

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

```
SELECT MONTH(OrderDate) as Bulan, COUNT(DISTINCT CustomerID) as Jumlah_Customer
FROM Orders
WHERE YEAR(OrderDate) = 1997
GROUP BY MONTH(OrderDate)
```

	Bulan	Jumlah_Customer
1	1	27
2	2	21
3	3	24
4	4	27
5	5	26
6	6	25
7	7	25
8	8	30
9	9	27
10	10	28
11	11	27
12	12	37

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

```
SELECT FirstName, LastName
FROM Employees
WHERE Title='Sales Representative'
```

	FirstName	LastName
1	Nancy	Davolio
2	Janet	Leverling
3	Margaret	Peacock
4	Michael	Suyama
5	Robert	King
6	Anne	Dodsw...

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

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

	ProductName	Quantity
1	Geitost	119
2	Raclette Courdavault	115
3	Gnocchi di nonna ...	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.

```
SELECT DISTINCT Suppliers.CompanyName
FROM Suppliers
INNER JOIN Products ON Suppliers.SupplierID = Products.SupplierID
```

```
INNER JOIN [Order Details] ON Products.ProductID = [Order Details].ProductID
INNER JOIN Orders ON [Order Details].OrderID = Orders.OrderID
```

```
WHERE Products.ProductName = 'Chai' AND MONTH(Orders.OrderDate) = 6 AND
YEAR(Orders.OrderDate) = 1997
```

	CompanyName
1	Exotic Liquids

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

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

	<=100	100<x<=250	250<x<=500	>500
1	351	472	532	800

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

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

	CompanyName
1	Alfreds Futterkiste
2	Antonio Moreno Taqueria
3	Around the Horn
4	Berglunds snabbköp
5	Blondesddal père et fils
6	Bólido Comidas prepara...
7	Bon app'
8	Bottom-Dollar Markets
9	B's Beverages
10	Chop-suey Chinese
11	Comércio Mineiro
12	Die Wandende Kuh
13	Eastern Connection
14	Ernst Handel
15	Familia Arquibaldo
16	Filles gourmandes
17	Folk och fä HB
18	Frankenversand
19	Furia Bacalhau e Frutos ...
20	Godos Cocina Típica

	CompanyName
21	Gourmet Lanchonetes
22	Great Lakes Food Market
23	Hanan Carnes
24	HILARION-Abastos
25	Hungry Coyote Import St...
26	Hungry Owl All-Night Gr...
27	Island Trading
28	Königlich Essen
29	La maison d'Asie
30	Lehmanns Marktstand
31	Let's Stop N Shop
32	LILA-Supermercado
33	LINO-Delicatesses
34	Lonesome Pine Restaur...
35	Magazzini Alimentari Rlu...
36	Maison Dewey
37	Mère Pailarde
38	Morgenstern Gesundkost
39	Old World Delicatessen
40	Ottile's Käseladen

.....

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

```

SELECT Bulan, ProductName, TotalSales
FROM (
SELECT MONTH(Orders.OrderDate) as Bulan,
ProductName,
SUM([Order Details].UnitPrice*[Order Details].Quantity) as TotalSales,
ROW_NUMBER() OVER (PARTITION BY MONTH(Orders.OrderDate)
ORDER BY SUM([Order Details].UnitPrice*[Order Details].Quantity) DESC) as RN
FROM [Order Details]
INNER JOIN Products ON [Order Details].ProductID = Products.ProductID
INNER JOIN Orders ON [Order Details].OrderID = Orders.OrderID
WHERE YEAR(Orders.OrderDate) = 1997
GROUP BY MONTH(Orders.OrderDate), ProductName
) as sub
WHERE RN <= 5
ORDER BY Bulan, TotalSales DESC

```

	Bulan	ProductName	TotalSales
1	1	Côte de Blaye	20869.20
2	1	Raclette Courdavault	5060.00
3	1	Veggie-spread	3510.00
4	1	Gnocchi di nonna Alice	3192.00
5	1	Alice Mutton	3026.40
6	2	Plâté chinois	3456.00
7	2	Srop d'érable	2622.00
8	2	Gnocchi di nonna Alice	2523.20
9	2	Thüringer Rostbratwurst	2376.00
10	2	Rössle Sauerkraut	2074.80
11	3	Raclette Courdavault	7128.00
12	3	Côte de Blaye	6324.00
13	3	Manjimup Dried Apples	1950.40
14	3	Thüringer Rostbratwurst	1782.00
15	3	Camembert Pierrot	1632.00
16	4	Gnocchi di nonna Alice	5517.60
17	4	Schoggi Schokolade	5268.00
18	4	Thüringer Rostbratwurst	4456.44
19	4	Côte de Blaye	3952.50
20	4	Camembert Pierrot	3604.00
21	5	Côte de Blaye	8959.00
22	5	Ipoh Coffee	3910.00
23	5	Tarte au sucre	2958.00
24	5	Manjimup Dried Apples	2862.00

--8.Buatlah view untuk melihat Order Details yang berisi OrderID, ProductID,  
--ProductName, UnitPrice, Quantity, Discount, Harga setelah diskon.

```

CREATE VIEW OrderDetailsView
AS
SELECT
[Order Details].OrderID,
[Order Details].ProductID,
Products.ProductName,

```

```

[Order Details].UnitPrice,
[Order Details].Quantity,
[Order Details].Discount,
([Order Details].UnitPrice * [Order Details].Quantity * (1 - [Order
Details].Discount)) as FinalPrice
FROM
[Order Details]
INNER JOIN Products ON [Order Details].ProductID = Products.ProductID

```

	OrderID	ProductID	ProductName	UnitPrice	Quantity	Discount	FinalPrice
1	10248	11	Queso Cabrales	14.00	12	0	168
2	10248	42	Singaporean Hokkien Fried Mee	9.80	10	0	98
3	10248	72	Mozzarella di Giovanni	34.80	5	0	174
4	10249	14	Tofu	18.60	9	0	167.4
5	10249	51	Manjimup Dried Apples	42.40	40	0	1696
6	10250	41	Jack's New England Clam Chowder	7.70	10	0	77
7	10250	51	Manjimup Dried Apples	42.40	35	0.15	1261.4
8	10250	65	Louisiana Fiery Hot Pepper Sauce	16.80	15	0.15	214.2
9	10251	22	Gustaf's Knäckebröd	16.80	6	0.05	95.76
10	10251	57	Ravioli Angelo	15.60	15	0.05	222.3
11	10251	65	Louisiana Fiery Hot Pepper Sauce	16.80	20	0	336
12	10252	20	Sir Rodney's Marmalade	64.80	40	0.05	2462.4

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

```

CREATE PROCEDURE Invoice (@CustomerID INT)
AS
BEGIN
    SELECT
        Customers.CustomerID,
        Customers.CompanyName as CustomerName,
        Orders.OrderID,
        Orders.OrderDate,
        Orders.RequiredDate,
        Orders.ShippedDate
    FROM Orders
    INNER JOIN Customers ON Orders.CustomerID = Customers.CustomerID
    WHERE Orders.CustomerID = @CustomerID
END
EXEC Invoice @CustomerID = 'value'

```

	CustomerID	CustomerName	OrderID	OrderDate	RequiredDate	ShippedDate
1	ALFKI	Maria Anders	10643	1997-08-25 00:00:00.000	1997-09-22 00:00:00.000	1997-09-02 00:00:00.000
2	ALFKI	Maria Anders	10692	1997-10-03 00:00:00.000	1997-10-31 00:00:00.000	1997-10-13 00:00:00.000
3	ALFKI	Maria Anders	10702	1997-10-13 00:00:00.000	1997-11-24 00:00:00.000	1997-10-21 00:00:00.000
4	ALFKI	Maria Anders	10835	1998-01-15 00:00:00.000	1998-02-12 00:00:00.000	1998-01-21 00:00:00.000
5	ALFKI	Maria Anders	10952	1998-03-16 00:00:00.000	1998-04-27 00:00:00.000	1998-03-24 00:00:00.000
6	ALFKI	Maria Anders	11011	1998-04-09 00:00:00.000	1998-05-07 00:00:00.000	1998-04-13 00:00:00.000