**Assignment 4**

**1. Create a stored procedure in the Northwind database that will calculate the average value of Freight for a specified customer.Then, a business rule will be added that will be triggered before every Update and Insert command in the Orders controller,and will use the stored procedure to verify that the Freight does not exceed the average freight. If it does, a message will be displayed and the command will be cancelled.**

alter PROCEDURE que1

AS

SELECT CustomerID, AVG(Freight) as AvgFreight

FROM Orders

GROUP BY CustomerID

GO

insert into orders values ( 'ALFKI', 1,'1997-08-25 00:00:00.000', '1997-08-01 00:00:00.000','1997-01-01 00:00:00.000', 1,80, 'Wolski Zajazd', 'ul. Filtrowa 68',

'Warszawa', 'Tachira', 24100, 'brazil')

exec que1

UPDATE Orders SET Freight=100 WHERE OrderID = 10248

SELECT \* FROM Orders WHERE OrderID = 10248

create TRIGGER tr\_que1\_update

ON orders

INSTEAD OF UPDATE

AS

BEGIN

Declare @OrderID int

Declare @CustomerID varchar(50)

Declare @Freight money

Declare @AvgFreight money

Declare @t\_ave TABLE(CustomerID nchar(5), AvgFreight money)

INSERT @t\_ave

exec que1

Select \* Into #Temptable FROM Inserted

While(Exists(Select OrderID from #TempTable))

Begin

Select TOP 1 @OrderID = OrderID, @CustomerID = CustomerID, @Freight=Freight

FROM #Temptable

SET @AvgFreight = (SELECT AvgFreight FROM @t\_ave WHERE CustomerID = @CustomerID)

Print @Freight

Print @AvgFreight

IF @Freight > @AvgFreight

BEGIN

RAISERROR ('ABOVE AVERAGE',16,1)

END

ELSE

BEGIN

UPDATE Orders SET Freight = @Freight WHERE OrderID=@OrderID

END

Delete from #TempTable where OrderID = @OrderID

End

END

alter TRIGGER tr\_que1\_insert

ON orders

INSTEAD OF INSERT

AS

BEGIN

Declare @OrderID int

Declare @CustomerID varchar(50)

Declare @Freight money

Declare @AvgFreight money

Declare @t\_ave TABLE(CustomerID nchar(5), AvgFreight money)

INSERT @t\_ave

exec que1

Select \* Into #Temptable FROM Inserted

While(Exists(Select OrderID from #TempTable))

Begin

Select TOP 1 @OrderID = OrderID, @CustomerID = CustomerID, @Freight=Freight

FROM #Temptable

SET @AvgFreight = (SELECT AvgFreight FROM @t\_ave WHERE CustomerID = @CustomerID)

IF @Freight > @AvgFreight

BEGIN

RAISERROR ('ABOVE AVERAGE',16,1)

END

ELSE

BEGIN

INSERT INTO Orders (CustomerID,EmployeeID,OrderDate,RequiredDate,ShippedDate,ShipVia,Freight,ShipName,ShipAddress,ShipCity,ShipRegion,ShipPostalCode,ShipCountry)

SELECT CustomerID,EmployeeID,OrderDate,RequiredDate,ShippedDate,ShipVia,Freight,ShipName,ShipAddress,ShipCity,ShipRegion,ShipPostalCode,ShipCountry

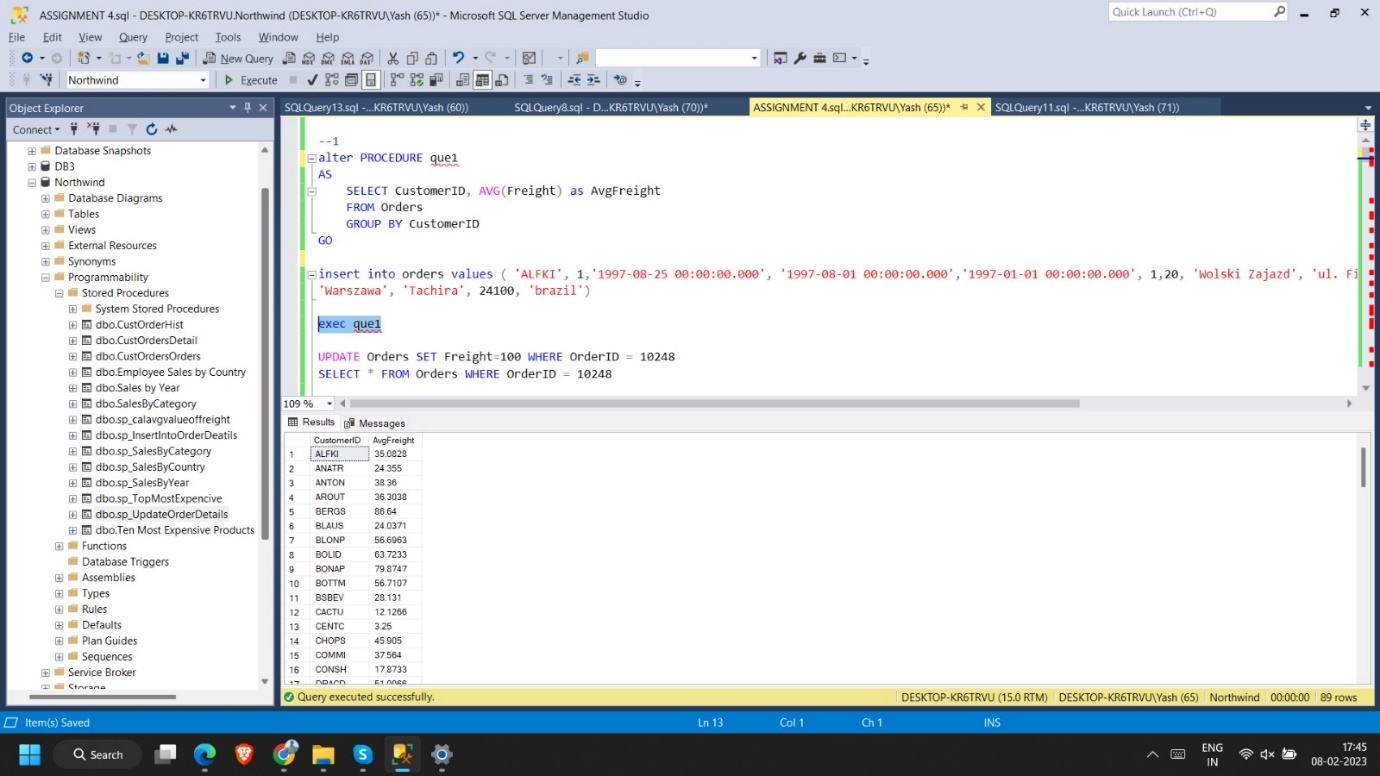
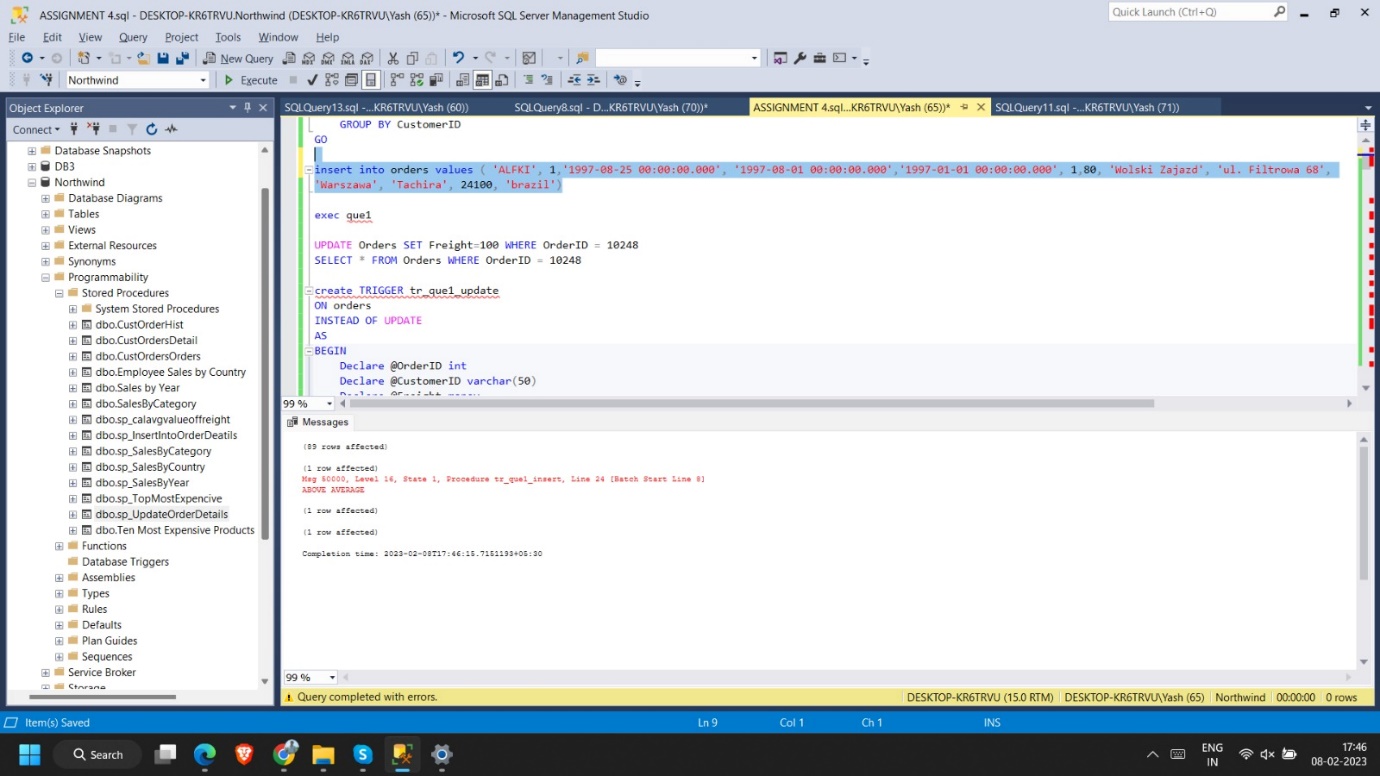
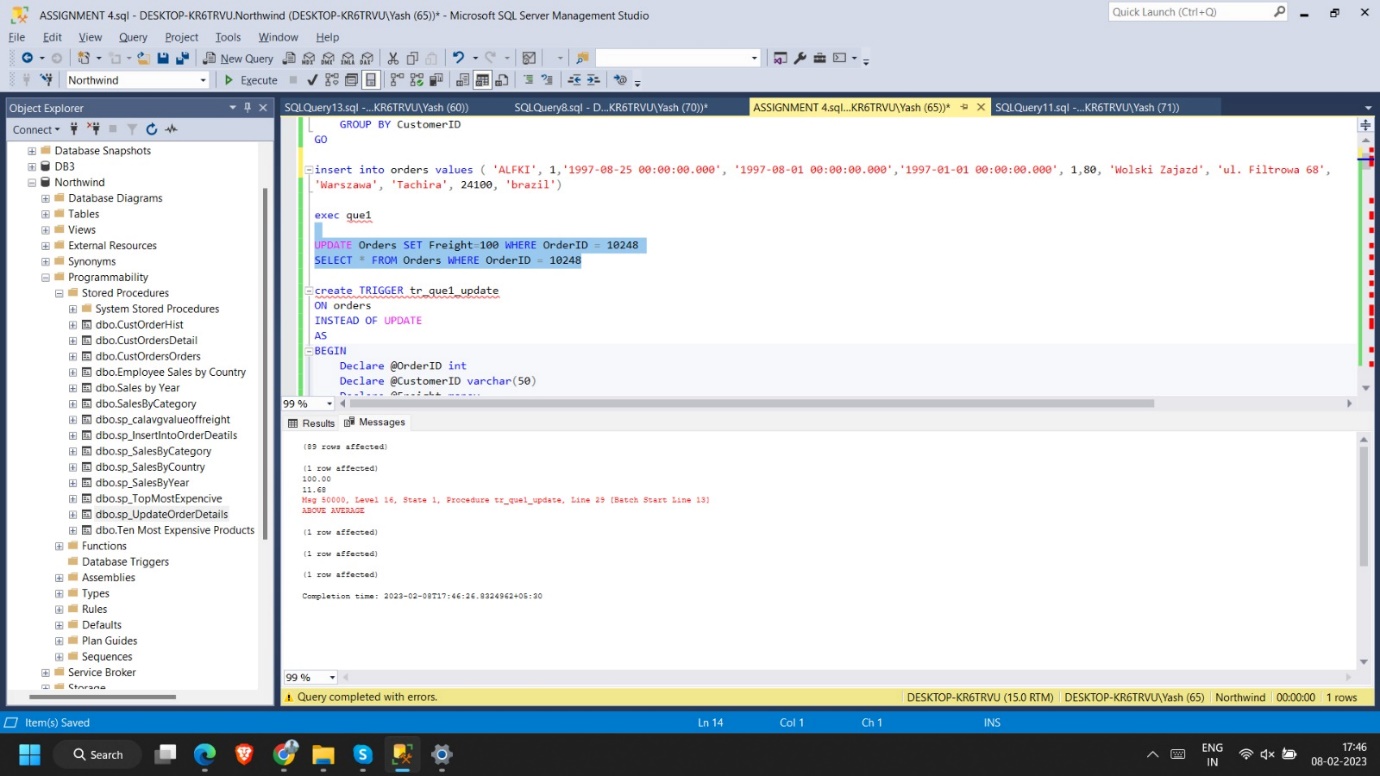
From Inserted

END

Delete from #TempTable where OrderID = @OrderID

End

END



**2. write a SQL query to Create Stored procedure in the Northwind database to retrieve Employee Sales by Country**

alter procedure sp\_SalesByCountry

@Employeename varchar(20)

as

begin

select e.EmployeeID,o.ShipCountry,count(o.OrderID) as [Total Orders]

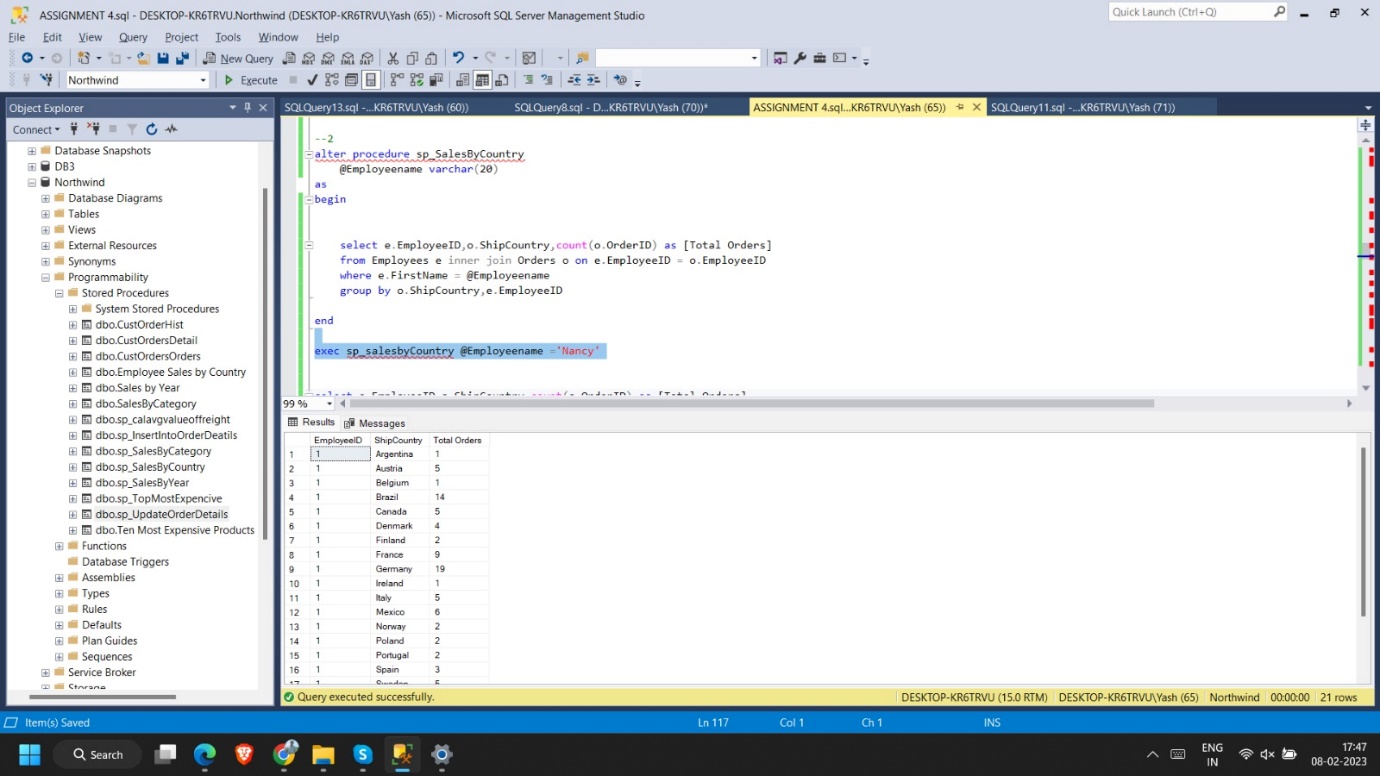
from Employees e inner join Orders o on e.EmployeeID = o.EmployeeID

where e.FirstName = @Employeename

group by o.ShipCountry,e.EmployeeID

end

exec sp\_salesbyCountry @Employeename ='Nancy'

****

**3. write a SQL query to Create Stored procedure in the Northwind database to retrieve Sales by Year**

select year(OrderDate) as [year], count(OrderID) as [Total Orders] from Orders

group by year(OrderDate)

alter procedure sp\_SalesByYear

@year int

as

begin

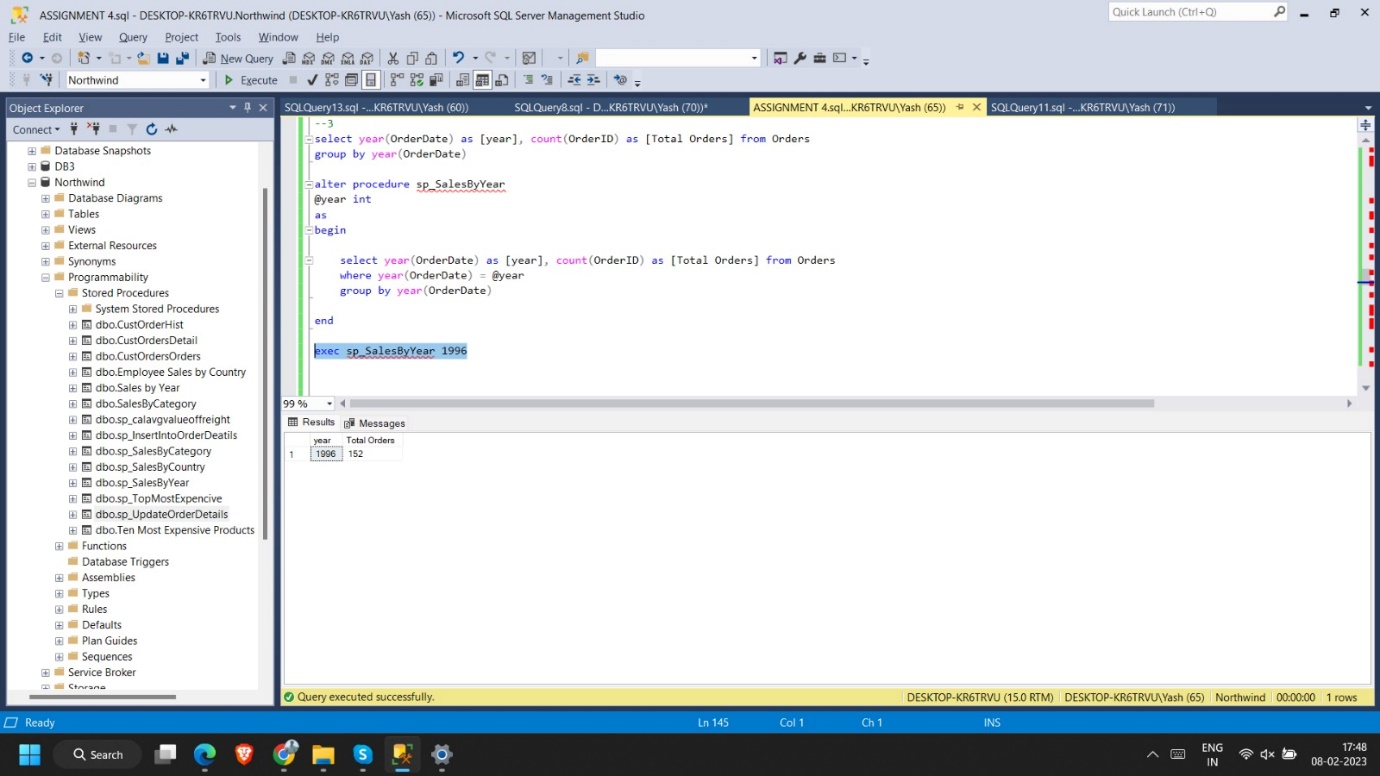
select year(OrderDate) as [year], count(OrderID) as [Total Orders] from Orders

where year(OrderDate) = @year

group by year(OrderDate)

end

exec sp\_SalesByYear 1996

****

**4. write a SQL query to Create Stored procedure in the Northwind database to retrieve Sales By Category**

alter procedure sp\_SalesByCategory

@CategoryID int

as

begin

select c.CategoryID, c.CategoryName, count(o.OrderID) as [Total Orders]

from Categories c inner join Products p on c.CategoryID = p.CategoryID

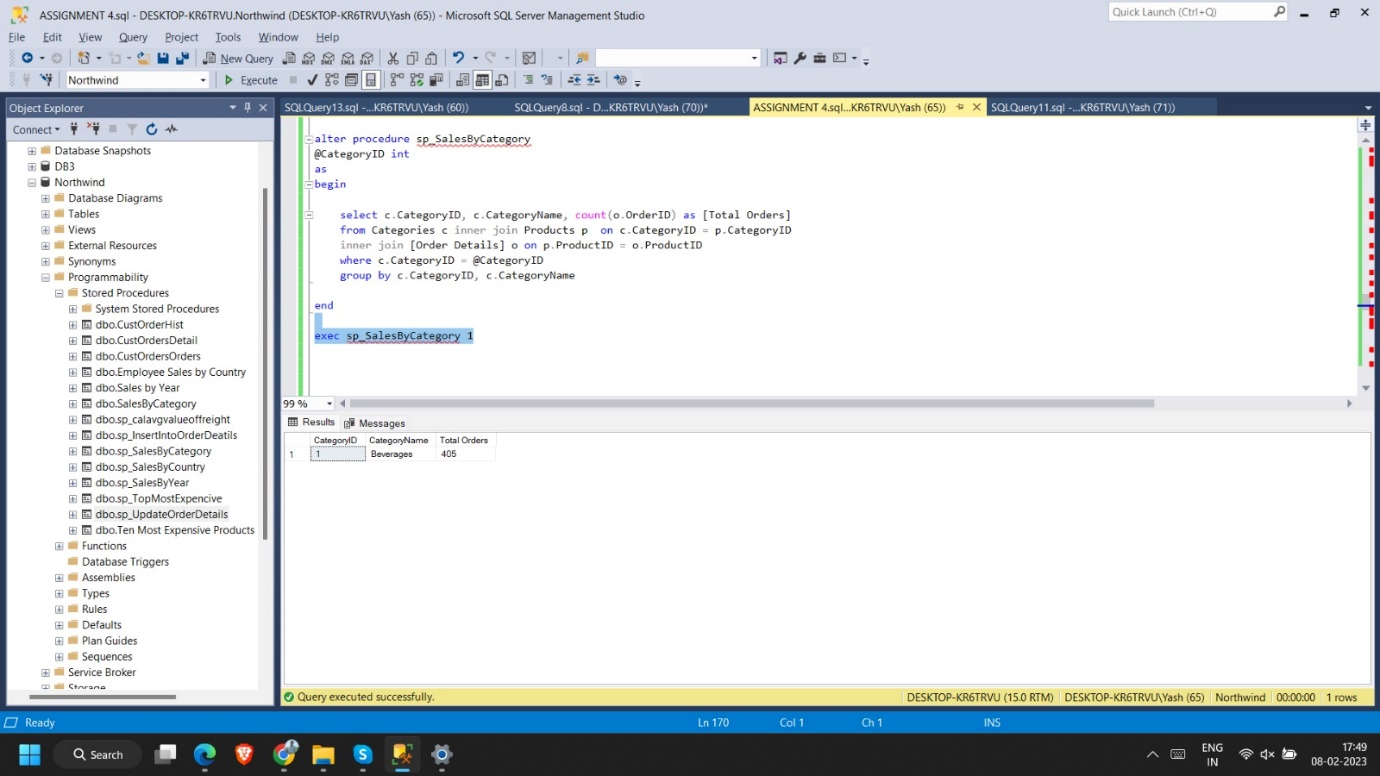
inner join [Order Details] o on p.ProductID = o.ProductID

where c.CategoryID = @CategoryID

group by c.CategoryID, c.CategoryName

end

exec sp\_SalesByCategory 1



**5. write a SQL query to Create Stored procedure in the Northwind database to retrieve Ten Most Expensive Products**

alter procedure sp\_TopMostExpencive

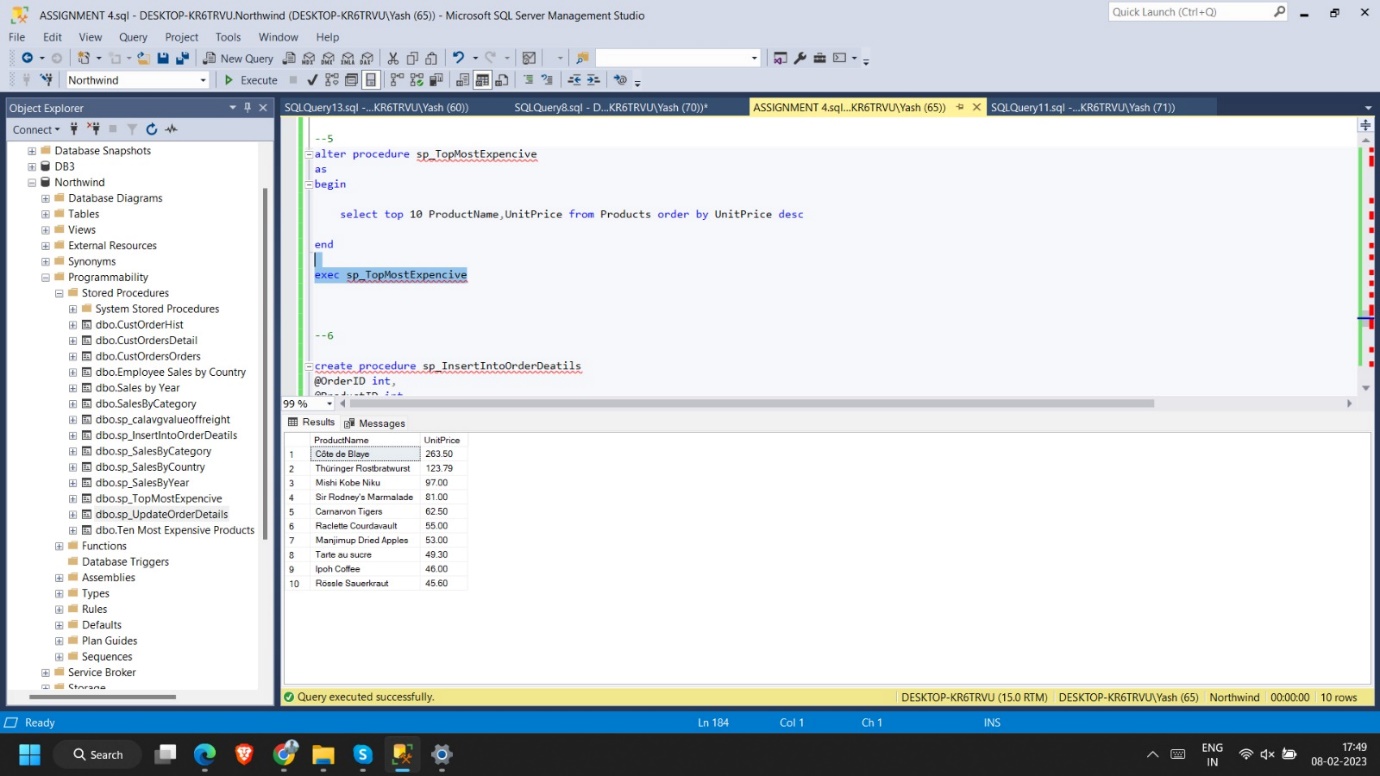
as

begin

select top 10 ProductName,UnitPrice from Products order by UnitPrice desc

end

exec sp\_TopMostExpencive



**6. write a SQL query to Create Stored procedure in the Northwind database to insert Customer Order Details**

alter procedure sp\_InsertIntoOrderDeatils

@OrderID int,

@ProductID int,

@UnitPrice money,

@Quantity smallint,

@Discount real

as

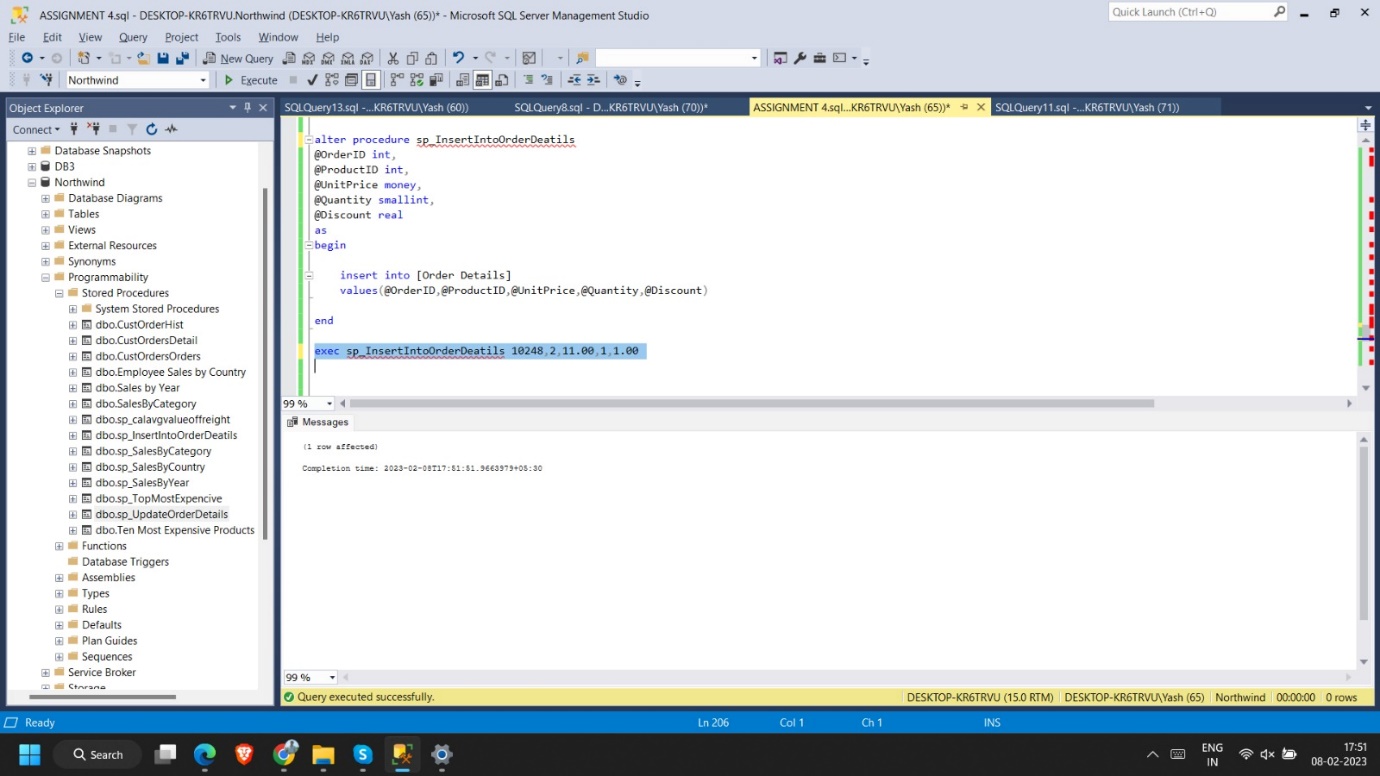
begin

insert into [Order Details]

values(@OrderID,@ProductID,@UnitPrice,@Quantity,@Discount)

end

exec sp\_InsertIntoOrderDeatils 10248,2,11.00,1,1.00



**7. write a SQL query to Create Stored procedure in the Northwind database to update Customer Order Details**

update [Order Details]

set UnitPrice=2, Quantity=2, Discount=0.5

where OrderID = 10248 and ProductID = 1

alter procedure sp\_UpdateOrderDetails

@OrderID int,

@ProductID int,

@UnitPrice money,

@Quantity smallint,

@Discount real

as

begin

update [Order Details]

set UnitPrice=@UnitPrice, Quantity=@Quantity, Discount=@Discount

where OrderID = @OrderID and ProductID = @ProductID

end

exec sp\_UpdateOrderDetails @OrderID=10248,@ProductID=1,@UnitPrice=22.00,@Quantity=2,@Discount=0.10

