

Intermediate Query

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Pertanyaan 1

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

Jawaban:

```
SELECT MONTH(OrderDate) AS OrderMonth, COUNT(CustomerID) AS CustomerCount FROM
dbo.Orders
WHERE YEAR(OrderDate) = 1997
GROUP BY MONTH(OrderDate)
```

Hasil query yang didapat adalah sebagai berikut.

	OrderMonth	CustomerCount
1	1	33
2	2	29
3	3	30
4	4	31
5	5	32
6	6	30
7	7	33
8	8	33
9	9	37
10	10	38
11	11	34
12	12	48

Pertanyaan 2

Tulis query untuk mendapatkan nama employee yang termasuk Sales Representative.

Jawaban:

```
SELECT FirstName + ' ' + LastName as EmployeeName, Title FROM dbo.Employees
WHERE Title = 'Sales Representative'
```

Hasil query yang didapat adalah sebagai berikut.

	EmployeeName	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

Pertanyaan 3

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

Jawaban:

```
SELECT TOP(5) TabPro.ProductName, COUNT(TabPro.ProductName) AS ProductCount,
MONTH(OrderDate) AS OrderMonth, YEAR(OrderDate) AS OrderYear FROM dbo.Orders AS
TabOrd
INNER JOIN dbo.[Order Details] AS TabDet ON TabOrd.OrderID = TabDet.OrderID
INNER JOIN dbo.Products AS TabPro ON TabPro.ProductID = TabDet.ProductID
WHERE MONTH(OrderDate) = 1 AND YEAR(OrderDate) = 1997
GROUP BY TabPro.ProductName, MONTH(OrderDate), YEAR(OrderDate)
ORDER BY COUNT(TabPro.ProductName) DESC
```

Hasil query yang didapat adalah sebagai berikut.

	ProductName	ProductCount	OrderMonth	OrderYear
1	Gumbär Gummibärchen	4	1	1997
2	Raclette Courdavault	4	1	1997
3	Alice Mutton	3	1	1997
4	Geitost	3	1	1997
5	Gnocchi di nonna Alice	3	1	1997

Pertanyaan 4

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

Jawaban:

```
SELECT TabCust.CompanyName, TabPro.ProductName, MONTH(TabOrd.OrderDate) AS
OrderMonth, YEAR(TabOrd.OrderDate) AS OrderYear FROM dbo.Customers AS TabCust
INNER JOIN dbo.Orders AS TabOrd ON TabCust.CustomerID = TabOrd.CustomerID
```

```
INNER JOIN dbo.[Order Details] AS TabDet ON TabDet.OrderID = TabOrd.OrderID
INNER JOIN dbo.Products AS TabPro ON TabPro.ProductID = TabDet.ProductID
WHERE MONTH(TabOrd.OrderDate) = 6 AND YEAR(TabOrd.OrderDate) = 1997 AND
TabPro.ProductName = 'Chai'
```

Hasil query yang didapat adalah sebagai berikut.

	CompanyName	ProductName	OrderMonth	OrderYear
1	Tortuga Restaurante	Chai	6	1997

Pertanyaan 5

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

Jawaban:

```
SELECT (SELECT COUNT(OrderID)
FROM dbo.[Order Details]
WHERE UnitPrice * Quantity * (1-Discount) <= 100) AS '<=100',
(SELECT COUNT(OrderID)
FROM dbo.[Order Details]
WHERE UnitPrice * Quantity * (1-Discount) > 100 AND UnitPrice * Quantity * (1-Discount) <= 250) AS '100<x<=250',
(SELECT COUNT(OrderID)
FROM dbo.[Order Details]
WHERE UnitPrice * Quantity * (1-Discount) > 250 AND UnitPrice * Quantity * (1-Discount) <= 500) AS '250<x<=500',
(SELECT COUNT(OrderID)
FROM dbo.[Order Details]
WHERE UnitPrice * Quantity * (1-Discount) > 500) AS '>500'
```

Hasil query yang didapat adalah sebagai berikut.

	<=100	100<x<=250	250<x<=500	>500
1	372	497	534	752

Pertanyaan 6

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

Jawaban:

```
SELECT DISTINCT CompanyName FROM dbo.Customers AS TabCust
INNER JOIN dbo.Orders AS TabOrd ON TabCust.CustomerID = TabOrd.CustomerID
INNER JOIN dbo.[Order Details] AS TabDet ON TabOrd.OrderID = TabDet.OrderID
WHERE YEAR(TabOrd.OrderDate) = 1997
GROUP BY TabCust.CompanyName, UnitPrice*Quantity *(1-Discount)
```

HAVING UnitPrice*Quantity*(1-Discount) > 500

Hasil query yang didapat adalah sebagai berikut.

	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
12	Die Wandemde Kuh
13	Eastern Connection
14	Ernst Handel
15	Familia Arquibaldo
16	Folies gourmandes
17	Folk och fä HB

Sejumlah 65 row

Pertanyaan 7

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

Jawaban:

```
WITH cte AS (  
    SELECT  
        MONTH(ord2.OrderDate) as OrderMonth,  
        prod.ProductName as ProductName, ord1.UnitPrice * ord1.Quantity * (1-  
ord1.Discount) as Sales,  
        ROW_NUMBER() OVER (PARTITION BY MONTH(ord2.OrderDate) ORDER BY  
ord1.UnitPrice * ord1.Quantity * (1-ord1.Discount) DESC) as row_num
```

```

FROM dbo.Products as prod
JOIN dbo.[Order Details] as ord1 ON prod.ProductID = ord1.ProductID
JOIN dbo.Orders as ord2 ON ord1.OrderID = ord2.OrderID
WHERE YEAR(ord2.OrderDate) = 1997
)
SELECT OrderMonth, ProductName, Sales
FROM cte
WHERE row_num <=5

```

Hasil query yang didapat adalah sebagai berikut.

	OrderMonth	ProductName	Sales
1	1	Côte de Blaye	10540
2	1	Côte de Blaye	8263.36
3	1	Raclette Courdavault	2464
4	1	Veggie-spread	2281.5
5	1	Gnocchi di nonna Alice	2128
6	2	Pâté chinois	2073.6
7	2	Thüringer Rostbratwurst	2019.6
8	2	Schoggi Schokolade	1755
9	2	Sirop d'érable	1744.2
10	2	Raclette Courdavault	1584
11	3	Côte de Blaye	6324
12	3	Raclette Courdavault	2640
13	3	Raclette Courdavault	2640
14	3	Thüringer Rostbratwurst	1603.8
15	3	Camarvon Tigers	1500
16	4	Schoggi Schokolade	5268
17	4	Thüringer Rostbratwurst	4456.44
18	4	Côte de Blaye	3952.5
19	4	Sir Rodney's Marmalade	3159
20	4	Gnocchi di nonna Alice	2660

	OrderMonth	ProductName	Sales
21	5	Côte de Blaye	7905
22	5	Ipoh Coffee	2760
23	5	Manjimup Dried Apples	2162.4
24	5	Tarte au sucre	1972
25	5	Alice Mutton	1560
26	6	Manjimup Dried Apples	2650
27	6	Gnocchi di nonna Alice	2166
28	6	Raclette Courdavault	1760
29	6	Thüringer Rostbratwurst	1237.9
30	6	Gnocchi di nonna Alice	1216
31	7	Alice Mutton	3900
32	7	Côte de Blaye	3754....
33	7	Sirop d'érable	2565
34	7	Camembert Pierrot	2261
35	7	Schoggi Schokolade	2195
36	8	Tarte au sucre	3352.4
37	8	Camarvon Tigers	3125
38	8	Thüringer Rostbratwurst	2475.8
39	8	Gnocchi di nonna Alice	2166
40	8	Mozzarella di Giovanni	2088
41	9	Thüringer Rostbratwurst	4456.44
42	9	Queso Manchego La ...	3800
43	9	Mishi Kobe Niku	3637.5
44	9	Côte de Blaye	3557.25

45	9	Camembert Pierrot	1776.5
46	10	Thüringer Rostbratwurst	4951.6
47	10	Perth Pasties	3936
48	10	Uncle Bob's Organic ...	2700
49	10	Rössle Sauerkraut	2462.4
50	10	Tarte au sucre	2366.4
51	11	Raclette Courdavault	2475
52	11	Camembert Pierrot	1700
53	11	Manjimup Dried Apples	1510.5
54	11	Camarvon Tigers	1500
55	11	Tarte au sucre	1479
56	12	Manjimup Dried Apples	6042
57	12	Côte de Blaye	2635
58	12	Thüringer Rostbratwurst	2352.01
59	12	Gnocchi di nonna Alice	2280
60	12	Thüringer Rostbratwurst	2228.22

Pertanyaan 8

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

Jawaban:

```
SELECT det.OrderID, det.ProductID, prod.ProductName, det.UnitPrice, det.Quantity,
det.Discount, det.UnitPrice*(1-det.Discount) as NewUnitPrice
FROM dbo.[Order Details] AS det
JOIN dbo.Products AS prod ON det.ProductID = prod.ProductID
```

Hasil query yang didapat adalah sebagai berikut.

	OrderID	ProductID	ProductName	UnitPrice	Quantity	Discount	NewUnitPrice
1	10248	11	Queso Cabrales	14.00	12	0	14
2	10248	42	Singaporean Hokkien Fried Mee	9.80	10	0	9.8
3	10248	72	Mozzarella di Giovanni	34.80	5	0	34.8
4	10249	14	Tofu	18.60	9	0	18.6
5	10249	51	Manjimup Dried Apples	42.40	40	0	42.4
6	10250	41	Jack's New England Clam Chowder	7.70	10	0	7.7
7	10250	51	Manjimup Dried Apples	42.40	35	0.15	36.04
8	10250	65	Louisiana Fiery Hot Pepper Sauce	16.80	15	0.15	14.28
9	10251	22	Gustaf's Knäckebröd	16.80	6	0.05	15.96
10	10251	57	Ravioli Angelo	15.60	15	0.05	14.82
11	10251	65	Louisiana Fiery Hot Pepper Sauce	16.80	20	0	16.8
12	10252	20	Sir Rodney's Marmalade	64.80	40	0.05	61.56
13	10252	33	Geitost	2.00	25	0.05	1.9
14	10252	60	Camembert Pierrot	27.20	40	0	27.2
15	10253	31	Gorgonzola Telino	10.00	20	0	10
16	10253	39	Chartreuse verte	14.40	42	0	14.4
17	10253	49	Maxilaku	16.00	40	0	16
18	10254	24	Guaraná Fantástica	3.60	15	0.15	3.06
19	10254	55	Pâté chinois	19.20	21	0.15	16.32
20	10254	74	Longlife Tofu	8.00	21	0	8

Pertanyaan 9

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

Jawaban:

```
SELECT ord.CustomerID, cust.CompanyName, ord.OrderID, ord.OrderDate,
ord.RequiredDate, ord.ShippedDate FROM dbo.Orders AS ord
JOIN dbo.Customers AS cust ON ord.CustomerID = cust.CustomerID
```

Hasil query yang didapat adalah sebagai berikut.

	CustomerID	CompanyName	OrderID	OrderDate	RequiredDate	ShippedDate
1	VINET	Vins et alcools Chevalier	10248	1996-07-04 00:00:00.000	1996-08-01 00:00:00.000	1996-07-16 00:00:00.000
2	TOMSP	Toms Spezialitäten	10249	1996-07-05 00:00:00.000	1996-08-16 00:00:00.000	1996-07-10 00:00:00.000
3	HANAR	Hanari Cames	10250	1996-07-08 00:00:00.000	1996-08-05 00:00:00.000	1996-07-12 00:00:00.000
4	VICTE	Victuailles en stock	10251	1996-07-08 00:00:00.000	1996-08-05 00:00:00.000	1996-07-15 00:00:00.000
5	SUPRD	Suprêmes délices	10252	1996-07-09 00:00:00.000	1996-08-06 00:00:00.000	1996-07-11 00:00:00.000
6	HANAR	Hanari Cames	10253	1996-07-10 00:00:00.000	1996-07-24 00:00:00.000	1996-07-16 00:00:00.000
7	CHOPS	Chop-suey Chinese	10254	1996-07-11 00:00:00.000	1996-08-08 00:00:00.000	1996-07-23 00:00:00.000
8	RICSU	Richter Supermarkt	10255	1996-07-12 00:00:00.000	1996-08-09 00:00:00.000	1996-07-15 00:00:00.000
9	WELLI	Wellington Importadora	10256	1996-07-15 00:00:00.000	1996-08-12 00:00:00.000	1996-07-17 00:00:00.000
10	HILAA	HILARION-Abastos	10257	1996-07-16 00:00:00.000	1996-08-13 00:00:00.000	1996-07-22 00:00:00.000
11	ERNSH	Ernst Handel	10258	1996-07-17 00:00:00.000	1996-08-14 00:00:00.000	1996-07-23 00:00:00.000
12	CENTC	Centro comercial Moctezuma	10259	1996-07-18 00:00:00.000	1996-08-15 00:00:00.000	1996-07-25 00:00:00.000
13	OTTIK	Ottiles Käseladen	10260	1996-07-19 00:00:00.000	1996-08-16 00:00:00.000	1996-07-29 00:00:00.000
14	QUEDE	Que Delícia	10261	1996-07-19 00:00:00.000	1996-08-16 00:00:00.000	1996-07-30 00:00:00.000
15	RATTC	Rattlesnake Canyon Grocery	10262	1996-07-22 00:00:00.000	1996-08-19 00:00:00.000	1996-07-25 00:00:00.000
16	ERNSH	Ernst Handel	10263	1996-07-23 00:00:00.000	1996-08-20 00:00:00.000	1996-07-31 00:00:00.000
17	FOLKO	Folk och få HB	10264	1996-07-24 00:00:00.000	1996-08-21 00:00:00.000	1996-08-23 00:00:00.000
18	BLONP	Blondesddsl père et fils	10265	1996-07-25 00:00:00.000	1996-08-22 00:00:00.000	1996-08-12 00:00:00.000
19	WARTH	Wartian Herkku	10266	1996-07-26 00:00:00.000	1996-09-06 00:00:00.000	1996-07-31 00:00:00.000
20	FRANK	Frankenversand	10267	1996-07-29 00:00:00.000	1996-08-26 00:00:00.000	1996-08-06 00:00:00.000