Assignment :-4

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SQL QUERS

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.

Ans :-

```
CREATE PROCEDURE que1
AS
SELECT CustomerID, AVG(Freight) as AvgFreight
FROM Orders
GROUP BY CustomerID
GO
insert into orders values ( 'VAFFE', 8,'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=60 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)

       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
CREATE 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,ShipN
ame,ShipAddress,ShipCity,ShipRegion,ShipPostalCode,ShipCountry)

SELECT
CustomerID,EmployeeID,OrderDate,RequiredDate,ShippedDate,ShipVia,Freight,ShipNa
me,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

Ans:-
```
CREATE PROC spEmployeeSalesbByCounttry
@country NVARCHAR(10)
AS
BEGIN
```

```
        SELECT FirstName, LastName,COUNT(o.OrderID)
        AS [totle sales] , @country AS Country
        FROM [Order Details] r
        JOIN Orders o ON o.OrderID = r.OrderID
        JOIN Employees e ON o.EmployeeID = e.EmployeeID
 group by FirstName, LastName, o.ShipCountry  having
o.ShipCountry = @country
        END
```

Out put :- spEmployeeSalesbByCounttry 'UK'

Results | Messages

	FirstName	LastName	totle sales	Country
1	Steven	Buchanan	7	UK
2	Laura	Callahan	16	UK
3	Nancy	Davolio	22	UK
4	Anne	Dodsworth	10	UK
5	Andrew	Fuller	11	UK
6	Robert	King	12	UK
7	Janet	Leverling	17	UK
8	Margaret	Peacock	28	UK
9	Michael	Suyama	12	UK

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

Ans :-
```
CREATE PROC spSalesbByyear
        @year int
        AS
        BEGIN
        SELECT COUNT(o.OrderID)
        AS [totle sales] , @year as [Year]
        FROM [Order Details] r
        JOIN Orders o ON o.OrderID = r.OrderID
group by YEAR(o.ShippedDate)       having
YEAR(ShippedDate) = @year
        END
```

Out Put :- spSalesbByyear 1998

Results | Messages

	totle sales	Year
1	661	1998

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

Ans :-
```
 CREATE PROC spSalesbByCategory
        @CategroyName Nvarchar(15)
        AS
        BEGIN
        SELECT count(r.OrderID)
        AS [totle sales], @CategroyName AS CategoryName
        FROM [Order Details] r
        JOIN Products ON Products.ProductID = r.ProductID
```

```
 JOIN Categories ON Products.CategoryID = Categories.CategoryID  where
Categories.CategoryName = @CategroyName
        group by Categories.CategoryName
        END
```

Ans:- spSalesbByCategory 'seafood'

Results | Messages

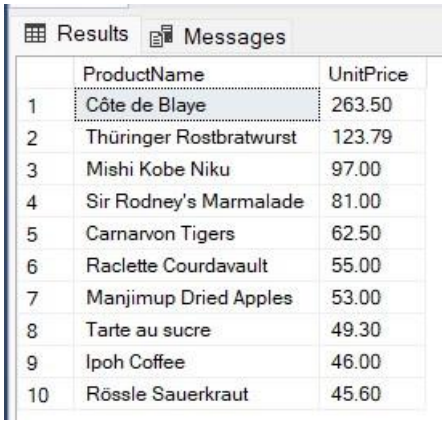
	totle sales	CategoryName
1	330	seafood

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

Ans:-

```
CREATE PROC sp10mostExpensiveproducts
as
begin
select top 10 ProductName , UnitPrice from Products order by UnitPrice desc
end
```

Out put :- sp10mostExpensiveproducts



Results | Messages

	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

Ans :-

```
CREATE PROC spCustomerOrderDetails
@OrderID int,
@ProductID int,
@UnitPaice money,
@Quantity smallint,
@Discount real
as
begin
insert into [Order Details] values (@OrderID , @ProductID , @UnitPaice ,
@Quantity , @Discount)
end
```

Out put :-

```
spCustomerOrderDetails 10248,14,522,5,0.2

SELECT * FROM [Order Details]
```

Results | Messages

	OrderID	ProductID	UnitPrice	Quantity	Discount
1	10248	11	14.00	12	0
2	10248	14	522.00	5	0.2
3	10248	42	9.80	10	0
4	10248	72	34.80	5	0
5	10249	14	18.60	9	0
6	10249	51	42.40	40	0
7	10250	41	7.70	10	0
8	10250	51	42.40	35	0.15
9	10250	65	16.80	15	0.15
10	10251	22	16.80	6	0.05
11	10251	57	15.60	15	0.05
12	10251	65	16.80	20	0
13	10252	20	64.80	40	0.05
14	10252	33	2.00	25	0.05

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

Ans: -

```
CREATE PROC spUpdateCustomerOrderDetails
@orderid int,
@productid int,
@unitprice money,
@quantity smallint,
@discount real

as
update [Order Details]
set [Quantity] = @quantity , [UnitPrice] = @unitprice, [Discount] = @discount
WHERE ([OrderID] = @orderid AND [ProductID] = @productid)
Go
```

Out put:-

```
spUpdateCustomerOrderDetails 10248 , 72 , 35.25 , 2 , 0.13
SELECT * FROM [Order Details]
```

	OrderID	ProductID	UnitPrice	Quantity	Discount
1	10248	11	14.00	12	0.1
2	10248	14	522.00	5	0.2
3	10248	42	9.80	10	0.1
4	10248	72	35.25	2	0.13
5	10249	14	18.60	9	0
6	10249	51	42.40	40	0
7	10250	41	7.70	10	0.1