DATABASE SYSTEMS
LAB 5

Session 2022 - 2026

Submitted By

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Submitted To

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1 Task 01

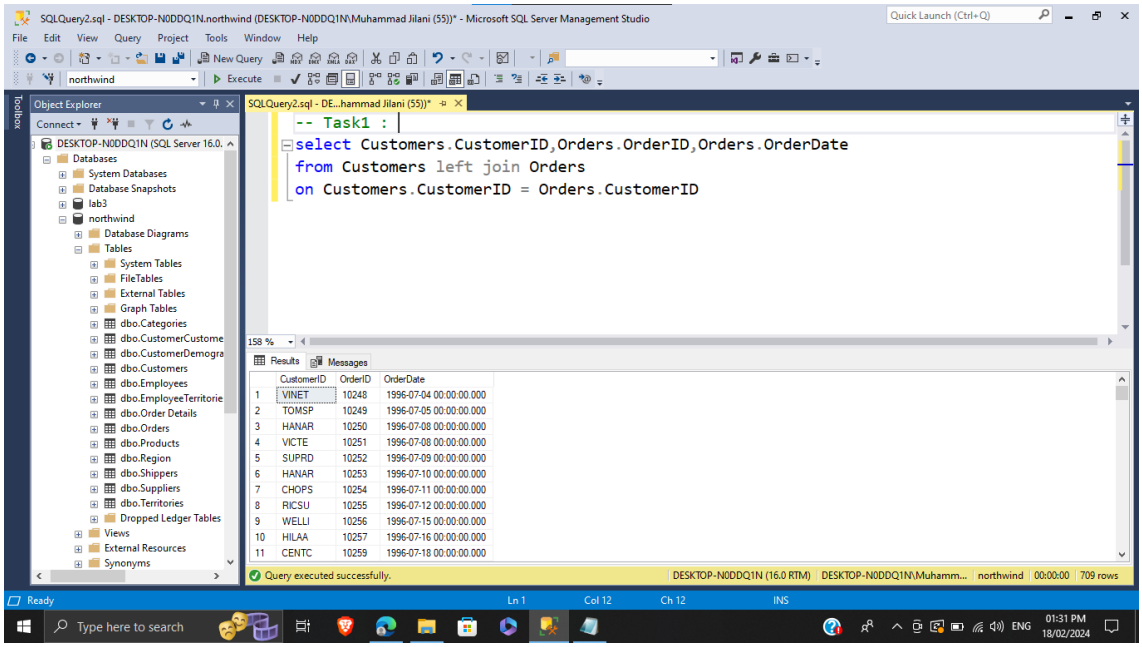
1.1 Question :

Return customers and their orders, including customers who placed no orders (CustomerID, OrderID, OrderDate)

1.2 Query :

```
select Customers.CustomerID,Orders.OrderID,Orders.OrderDate
from Customers left join Orders
on Customers.CustomerID = Orders.CustomerID;
```

1.3 Picture



2 Task 02

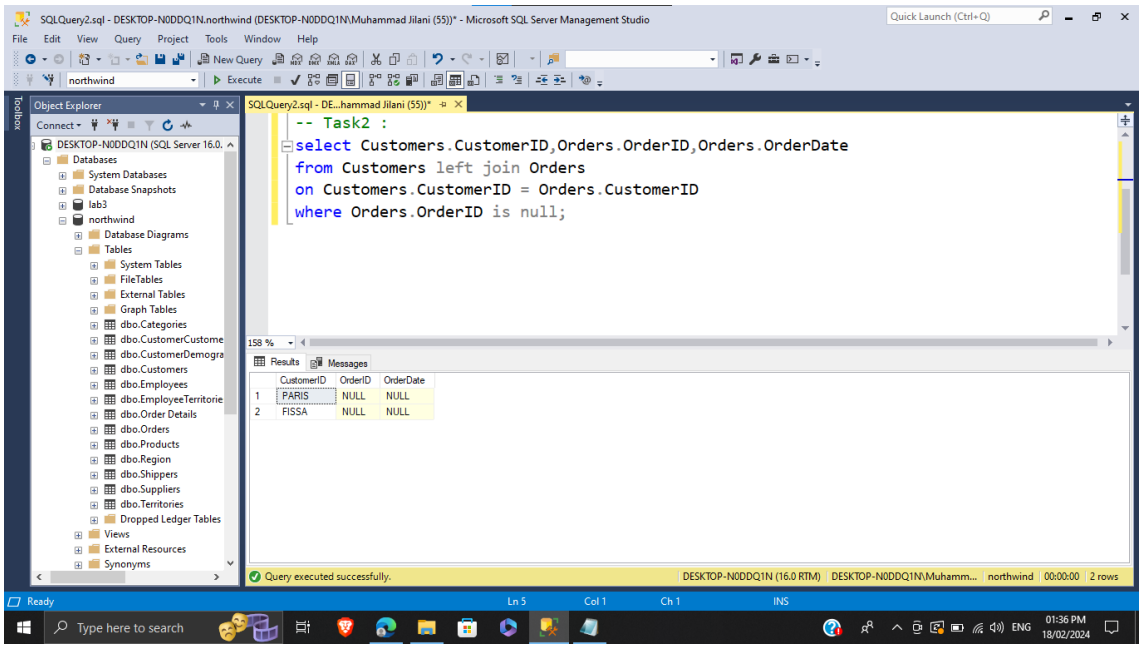
2.1 Question :

Report only those customer IDs who never placed any order. (CustomerID, OrderID, OrderDate)

2.2 Query :

```
select Customers.CustomerID,Orders.OrderID,Orders.OrderDate
from Customers left join Orders
on Customers.CustomerID = Orders.CustomerID
where Orders.OrderID is null;
```

2.3 Picture



3 Task 03

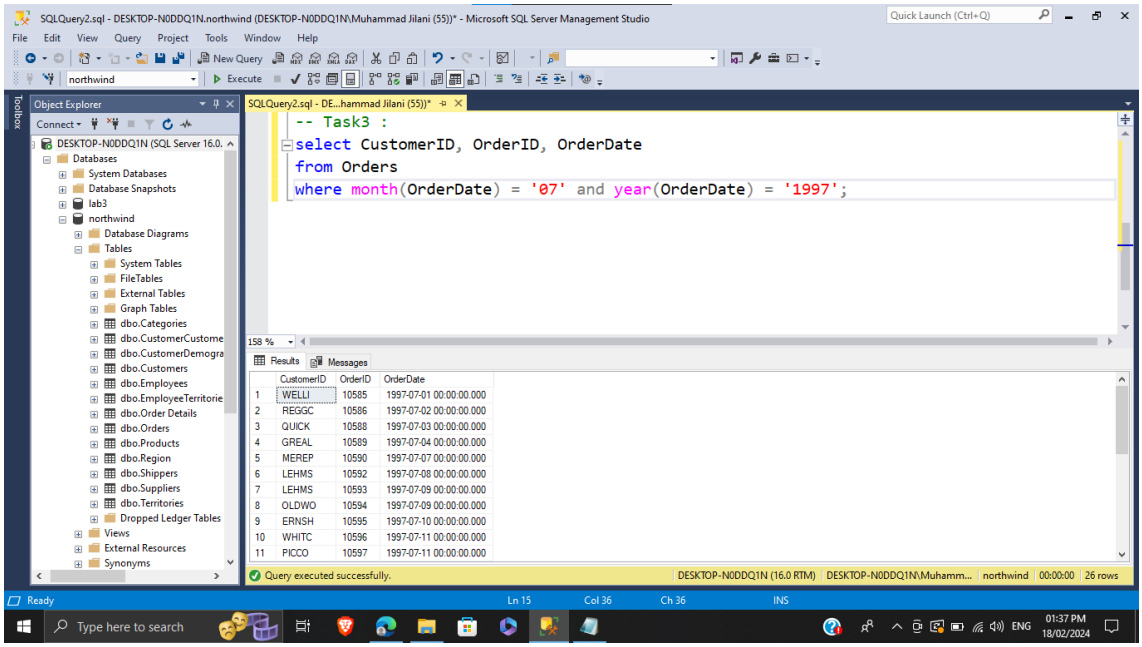
3.1 Question :

Report those customers who placed orders on July,1997. (CustomerID, OrderID, OrderDate)

3.2 Query :

```
select CustomerID, OrderID, OrderDate
from Orders
where month(OrderDate) = '07' and year(OrderDate) = '1997';
```

3.3 Picture



4 Task 04

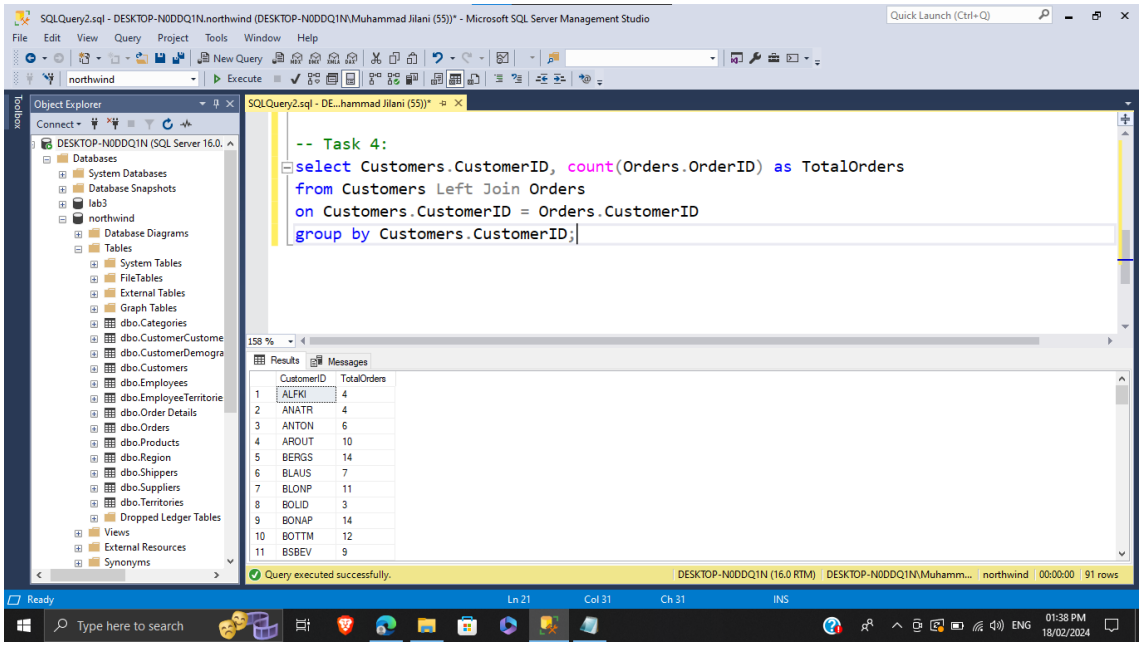
4.1 Question :

Report the total orders of each customer. (customerID, totalorders)

4.2 Query :

```
select Customers.CustomerID, count(Orders.OrderID) as TotalOrders
from Customers Left Join Orders
on Customers.CustomerID = Orders.CustomerID
group by Customers.CustomerID;
```

4.3 Picture



5 Task 05

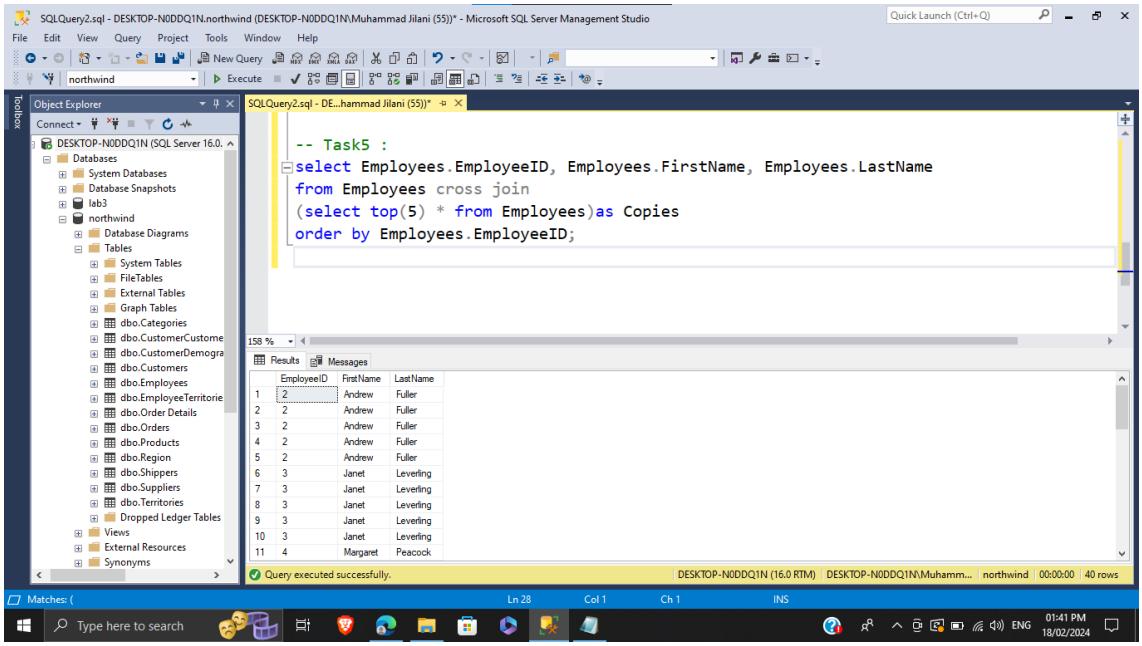
5.1 Question :

Write a query to generate a five copies of each employee. (EmployeeID, FirstName, LastName)

5.2 Query :

```
select Employees.EmployeeID, Employees.FirstName, Employees.LastName
from Employees cross join
(select top(5) * from Employees)as Copies
order by Employees.EmployeeID;
```

5.3 Picture



6 Task 06

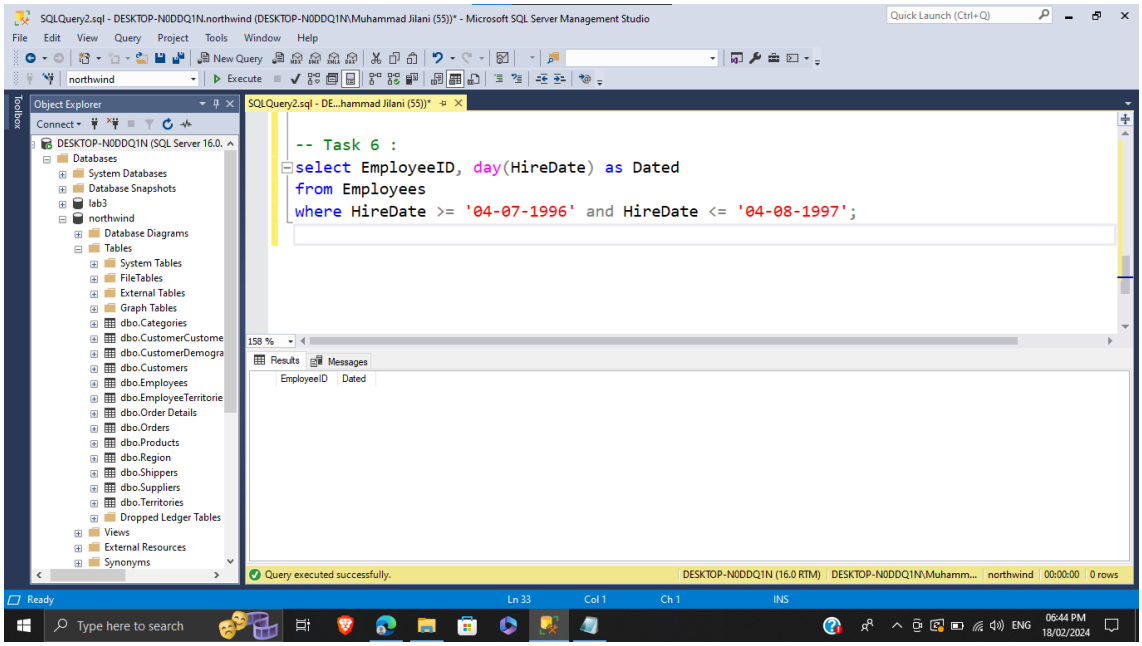
6.1 Question :

Write a query that returns a row for each employee and day in the range 04-07-1996 through 04-08- 1997. (EmployeeID, Date)

6.2 Query :

```
select EmployeeID, day(HireDate) as Dated
from Employees
where HireDate >= '04-07-1996' and HireDate <= '04-08-1997';
```

6.3 Picture



7 Task 07

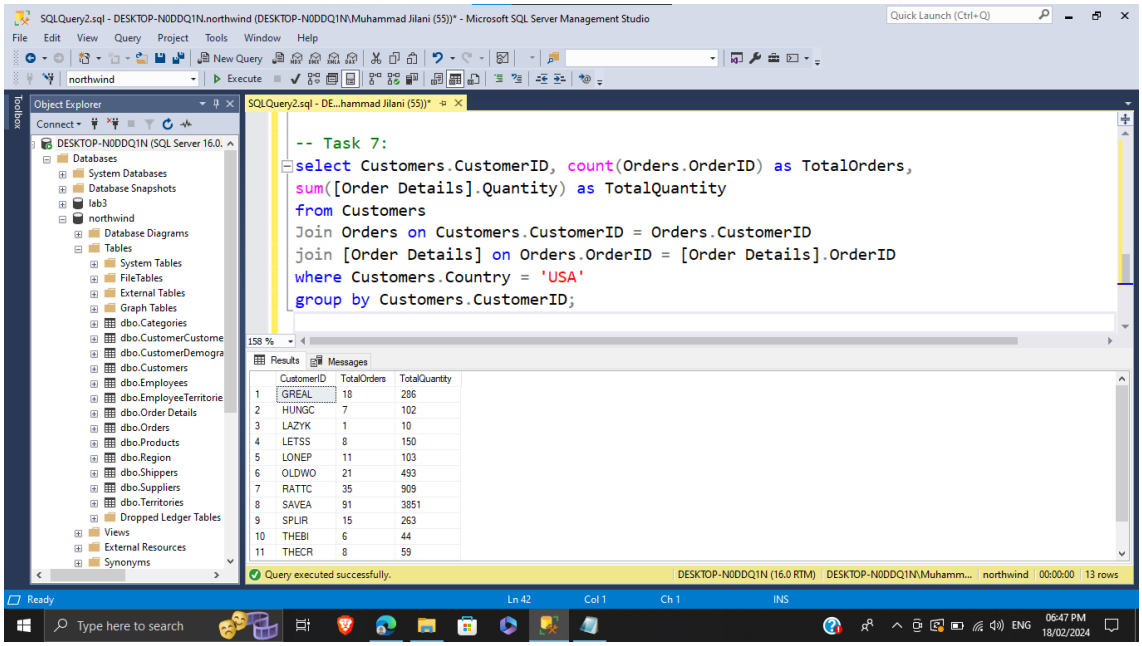
7.1 Question :

Return US customers, and for each customer return the total number of orders and total quantities. (CustomerID, Totalorders, totalquantity)

7.2 Query :

```
select Customers.CustomerID, count(Orders.OrderID) as TotalOrders,
sum([Order Details].Quantity) as TotalQuantity
from Customers
Join Orders on Customers.CustomerID = Orders.CustomerID
join [Order Details] on Orders.OrderID = [Order Details].OrderID
where Customers.Country = 'USA'
group by Customers.CustomerID;
```

7.3 Picture



8 Task 08

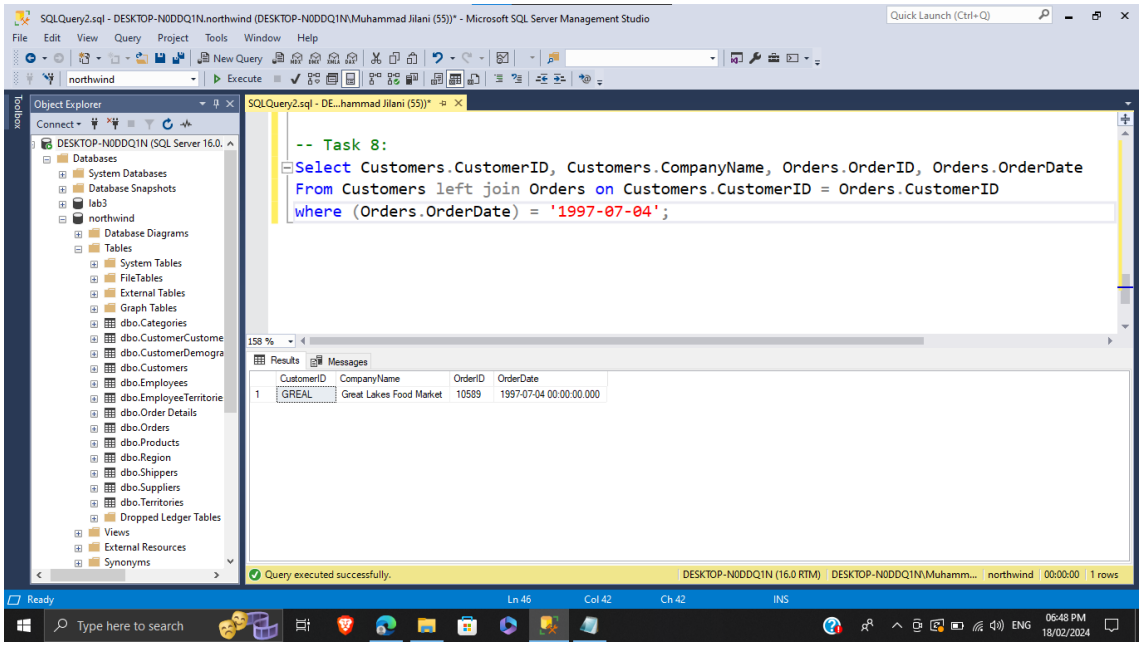
8.1 Question :

Write a query that returns all customers in the output, but matches them with their respective orders only if they were placed on July 04,1997. (CustomerID, CompanyName, OrderID, Orderdate)

8.2 Query :

```
Select Customers.CustomerID, Customers.CompanyName, Orders.OrderID, Orders.OrderDate
From Customers left join Orders on Customers.CustomerID = Orders.CustomerID
where (Orders.OrderDate) = '1997-07-04';
```

8.3 Picture



9 Task 09

9.1 Question :

Are there any employees who are older than their managers?

9.2 Answer :

Yes, There are employess that are older than their managers.

10 Task 10

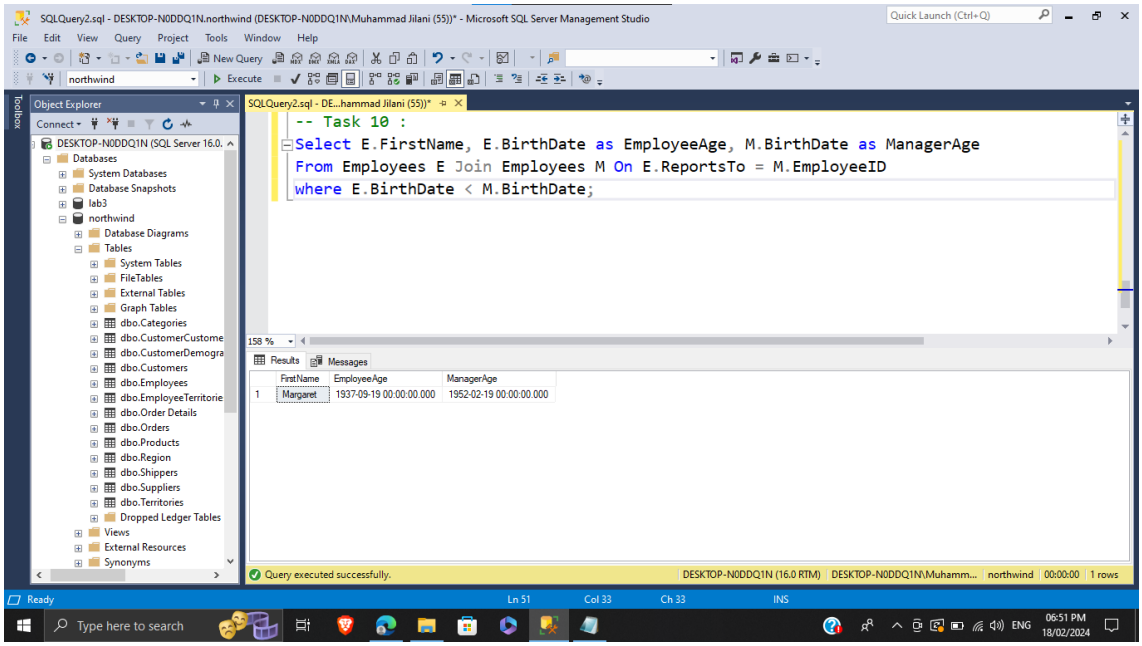
10.1 Question :

List that names of those employees and their ages. (EmployeeName, Age, Manager Age)

10.2 Query :

```
Select E.FirstName, E.BirthDate as EmployeeAge, M.BirthDate as ManagerAge
From Employees E Join Employees M On E.ReportsTo = M.EmployeeID
where E.BirthDate < M.BirthDate;
```

10.3 Picture



11 Task 11

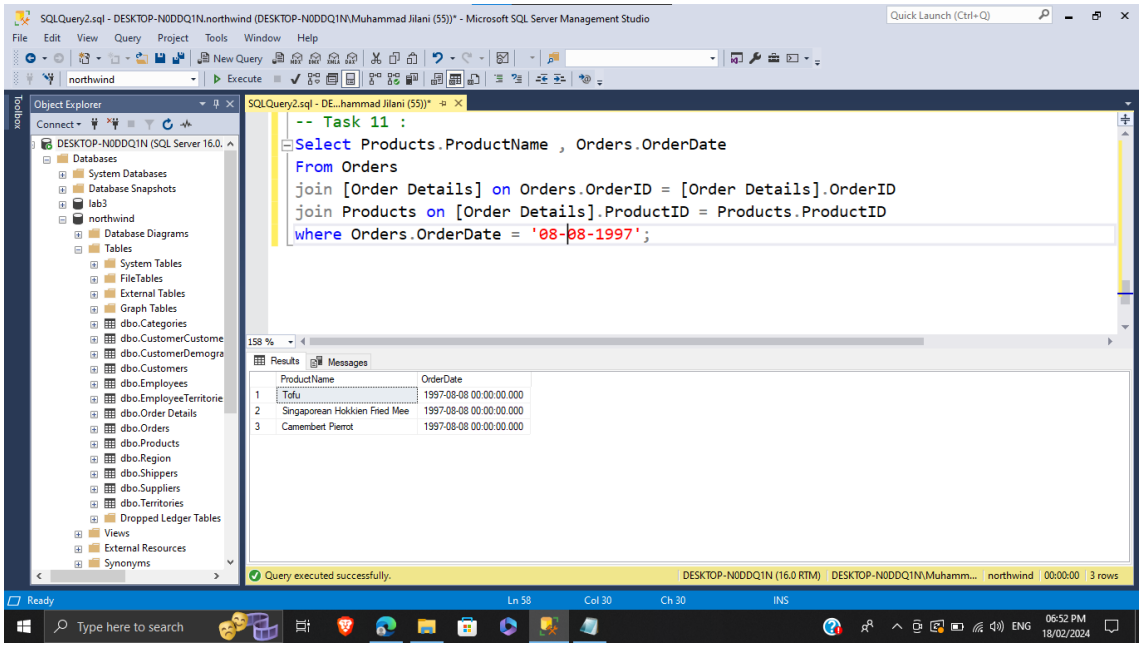
11.1 Question :

List the names of products which were ordered on 8th August 1997. (ProductName, OrderDate)

11.2 Query :

```
Select Products.ProductName , Orders.OrderDate
From Orders
join [Order Details] on Orders.OrderID = [Order Details].OrderID
join Products on [Order Details].ProductID = Products.ProductID
where Orders.OrderDate = '08-08-1997';
```

11.3 Picture



12 Task 12

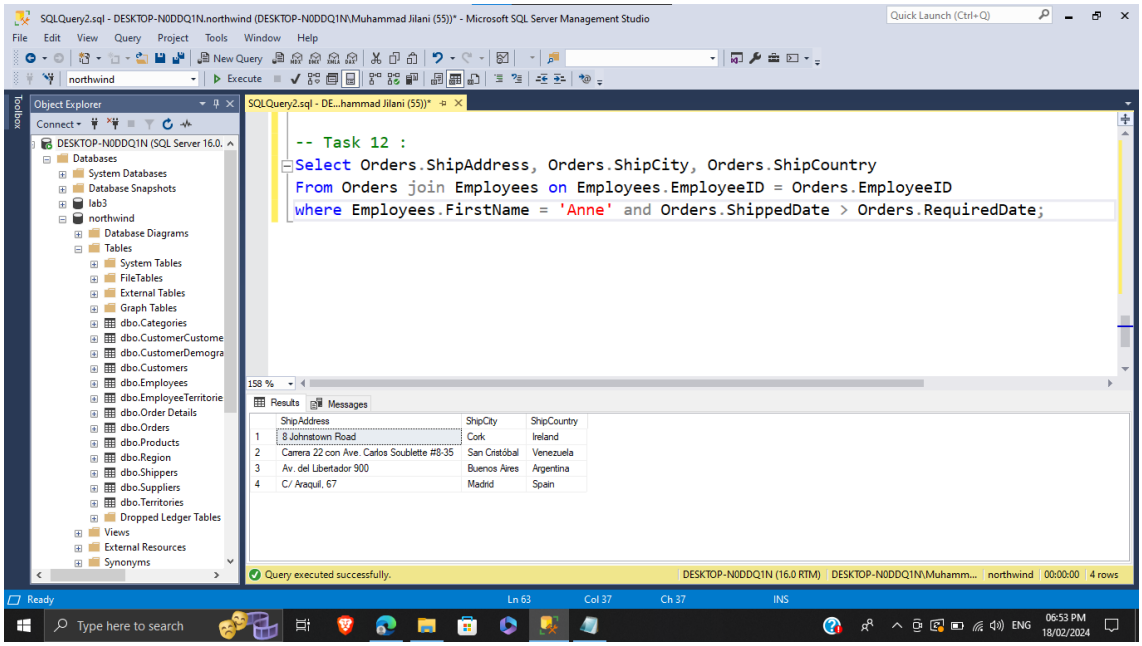
12.1 Question :

List the addresses, cities, countries of all orders which were serviced by Anne and were shipped late. (Address, City, Country)

12.2 Query :

```
Select Orders.ShipAddress, Orders.ShipCity, Orders.ShipCountry
From Orders join Employees on Employees.EmployeeID = Orders.EmployeeID
where Employees.FirstName = 'Anne' and Orders.ShippedDate > Orders.RequiredDate;
```

12.3 Picture



13 Task 13

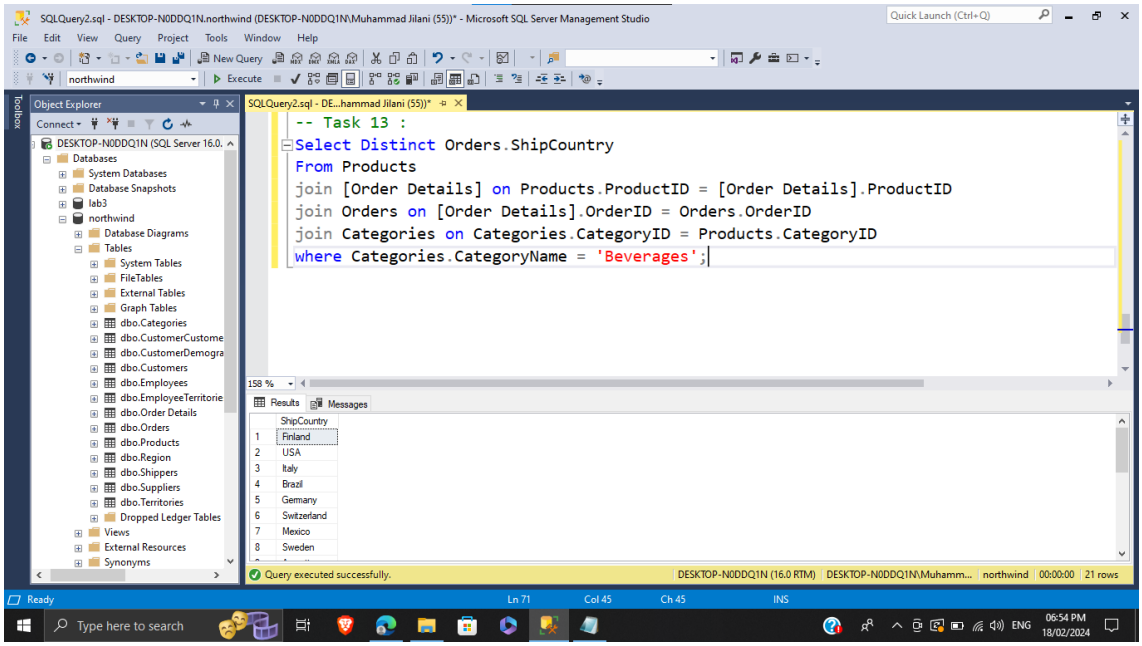
13.1 Question :

List all countries to which beverages have been shipped. (Country)

13.2 Query :

```
Select Distinct Orders.ShipCountry
From Products
join [Order Details] on Products.ProductID = [Order Details].ProductID
join Orders on [Order Details].OrderID = Orders.OrderID
join Categories on Categories.CategoryID = Products.CategoryID
where Categories.CategoryName = 'Beverages';
```

13.3 Picture


SQLQuery2.sql - DESKTOP-N0DDQ1N.northwind (DESKTOP-N0DDQ1N\Muhammad Jilani (55))* - Microsoft SQL Server Management Studio
-- Task 13 :
Select Distinct Orders.ShipCountry
From Products
join [Order Details] on Products.ProductID = [Order Details].ProductID
join Orders on [Order Details].OrderID = Orders.OrderID
join Categories on Categories.CategoryID = Products.CategoryID
where Categories.CategoryName = 'Beverages';
ShipCountry
Finland
USA
Italy
Brazil
Germany
Switzerland
Mexico
Sweden
Query executed successfully.