

DATABASE SYSTEMS

LAB 4

Submitted To

Sir Nazeef Ul Haq
Sir Numan Babar



Submitted By

Muhammad Jilani
2022 - CS - 192

Contents

1	Task 01	3
	1.1 Question :	3
	1.2 Query :	3
	1.3 Picture	3
2	Task 02	4
	2.1 Question :	4
	2.2 Query :	4
	2.3 Picture	4
3	Task 03	5
	3.1 Question :	5
	3.2 Query :	5
	3.3 Picture	5
4	Task 04	5
	4.1 Question :	5
	4.2 Query :	6
	4.3 Picture	6
5	Task 05	6
	5.1 Question :	6
	5.2 Query :	7
	5.3 Picture	7
6	Task 06	7
	6.1 Question :	7
	6.2 Query :	7
	6.3 Picture	8
7	Task 07	8
	7.1 Question :	8
	7.2 Query :	8
	7.3 Picture	9
8	Task 08	9
	8.1 Question :	9
	8.2 Query :	9
	8.3 Picture	10
9	Task 09	10
	9.1 Question :	10
	9.2 Query :	10

9.3	Picture	11
-----	-------------------	----

1 Task 01

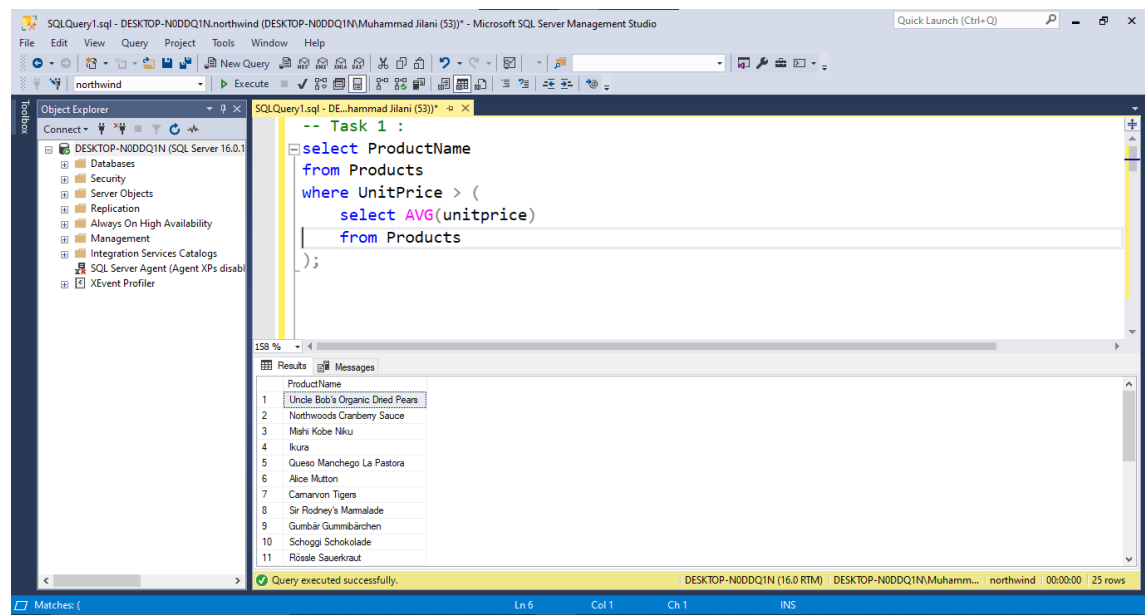
1.1 Question :

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

1.2 Query :

```
select ProductName
from Products
where UnitPrice > (
    select AVG(unitprice)
    from Products
);
```

1.3 Picture



2 Task 02

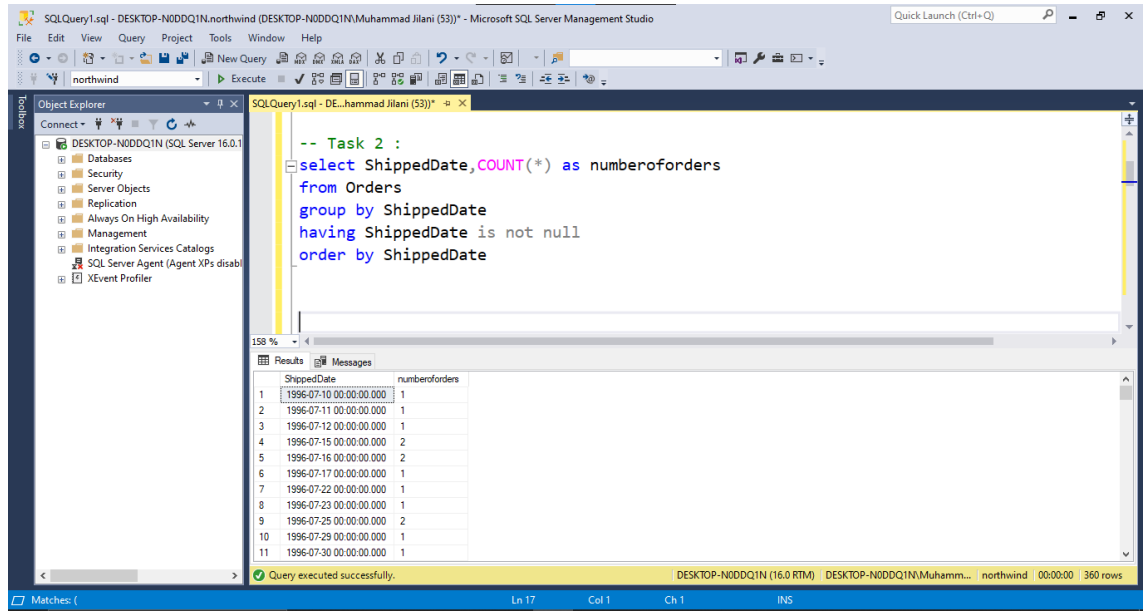
2.1 Question :

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

2.2 Query :

```
select ShippedDate , COUNT(*) as numberoforders
from Orders
group by ShippedDate
having ShippedDate is not null
order by ShippedDate;
```

2.3 Picture



3 Task 03

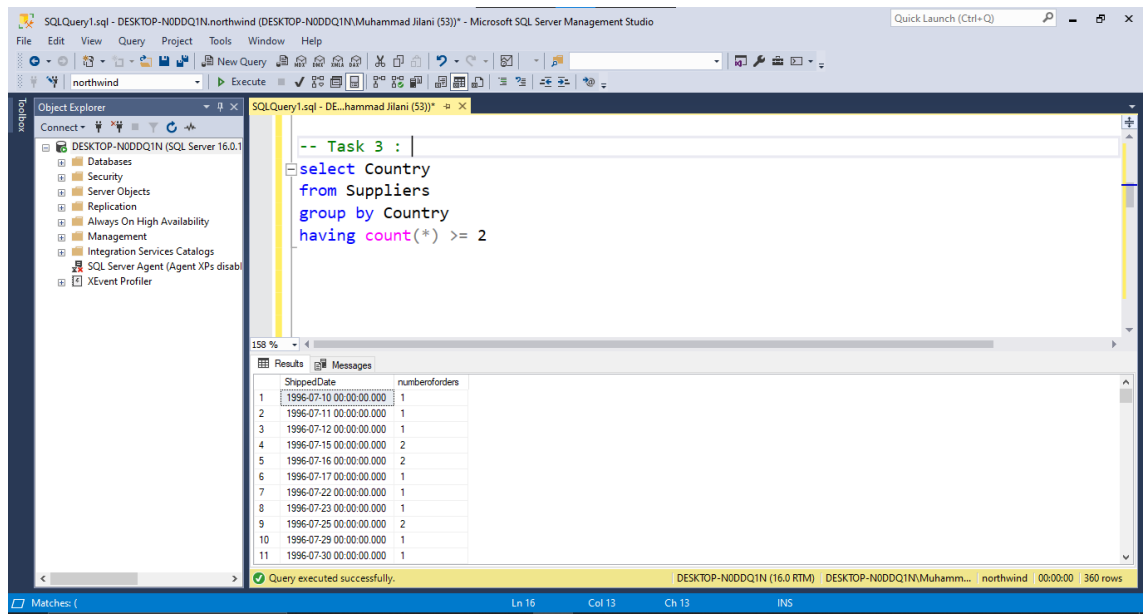
3.1 Question :

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

3.2 Query :

```
select Country
from Suppliers
group by Country
having count(*) >= 2;
```

3.3 Picture



4 Task 04

4.1 Question :

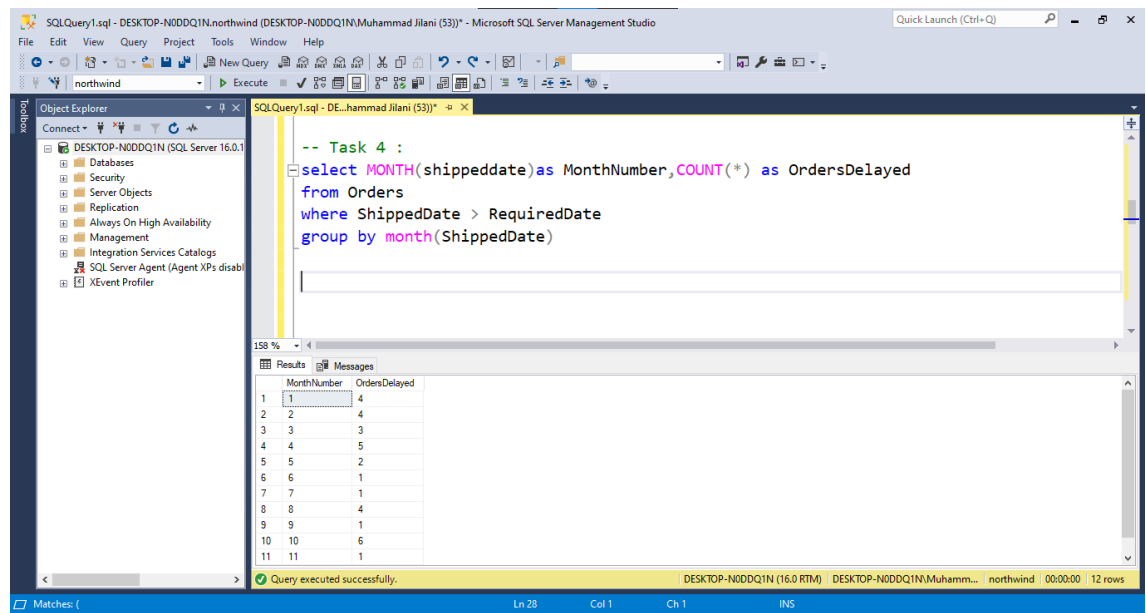
Write a query to generate report showing month wise orders delayed shipped. Your output should look like this (Month Number, Orders

Delayed)

4.2 Query :

```
select MONTH(shippeddate)as MonthNumber,  
COUNT(*) as OrdersDelayed  
from Orders  
where ShippedDate > RequiredDate  
group by month(ShippedDate);
```

4.3 Picture



5 Task 05

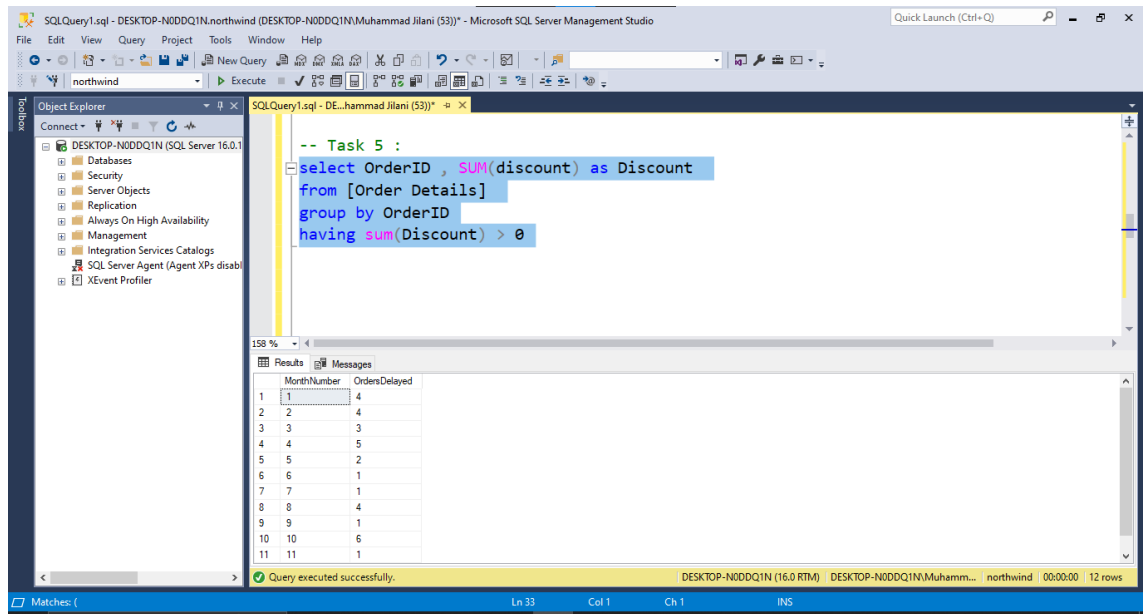
5.1 Question :

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)

5.2 Query :

```
select OrderID , SUM(discount) as Discount
from [Order Details]
group by OrderID
having sum(Discount) > 0;
```

5.3 Picture



6 Task 06

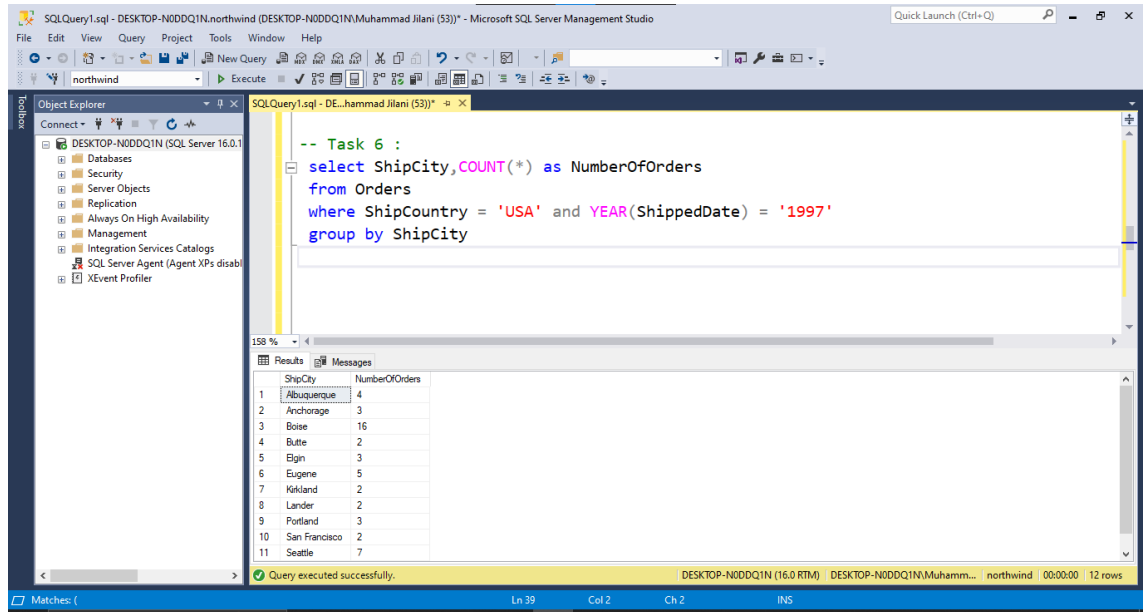
6.1 Question :

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)

6.2 Query :

```
select ShipCity,COUNT(*) as NumberOfOrders
from Orders
where ShipCountry = 'USA' and YEAR(ShippedDate) = '1997'
group by ShipCity ;
```


6.3 Picture



7 Task 07

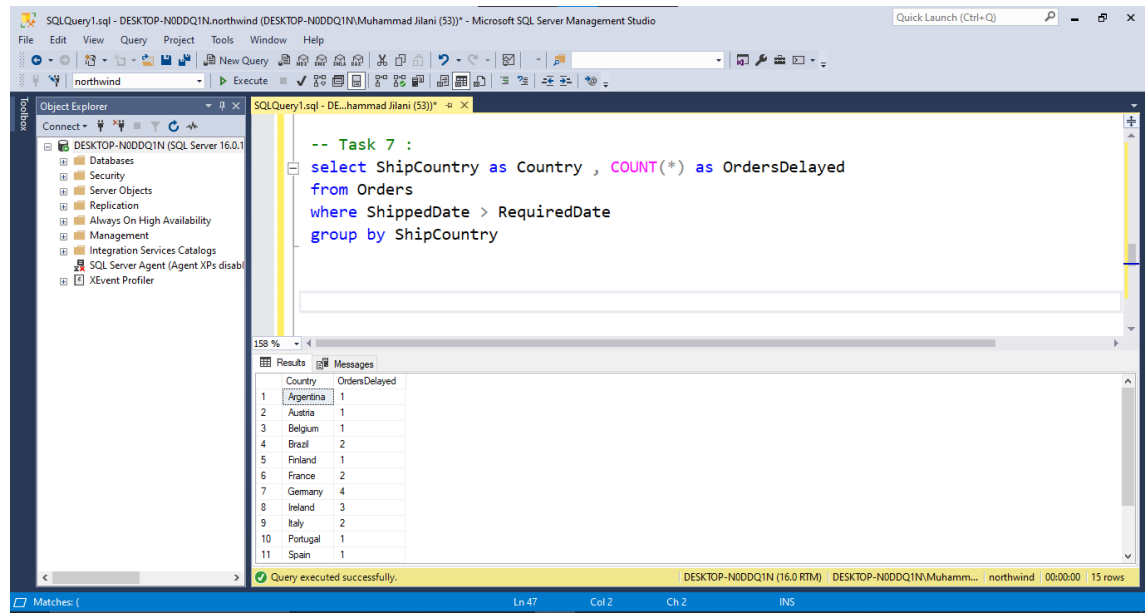
7.1 Question :

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

7.2 Query :

```
select ShipCountry as Country , COUNT(*) as OrdersDelayed  
from Orders  
where ShippedDate > RequiredDate  
group by ShipCountry;
```

7.3 Picture



8 Task 08

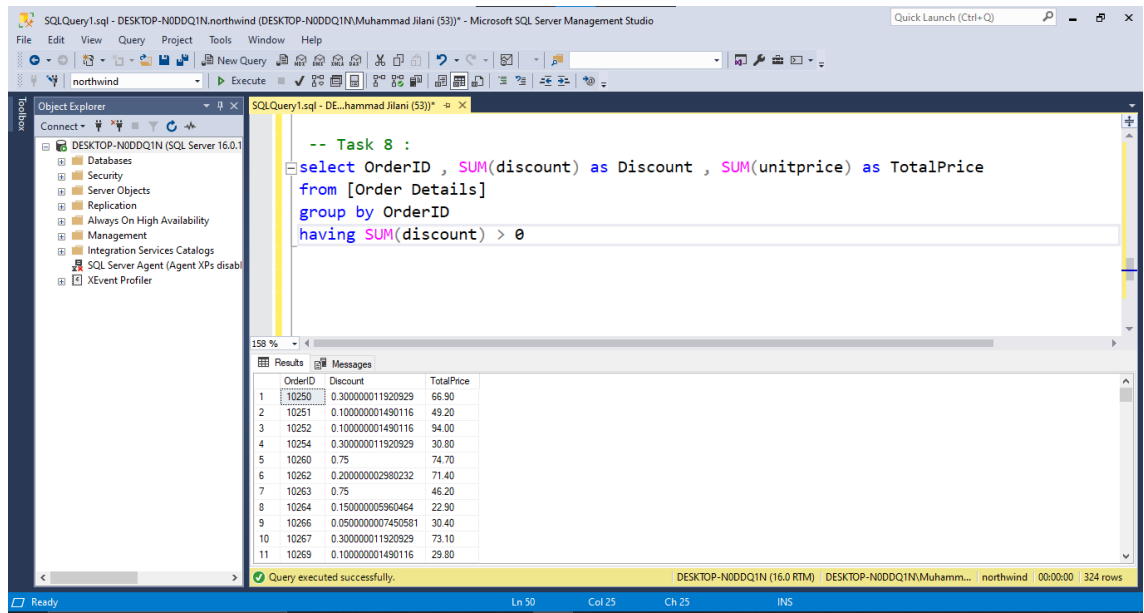
8.1 Question :

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)

8.2 Query :

```
select OrderID , SUM(discount) as Discount ,
SUM(unitprice) as TotalPrice
from [Order Details]
group by OrderID
having SUM(discount) > 0;
```

8.3 Picture



9 Task 09

9.1 Question :

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)

9.2 Query :

```
select ShipRegion,ShipCity,COUNT(*) as NumberOfOrders  
from Orders  
where YEAR(ShippedDate) = '1997' and ShipRegion is not null  
group by ShipRegion,ShipCity;
```

9.3 Picture

The screenshot displays the Microsoft SQL Server Management Studio interface. The main window shows a SQL query titled "Task 9" in the editor. The query is as follows:

```
-- Task 9 :
select ShipRegion, ShipCity, COUNT(*) as NumberOfOrders
from Orders
where YEAR(ShippedDate) = '1997' and ShipRegion is not null
group by ShipRegion, ShipCity
```

Below the query editor, the "Results" pane shows the output of the query. The results are displayed in a table with three columns: ShipRegion, ShipCity, and NumberOfOrders. The table contains 11 rows of data.

ShipRegion	ShipCity	NumberOfOrders
NM	Albuquerque	4
AK	Anchorage	3
LA	Berkeley	3
ID	Boise	16
MT	Butte	2
SP	Campinas	5
Essex	Colchester	3
Co. Cork	Cork	10
Isle of Wight	Cowes	3
OR	Elgin	3
OR	Eugene	5

The status bar at the bottom indicates that the query was executed successfully, returning 25 rows in 00:00:00. The status bar also shows the current file path: "DESKTOP-N0DDQ1N (16.0 RTM) | DESKTOP-N0DDQ1N.Muhamm... | northwind | 00:00:00 | 25 rows".