Assignment 4 : Create Stored procedure in Northwind database to insert or update a --record in a table

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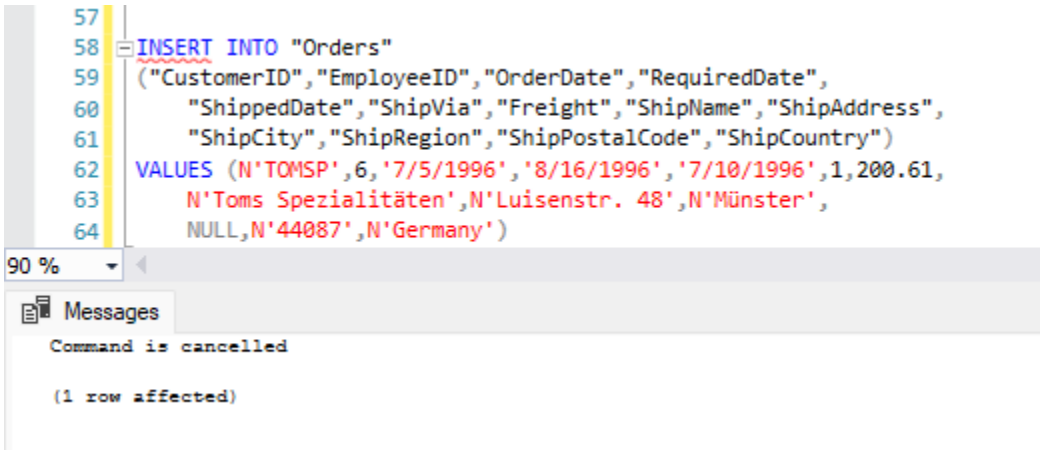
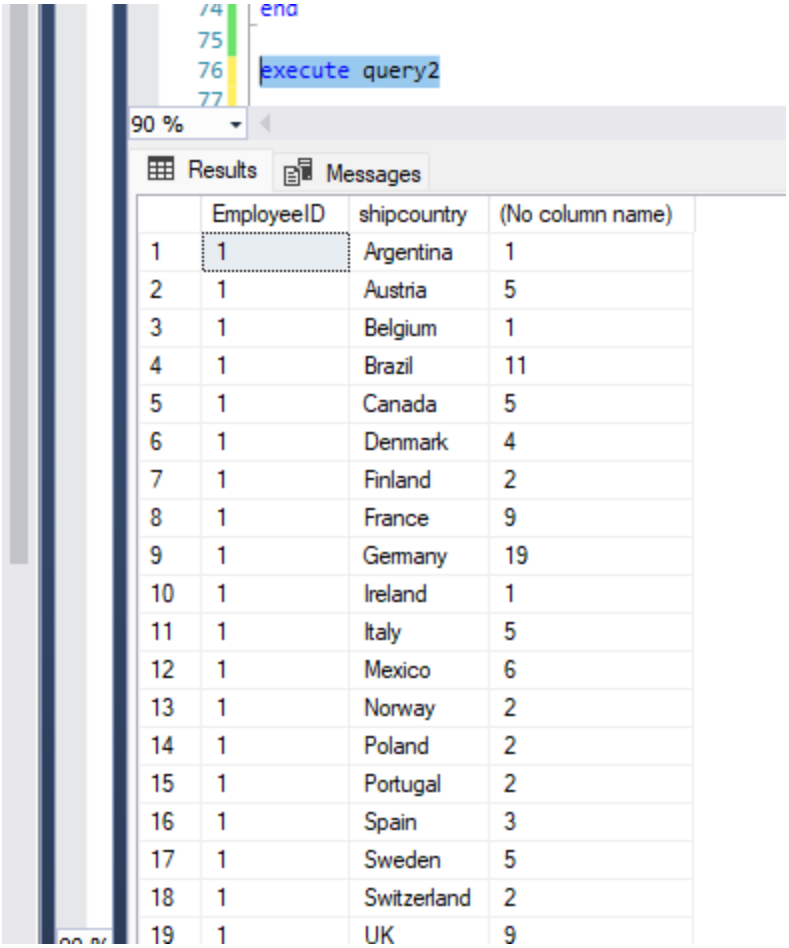
```
--1. Create a stored procedure in the Northwind database that will calculate the average
--value of Freight for a specified customer.Then, a business rule will be added that will
--be triggered before every Update and Insert command in the Orders controller,and
--will use the stored procedure to 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 spCalculateAvgFreight
@CustomerID nchar(10),
@AvgFreight money out
as
Begin
Select @AvgFreight = avg(Freight)
From Orders
Where CustomerID = @CustomerID
End



alter Trigger check_freight
ON Orders
Instead of Insert
as
Begin

        Declare @Avg money
        Exec spCalculateAvgFreight 'VINET', @Avg out

        Declare @Freight money
        Select @Freight = Freight from inserted
        if(@Freight > @Avg)
        Begin
                Print 'Command is cancelled'
                Return
        End

        End
```

```
INSERT INTO "Orders"
("CustomerID","EmployeeID","OrderDate","RequiredDate",
        "ShippedDate","ShipVia","Freight","ShipName","ShipAddress",
        "ShipCity","ShipRegion","ShipPostalCode","ShipCountry")
VALUES (N'TOMSP',6,'7/5/1996','8/16/1996','7/10/1996',1,200.61,
        N'Toms Spezialitäten',N'Luisenstr. 48',N'Münster',
        NULL,N'44087',N'Germany')
```

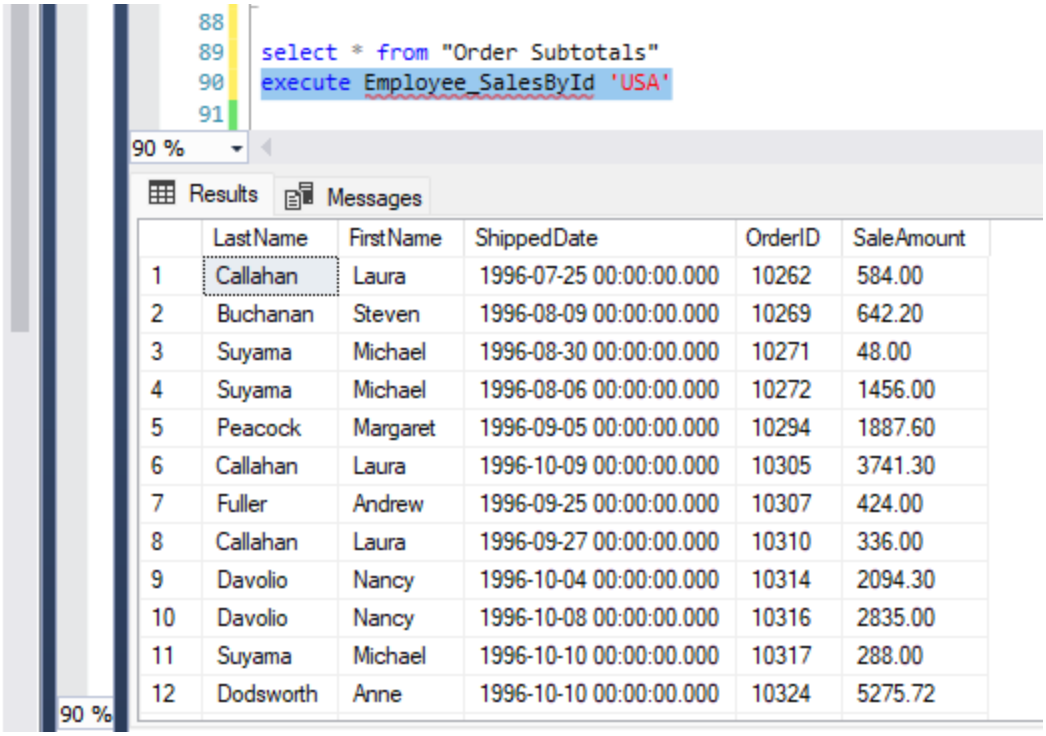



```
--2. write a SQL query to Create Stored procedure in the Northwind database to retrieve
--Employee Sales by Country
create procedure query2
as
begin
select EmployeeID ,shipcountry ,count(shipcountry) from orders
group by EmployeeID,shipcountry
order by EmployeeID
end

execute query2
```



	EmployeeID	shipcountry	(No column name)
1	1	Argentina	1
2	1	Austria	5
3	1	Belgium	1
4	1	Brazil	11
5	1	Canada	5
6	1	Denmark	4
7	1	Finland	2
8	1	France	9
9	1	Germany	19
10	1	Ireland	1
11	1	Italy	5
12	1	Mexico	6
13	1	Norway	2
14	1	Poland	2
15	1	Portugal	2
16	1	Spain	3
17	1	Sweden	5
18	1	Switzerland	2
19	1	UK	9

```
alter Procedure Employee_SalesById
@shipcontry nvarchar(15)

As
BEGIN
SELECT Employees.LastName, Employees.FirstName, Orders.ShippedDate, Orders.OrderID,
"Order Subtotals".Subtotal AS SaleAmount
FROM Employees INNER JOIN(Orders INNER JOIN "Order Subtotals" ON Orders.OrderID =
"Order Subtotals".OrderID)
ON Employees.EmployeeID = Orders.EmployeeID
Where Orders.shipcountry = @shipcontry
END

execute Employee_SalesById 'USA'
```



```
select * from "Order Subtotals"
execute Employee_SalesById 'USA'
```

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Results | Messages

	LastName	FirstName	ShippedDate	OrderID	SaleAmount
1	Callahan	Laura	1996-07-25 00:00:00.000	10262	584.00
2	Buchanan	Steven	1996-08-09 00:00:00.000	10269	642.20
3	Suyama	Michael	1996-08-30 00:00:00.000	10271	48.00
4	Suyama	Michael	1996-08-06 00:00:00.000	10272	1456.00
5	Peacock	Margaret	1996-09-05 00:00:00.000	10294	1887.60
6	Callahan	Laura	1996-10-09 00:00:00.000	10305	3741.30
7	Fuller	Andrew	1996-09-25 00:00:00.000	10307	424.00
8	Callahan	Laura	1996-09-27 00:00:00.000	10310	336.00
9	Davolio	Nancy	1996-10-04 00:00:00.000	10314	2094.30
10	Davolio	Nancy	1996-10-08 00:00:00.000	10316	2835.00
11	Suyama	Michael	1996-10-10 00:00:00.000	10317	288.00
12	Dodsworth	Anne	1996-10-10 00:00:00.000	10324	5275.72

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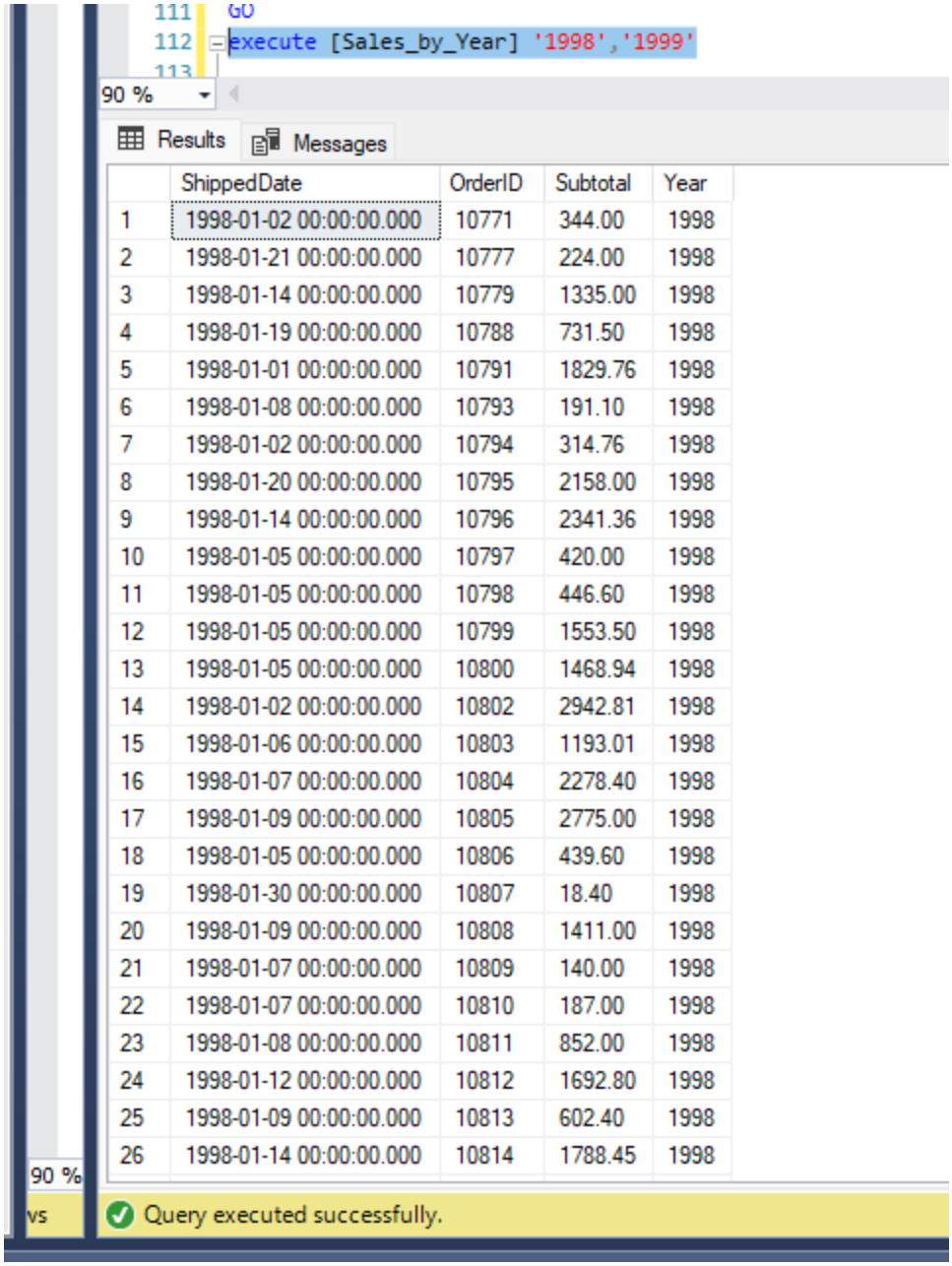
--3. write a SQL query to Create Stored procedure in the Northwind database to retrieve
--Sales by Year

```
create procedure query3
as
begin
select YEAR(ShippedDate),COUNT(OrderID) as "total no of sales" from Orders
group by YEAR(ShippedDate)
order by  YEAR(ShippedDate)
end

execute query3

create procedure [dbo].[Sales_by_Year]
        @Beginning_Date DateTime, @Ending_Date DateTime AS
SELECT Orders.ShippedDate, Orders.OrderID, "Order Subtotals".Subtotal,
DATENAME(yy,ShippedDate) AS Year
FROM Orders INNER JOIN "Order Subtotals" ON Orders.OrderID = "Order Subtotals".OrderID
WHERE Orders.ShippedDate Between @Beginning_Date And @Ending_Date
GO
execute [Sales_by_Year] '1998','1999'
```



	ShippedDate	OrderID	Subtotal	Year
1	1998-01-02 00:00:00.000	10771	344.00	1998
2	1998-01-21 00:00:00.000	10777	224.00	1998
3	1998-01-14 00:00:00.000	10779	1335.00	1998
4	1998-01-19 00:00:00.000	10788	731.50	1998
5	1998-01-01 00:00:00.000	10791	1829.76	1998
6	1998-01-08 00:00:00.000	10793	191.10	1998
7	1998-01-02 00:00:00.000	10794	314.76	1998
8	1998-01-20 00:00:00.000	10795	2158.00	1998
9	1998-01-14 00:00:00.000	10796	2341.36	1998
10	1998-01-05 00:00:00.000	10797	420.00	1998
11	1998-01-05 00:00:00.000	10798	446.60	1998
12	1998-01-05 00:00:00.000	10799	1553.50	1998
13	1998-01-05 00:00:00.000	10800	1468.94	1998
14	1998-01-02 00:00:00.000	10802	2942.81	1998
15	1998-01-06 00:00:00.000	10803	1193.01	1998
16	1998-01-07 00:00:00.000	10804	2278.40	1998
17	1998-01-09 00:00:00.000	10805	2775.00	1998
18	1998-01-05 00:00:00.000	10806	439.60	1998
19	1998-01-30 00:00:00.000	10807	18.40	1998
20	1998-01-09 00:00:00.000	10808	1411.00	1998
21	1998-01-07 00:00:00.000	10809	140.00	1998
22	1998-01-07 00:00:00.000	10810	187.00	1998
23	1998-01-08 00:00:00.000	10811	852.00	1998
24	1998-01-12 00:00:00.000	10812	1692.80	1998
25	1998-01-09 00:00:00.000	10813	602.40	1998
26	1998-01-14 00:00:00.000	10814	1788.45	1998

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

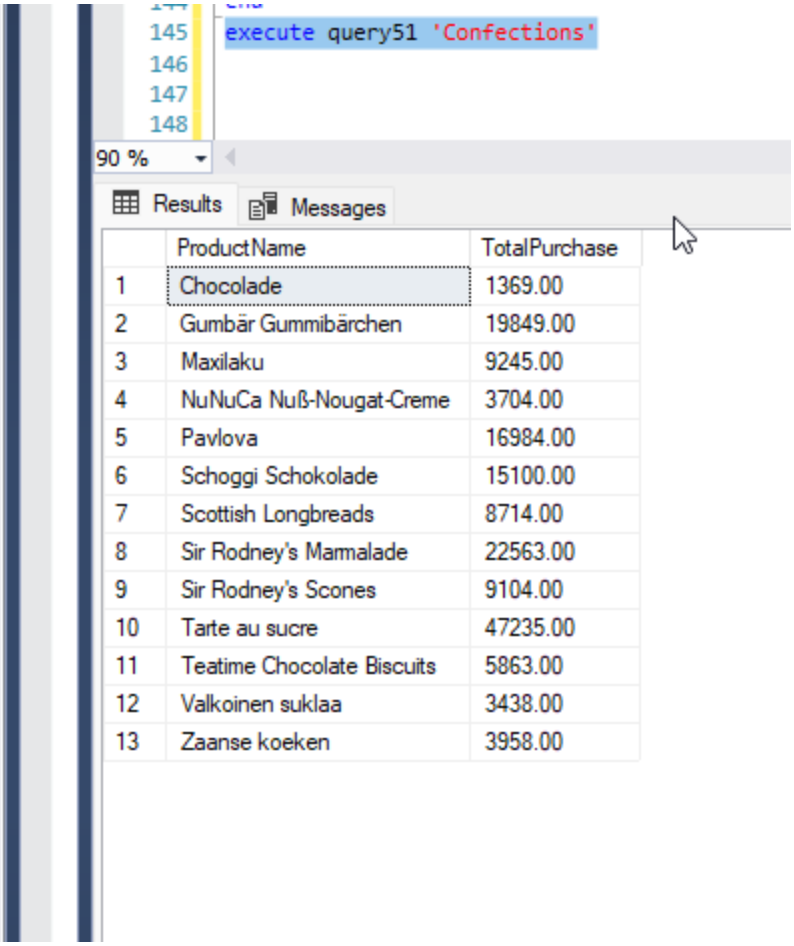
```
create procedure query4
as
begin
select distinct c.CategoryID,count(c.CategoryName) as "number of orders",c.CategoryName
from orders o
inner join "order details" od on od.orderid=o.OrderID
inner JOIN Products p on p.productID=od.productid
inner join Categories c on p.CategoryID= c.CategoryID
```

```
group by c.CategoryID ,c.CategoryName
end

execute query4


create procedure query51
  @CategoryName nvarchar(15)
as
begin

SELECT ProductName,
        TotalPurchase=ROUND(SUM(CONVERT(decimal(14,2), OD.Quantity * (1-OD.Discount)
* OD.UnitPrice)), 0)
FROM [Order Details] OD, Orders O, Products P, Categories C
WHERE OD.OrderID = O.OrderID
        AND OD.ProductID = P.ProductID
        AND P.CategoryID = C.CategoryID
        AND C.CategoryName = @CategoryName
        --AND SUBSTRING(CONVERT(nvarchar(22), O.OrderDate, 111), 1, 4) = @OrdYear
GROUP BY ProductName
ORDER BY ProductName
end
execute query51 'Confections'
```

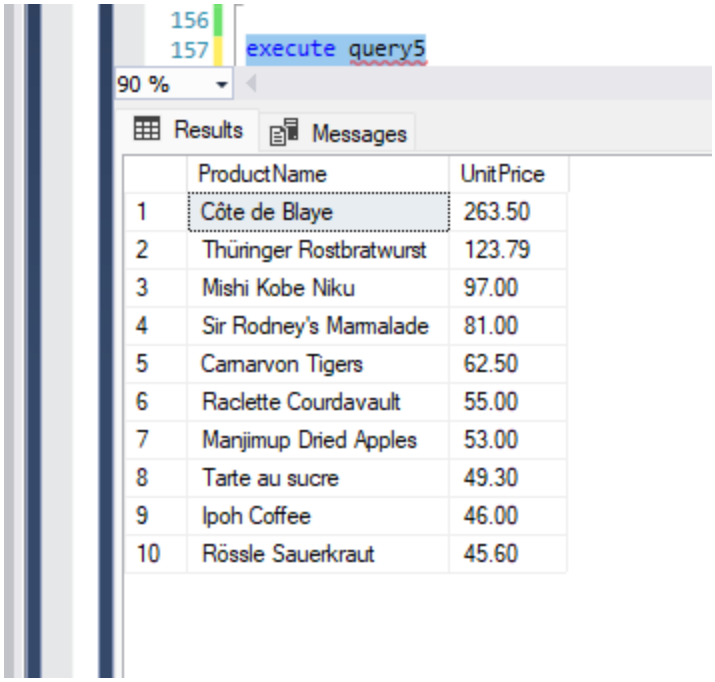


	ProductName	TotalPurchase
1	Chocolade	1369.00
2	Gumbär Gummibärchen	19849.00
3	Maxilaku	9245.00
4	NuNuCa Nuß-Nougat-Creme	3704.00
5	Pavlova	16984.00
6	Schoggi Schokolade	15100.00
7	Scottish Longbreads	8714.00
8	Sir Rodney's Marmalade	22563.00
9	Sir Rodney's Scones	9104.00
10	Tarte au sucre	47235.00
11	Teatime Chocolate Biscuits	5863.00
12	Valkoinen suklaa	3438.00
13	Zaanse koeken	3958.00

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

```
alter procedure query5
as
begin
select top 10  ProductName, UnitPrice from Products order by UnitPrice desc
end

execute query5
```



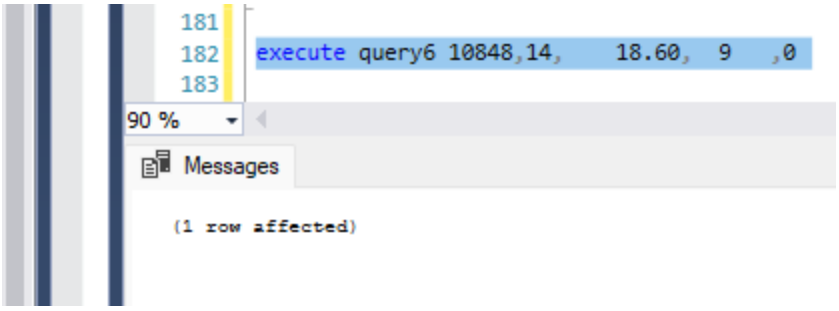
	ProductName	UnitPrice
1	Côte de Blaye	263.50
2	Thüringer Rostbratwurst	123.79
3	Mishi Kobe Niku	97.00
4	Sir Rodney's Marmalade	81.00
5	Carnarvon Tigers	62.50
6	Raclette Courdavault	55.00
7	Manjimup Dried Apples	53.00
8	Tarte au sucre	49.30
9	Ipoh Coffee	46.00
10	Rössle Sauerkraut	45.60

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

```
create procedure query6

        @OID int,
        @pid int  ,
        @UnitPrice money ,
        @Quantity smallint ,
        @Discount real
as
begin
insert into [Order Details] values (
        @OID ,
        @pid   ,
        @UnitPrice  ,
        @Quantity  ,
        @Discount  )
end

execute query6 10248,14,      18.60,  9          ,0
```



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

```
create procedure query7
   @changeid int,
        @OID int,
        @pid int  ,
        @UnitPrice money ,
        @Quantity smallint ,
        @Discount real


as
begin
UPDATE [Order Details]
SET OrderID = @OID, ProductID = @pid,  UnitPrice = @UnitPrice,  Quantity = @Quantity,
Discount = @Discount
WHERE OrderID = @changeid
end

execute query7 11074,10288,14,       18.60,  9          ,0
```