1. Tulis query untuk mendapatkan jumlah customer tiap bulan yang melakukan order pada tahun 1997.
   Query :

   ```sql
   SELECT
       COUNT(DISTINCT [CustomerID]) as "Jumlah Customer",
       MONTH([OrderDate]) as "Bulan",
       YEAR([OrderDate]) as "Tahun"
   FROM [Northwind].[dbo].[Orders]
   WHERE YEAR([OrderDate]) = 1997
   GROUP BY MONTH([OrderDate]), YEAR([OrderDate])
   ```

   Output :

	Jumlah Customer	Bulan	Tahun
1	27	1	1997
2	21	2	1997
3	24	3	1997
4	27	4	1997
5	26	5	1997
6	25	6	1997
7	25	7	1997
8	30	8	1997
9	27	9	1997
10	28	10	1997
11	27	11	1997

2. Tulis query untuk mendapatkan nama employee yang termasuk Sales Representative.
   Query :

   ```sql
   SELECT [FirstName], [LastName], [Title]
   FROM [Northwind].[dbo].[Employees]
   WHERE [Title] = 'Sales Representative'
   ```

   Output :

	FirstName	LastName	Title
1	Nancy	Davolio	Sales Representative
2	Janet	Leverling	Sales Representative
3	Margaret	Peacock	Sales Representative
4	Michael	Suyama	Sales Representative
5	Robert	King	Sales Representative
6	Anne	Dodsworth	Sales Representative

3. Tulis query untuk mendapatkan top 5 nama produk yang quantitynya paling banyak diorder pada bulan Januari 1997.

Query :

```
SELECT TOP(5) [ProductName], SUM([Quantity]) as "Total Quantity"
FROM [Northwind].[dbo].[Products]
JOIN [Northwind].[dbo].[Order Details] ON [Products].[ProductID]= [Order Details].[ProductID]
JOIN [Northwind].[dbo].[Orders] ON [Order Details].[OrderID] = [Orders].[OrderID]
WHERE MONTH([Orders].[OrderDate]) = 1 AND YEAR([Orders].[OrderDate]) = 1997
GROUP BY [ProductName]
ORDER BY SUM([Quantity]) DESC
```

Output:

	ProductName	Total Quantity
1	Geitost	119
2	Raclette Courdavault	115
3	Gnocchi di nonna Alice	105
4	Vegie-spread	100
5	Côte de Blaye	99

4. Tulis query untuk mendapatkan nama company yang melakukan order Chai pada bulan Juni 1997.

Query :

```
SELECT DISTINCT [CompanyName], [Products].[ProductName], [OrderDate]
FROM [Northwind].[dbo].[Customers]
JOIN [Northwind].[dbo].[Orders] ON [Customers].[CustomerID] = [Orders].[CustomerID]
JOIN [Northwind].[dbo].[Order Details] ON [Orders].[OrderID] = [Order Details].[OrderID]
JOIN [Northwind].[dbo].[Products] ON [Order Details].[ProductID] = [Products].[ProductID]
WHERE [Products].[ProductName] = 'Chai' AND MONTH([Orders].[OrderDate]) = 6 AND YEAR([Orders].[OrderDate]) = 1997
```

Output:

	CompanyName	ProductName	OrderDate
1	Tortuga Restaurante	Chai	1997-06-23 00:00:00.000

5. Tulis query untuk mendapatkan jumlah OrderID yang pernah melakukan pembelian (unit_price dikali quantity) <=100, 100<x<=250, 250<x<=500, dan >500.

Query :

```
SELECT
SUM(CASE WHEN [UnitPrice] * [Quantity] <= 100 THEN 1 ELSE 0 END) as '<=100',
SUM(CASE WHEN [UnitPrice] * [Quantity] BETWEEN 101 AND 250 THEN 1 ELSE 0 END) as '100<x<=250',
SUM(CASE WHEN [UnitPrice] * [Quantity] BETWEEN 251 AND 500 THEN 1 ELSE 0 END) as '250<x<=500',
SUM(CASE WHEN [UnitPrice] * [Quantity] > 500 THEN 1 ELSE 0 END) as '>500'
FROM [Northwind].[dbo].[Order Details]
```

Output :

	<=100	100<x<=250	250<x<=500	>500
1	351	465	531	800

6. Tulis query untuk mendapatkan Company name pada tabel customer yang melakukan pembelian di atas 500 pada tahun 1997.

Query :

```sql
SELECT DISTINCT([CompanyName])
FROM [Northwind].[dbo].[Customers]
JOIN [Northwind].[dbo].[Orders] ON [Customers].[CustomerID] = [Orders].[CustomerID]
JOIN [Northwind].[dbo].[Order Details] ON [Orders].[OrderID] = [Order Details].[OrderID]
WHERE ([UnitPrice]*[Quantity])-([UnitPrice]*[Quantity]*[Discount]) > 500 AND YEAR([OrderDate]) = 1997
```

Output :

	CompanyName
1	Alfreds Futterkiste
2	Antonio Moreno Taquería
3	Around the Horn
4	Berglunds snabbköp
5	Blondesddsl père et fils
6	Bólido Comidas preparadas
7	Bon app'
8	Bottom-Dollar Markets
9	B's Beverages
10	Chop-suey Chinese
11	Comércio Mineiro

7. Tulis query untuk mendapatkan nama produk yang merupakan Top 5 sales tertinggi tiap bulan di tahun 1997.

Query :

```sql
SELECT TOP(5) [ProductName], SUM([Quantity]) AS Total_Sales
FROM [Northwind].[dbo].[Products]
JOIN [Northwind].[dbo].[Order Details] ON [Products].[ProductID] = [Order Details].[ProductID]
JOIN [Northwind].[dbo].[Orders] ON [Order Details].[OrderID] = [Orders].[OrderID]
WHERE YEAR([OrderDate]) = 1997
GROUP BY [ProductName], MONTH([OrderDate])
ORDER BY Total_Sales DESC
```

Output :

	ProductName	Total_Sales
1	Manjimup Dried Apples	188
2	Pâté chinois	180
3	Gorgonzola Telino	171
4	Jack's New England Clam Chowder	168
5	Raclette Courdavault	162

8. Tulis view untuk melihat Order Details yang berisi OrderID, ProductID, ProductName, UnitPrice, Quantity, Discount, Harga setelah diskon.
   Query :

```sql
CREATE VIEW Order_Details AS
SELECT
    o.OrderID, od.ProductID, p.ProductName, od.UnitPrice, od.Quantity,
    od.Discount, (od.UnitPrice * od.Quantity * (1 - od.Discount)) AS TotalPrice
FROM [Northwind].[dbo].[Orders] AS o
JOIN [Northwind].[dbo].[Order Details] AS od ON [o].[OrderID] = [od].[OrderID]
JOIN [Northwind].[dbo].[Products] AS p ON [od].[ProductID] = [p].[ProductID]
```

   Output :

   Messages
   Commands completed successfully.

   Completion time: 2023-01-29T21:09:42.1898251+08:00

9. Buatlah procedure Invoice untuk memanggil CustomerID, CustomerName/company name, OrderID, OrderDate, RequiredDate, ShippedDate jika terdapat inputan CustomerID tertentu.
   Query :

```sql
CREATE PROCEDURE Invoices (@CustomerID INT)
AS
BEGIN
SELECT c.CustomerID, c.CompanyName, o.OrderID, o.OrderDate, o.RequiredDate, o.ShippedDate
FROM [Northwind].[dbo].[Customers] AS c
JOIN [Northwind].[dbo].[Orders] AS o ON c.CustomerID = o.CustomerID
WHERE c.CustomerID = @CustomerID
END
```

   Output:

   Messages
   Commands completed successfully.

   Completion time: 2023-01-29T21:15:28.6554800+08:00