

# Rakha Kahansa Putra

DSLS 2023 – Kelompok 6

Intermediate Queries Project

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

## Query

```
select count(distinct customerid)
customers, count(*) orders,
month(orderdate) as month_order,
min(orderdate) min_date,
max(orderdate) max_date

from orders where orderdate >=
'1997-01-01 00:00:00.000' and
orderdate < '1998-01-01
00:00:00.000'

group by month(orderdate);
```

## Result

	customers	orders	month_order	min_date	max_date
1	27	33	1	1997-01-01 00:00:00.000	1997-01-31 00:00:00.000
2	21	29	2	1997-02-03 00:00:00.000	1997-02-28 00:00:00.000
3	24	30	3	1997-03-03 00:00:00.000	1997-03-31 00:00:00.000
4	27	31	4	1997-04-01 00:00:00.000	1997-04-30 00:00:00.000
5	26	32	5	1997-05-01 00:00:00.000	1997-05-30 00:00:00.000
6	25	30	6	1997-06-02 00:00:00.000	1997-06-30 00:00:00.000
7	25	33	7	1997-07-01 00:00:00.000	1997-07-31 00:00:00.000
8	30	33	8	1997-08-01 00:00:00.000	1997-08-29 00:00:00.000
9	27	37	9	1997-09-01 00:00:00.000	1997-09-30 00:00:00.000
10	28	38	10	1997-10-01 00:00:00.000	1997-10-31 00:00:00.000
11	27	34	11	1997-11-03 00:00:00.000	1997-11-28 00:00:00.000
12	37	48	12	1997-12-01 00:00:00.000	1997-12-31 00:00:00.000

Tulis query untuk mendapatkan nama employee yang termasuk Sales Representative.

```
select * from employees
```

```
where Title = 'Sales Representative';
```

	EmployeeID	LastName	FirstName	Title
1	1	Davolio	Nancy	Sales Representative
2	3	Leverling	Janet	Sales Representative
3	4	Peacock	Margaret	Sales Representative
4	6	Suyama	Michael	Sales Representative
5	7	King	Robert	Sales Representative
6	9	Dodswor...	Anne	Sales Representative

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

```
with base as(

select

productname, sum(quantity) quantity

from orders a

join order_details b on a.orderid = b.orderid

join products c on b.productid = c.productid

where orderdate >= '1997-01-01 00:00:00.000' and orderdate <
'1997-02-01 00:00:00.000'

group by productname

)

select top 5* from base

order by quantity desc;
```

	productname	quantity
1	Geitost	119
2	Raclette Courdavault	115
3	Gnocchi di nonna A...	105
4	Vegie-spread	100
5	Côte de Blaye	99

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

```
select companyname from products a
join order_details b on a.productid =
b.productid
join orders c on b.orderid = c.orderid
join customers d on c.customerid =
d.customerid
where orderdate >= '1997-06-01
00:00:00.000' and orderdate < '1997-07-
01 00:00:00.000'
and productname = 'Chai';
```

	companyname
1	Tortuga Restaurante

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

```
with base as (  
  select orderid,  
  case when unitprice*quantity <= 100 then  
    '<=100'  
  when unitprice*quantity <= 250 then '<=250'  
  when unitprice*quantity <= 500 then '<=500'  
  when unitprice*quantity > 500 then '>500'  
  end as buy_range  
from order_details  
)  
select count(*) orderid, buy_range from base  
group by buy_range  
;
```

	orderid	buy_range
1	532	<=500
2	472	<=250
3	800	>500
4	351	<=100

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

```
with base as (  
  select orderid,  
  case when unitprice*quantity <= 100 then '<=100'  
    when unitprice*quantity <= 250 then '<=250'  
      when unitprice*quantity <= 500 then '<=500'  
        when unitprice*quantity > 500 then '>500'  
      end as buy_range  
  from order_details  
)  
select  
distinct companyname  
from customers a  
join orders b on a.customerid = b.customerid  
join base c on b.orderid = c.orderid  
where orderdate >= '1997-01-01 00:00:00.000' and orderdate <  
  '1998-01-01 00:00:00.000'  
and buy_range = '>500';
```

	companyname
2	Antonio Moreno Taquería
3	Around the Horn
4	Berglunds snabbköp
5	Blondesddsl père et fils
6	Bólido Comidas prepar...
7	Bon app'
8	Bottom-Dollar Markets
9	B's Beverages
10	Chop-suey Chinese
11	Comércio Mineiro
12	Die Wandernde Kuh
13	Eastern Connection

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

```
with base as(
select
productname, sum(b.unitprice*quantity) as sales, month(orderdate)
month_order
from products a
join order_details b on a.productid = b.productid
join orders c on c.orderid = b.orderid
where orderdate >= '1997-01-01 00:00:00.000' and orderdate <
'1998-01-01 00:00:00.000'
group by productname, month(orderdate)
)
, base2 as(
select base.*, row_number () over (partition by month_order order
by Sales desc) rn from base
)
select
productname, sales, month_order
from base2
where rn <= 5;
```

	productname	sales	month_order
1	Côte de Blaye	20869,20	1
2	Raclette Courdavault	5060,00	1
3	Vegie-spread	3510,00	1
4	Gnocchi di nonna A...	3192,00	1
5	Alice Mutton	3026,40	1
6	Pâté chinois	3456,00	2
7	Sirop d'érable	2622,00	2
8	Gnocchi di nonna A...	2523,20	2
7	Sirop d'érable	2622,00	2
8	Gnocchi di nonna A...	2523,20	2
9	Thüringer Rostbrat...	2376,00	2
10	Rössle Sauerkraut	2074,80	2
11	Raclette Courdavault	7128,00	3
12	Côte de Blaye	6324,00	3
13	Manjimup Dried Ap...	1950,40	3
14	Thüringer Rostbrat...	1782,00	3



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

```
create view orderdetails as
select b.productname, a.*,
a.unitprice*(1-discount) as
discounted_price from order_details a
join products b on a.productid =
b.productid;

select * from orderdetails;
```

	productname	OrderID	ProductID	UnitPrice	Quantity	Discount	discounted_price
1	Queso Cabrales	10248	11	14,00	12	0	14
2	Singaporean Hokkien Fried Mee	10248	42	9,80	10	0	9,8
3	Mozzarella di Giovanni	10248	72	34,80	5	0	34,8
4	Tofu	10249	14	18,60	9	0	18,6
5	Manjimup Dried Apples	10249	51	42,40	40	0	42,4
6	Jack's New England Clam Chowder	10250	41	7,70	10	0	7,7
7	Manjimup Dried Apples	10250	51	42,40	35	0,15	36,04
8	Louisiana Fiery Hot Pepper Sauce	10250	65	16,80	15	0,15	14,28
9	Gustaf's Knäckebröd	10251	22	16,80	6	0,05	15,96
10	Ravioli Angelo	10251	57	15,60	15	0,05	14,82
11	Louisiana Fiery Hot Pepper Sauce	10251	65	16,80	20	0	16,8
12	Sir Rodney's Marmalade	10252	20	64,80	40	0,05	61,56
13	Geitost	10252	33	2,00	25	0,05	1,9
14	Camembert Pierrot	10252	60	27,20	40	0	27,2
15	Gorgonzola Telino	10253	31	10,00	20	0	10
16	Chartreuse verte	10253	39	14,40	42	0	14,4

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

```
CREATE PROCEDURE Invoice @CustomerID  
nvarchar(30)
```

```
AS
```

```
select a.CustomerID, companyname,  
OrderID, OrderDate, RequiredDate,  
ShippedDate from customers a
```

```
join orders b on a.CustomerID =  
b.CustomerID
```

```
WHERE a.CustomerID = @CustomerID;
```

```
exec Invoice @CustomerID = 'VINET'
```

	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	VINET	Vins et alcools Chevalier	10274	1996-08-06 00:00:00.000	1996-09-03 00:00:00.000	1996-08-16 00:00:00.000
3	VINET	Vins et alcools Chevalier	10295	1996-09-02 00:00:00.000	1996-09-30 00:00:00.000	1996-09-10 00:00:00.000
4	VINET	Vins et alcools Chevalier	10737	1997-11-11 00:00:00.000	1997-12-09 00:00:00.000	1997-11-18 00:00:00.000
5	VINET	Vins et alcools Chevalier	10739	1997-11-12 00:00:00.000	1997-12-10 00:00:00.000	1997-11-17 00:00:00.000