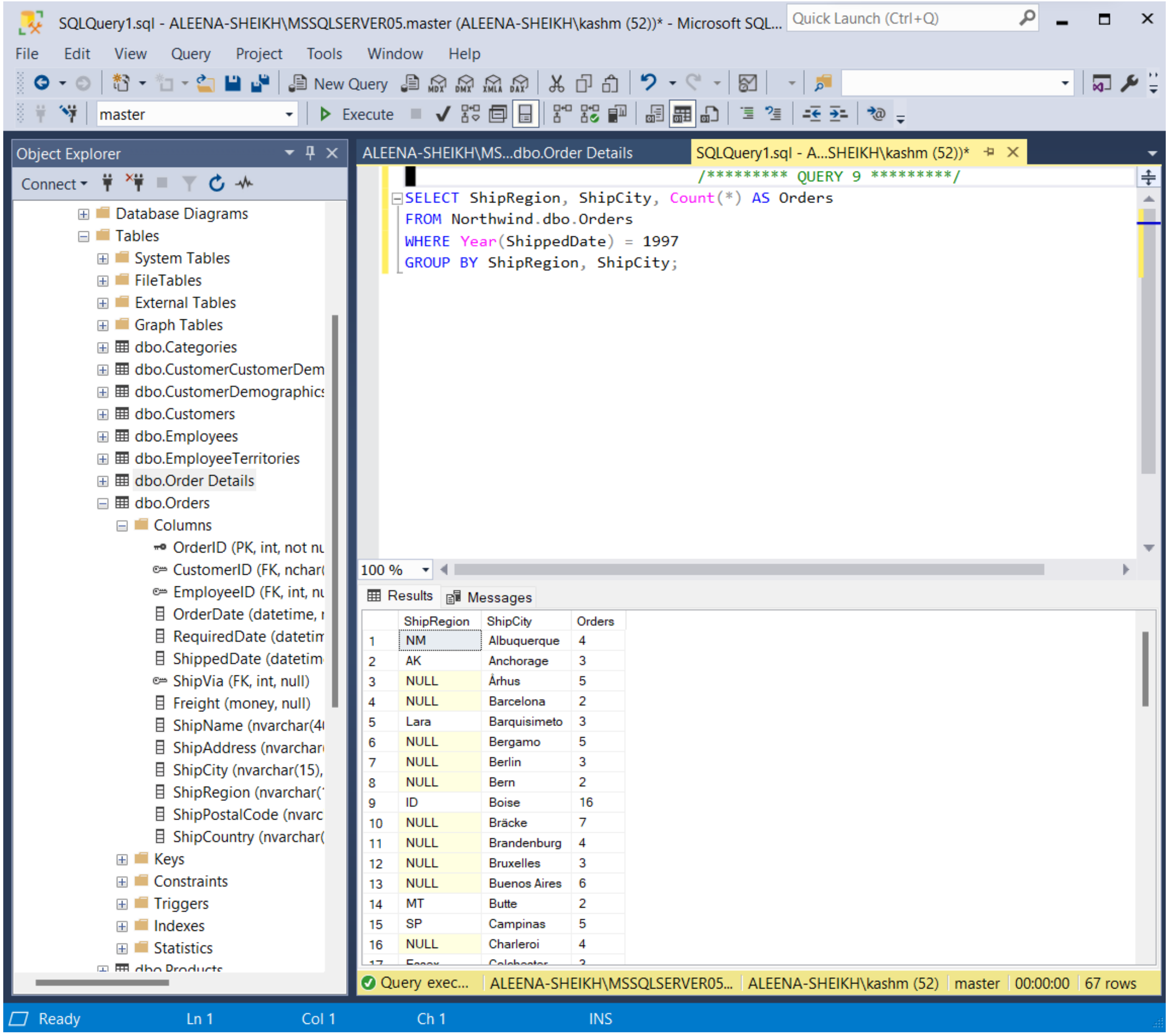
Question 09

Write a query to list the number of orders which were shipped in the cities of each region in 1997. Show the number of order against each city. Your results should look like this: (ShipRegion, ShipCity, Numberoforders)

ShipRegion	ShipCity	Numberoforders
AK	Lander	3
CJ	Walla Walla	5

Query:

```
SELECT ShipRegion, ShipCity, Count(*) AS Orders
FROM Northwind.dbo.Orders
WHERE Year(ShippedDate) = 1997
GROUP BY ShipRegion, ShipCity;
```



```
/********* QUERY 9 *********/
SELECT ShipRegion, ShipCity, Count(*) AS Orders
FROM Northwind.dbo.Orders
WHERE Year(ShippedDate) = 1997
GROUP BY ShipRegion, ShipCity;
```

	ShipRegion	ShipCity	Orders
1	NM	Albuquerque	4
2	AK	Anchorage	3
3	NULL	Århus	5
4	NULL	Barcelona	2
5	Lara	Barquisimeto	3
6	NULL	Bergamo	5
7	NULL	Berlin	3
8	NULL	Bern	2
9	ID	Boise	16
10	NULL	Bräcke	7
11	NULL	Brandenburg	4
12	NULL	Bruxelles	3
13	NULL	Buenos Aires	6
14	MT	Butte	2
15	SP	Campinas	5
16	NULL	Charleroi	4
17	Essex	Colchester	3

Query exec... | ALEENA-SHEIKH\MSSQLSERVER05... | ALEENA-SHEIKH\kashm (52) | master | 00:00:00 | 67 rows

Figure 9: Query 09