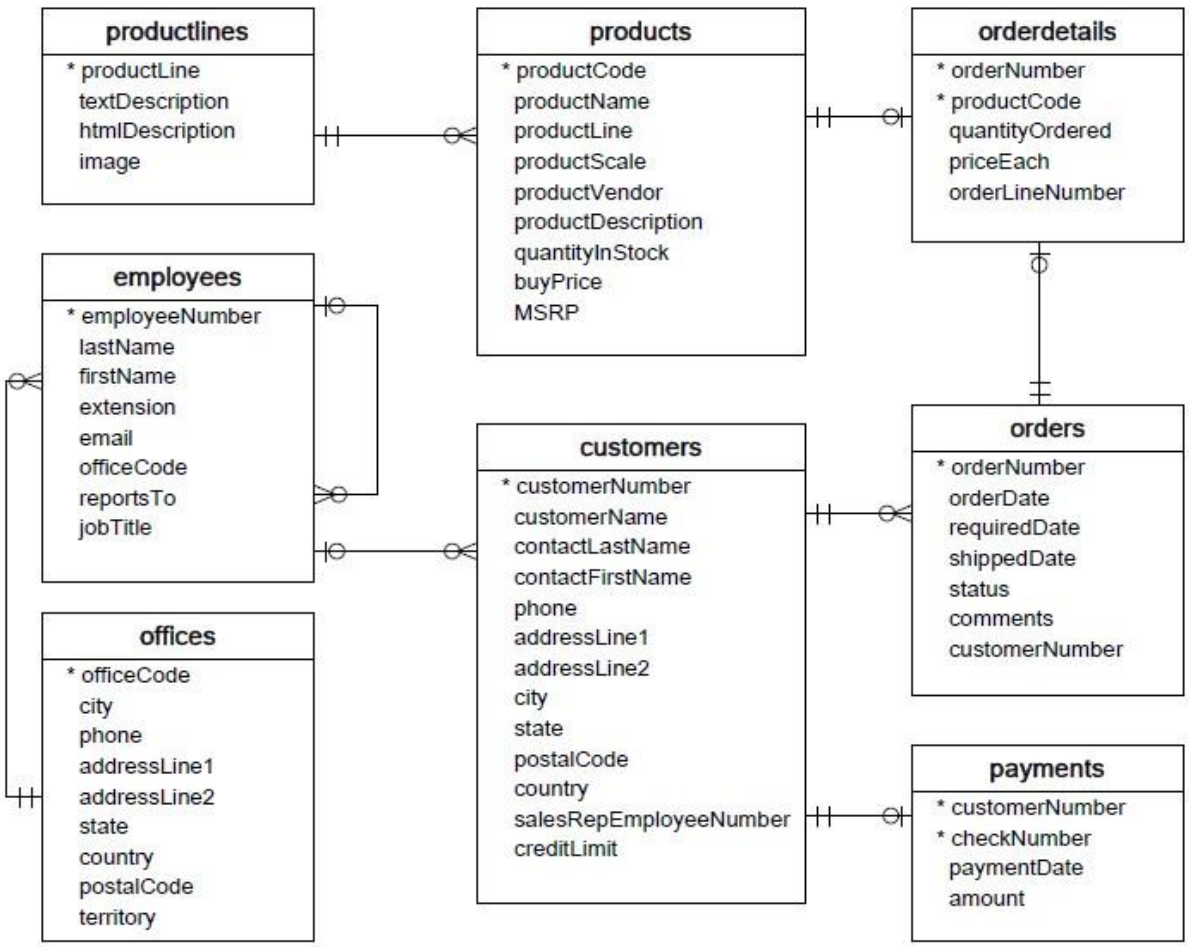
SE212 Database System and design

Lab 9 Basic DML



Write a SQL statement to retrieve the data from the given database to answer the question.

1. How many orders for each status?

	count(*)	status
▶	303	Shipped
	4	Resolved
	6	Cancelled
	4	On Hold
	3	Disputed
	6	In Process

```
SELECT count(*), status FROM newlabdata.orders group by status;
```

2. List customers whose orders are in "Disputed" status?

```
1 • use `newlabdata`;
2 • select customers.customerName, orders.status
3   from orders
4   inner join customers where status = 'Disputed'
5   group by customerName
6   order by customerName asc;
7
8
```

Result Grid | Filter Rows: | Export: | Wrap Cel

customerName	status
Alpha Cognac	Disputed
American Souvenirs Inc	Disputed
Amica Models & Co.	Disputed
ANG Resellers	Disputed
Anna's Decorations, Ltd	Disputed
Anton Designs, Ltd.	Disputed
Asian Shopping Network, Co	Disputed
Asian Treasures, Inc.	Disputed
Atelier graphique	Disputed
Australian Collectables, Ltd	Disputed

3. List the customer who cancel the order. Hint: The order that is canceled has "Cancelled" status.

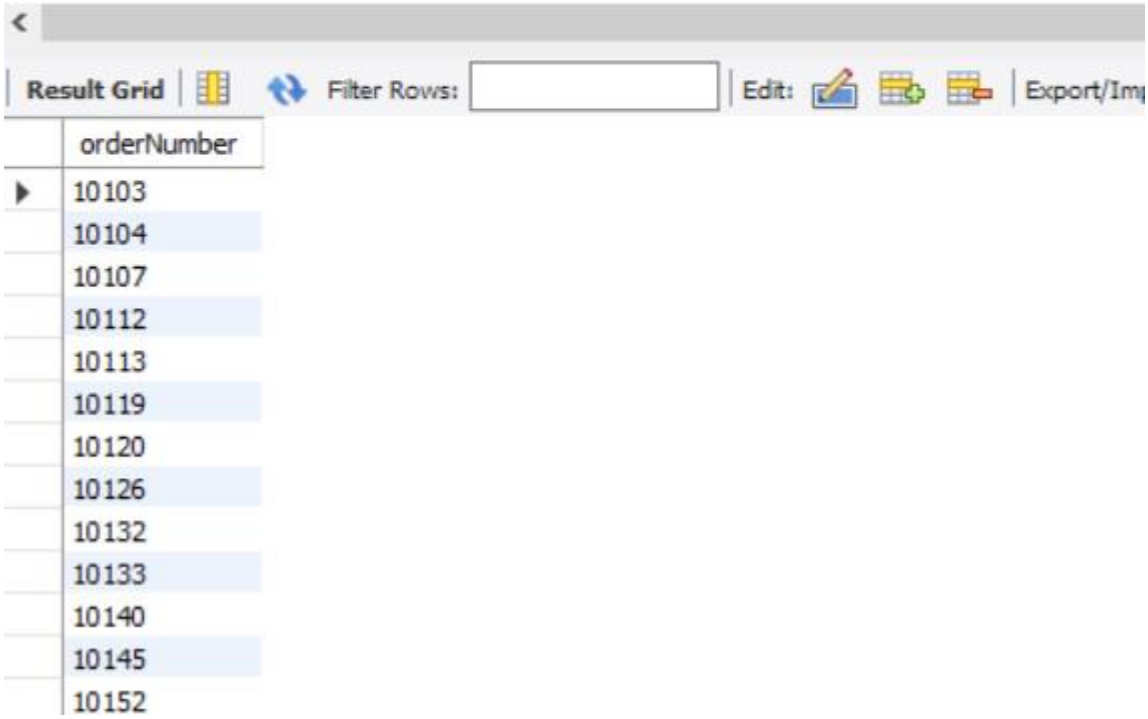
```
1 • use `newlabdata`;
2 • select customers.customerName, orders.status
3   from orders
4   inner join customers where status = 'Cancelled'
5   group by customerName
6   order by customerName asc;
7
8
```

Result Grid | Filter Rows: | Export: | Wrap Cell C

customerName	status
Alpha Cognac	Cancelled
American Souvenirs Inc	Cancelled
Amica Models & Co.	Cancelled
ANG Resellers	Cancelled
Anna's Decorations, Ltd	Cancelled
Anton Designs, Ltd.	Cancelled
Asian Shopping Network, Co	Cancelled
Asian Treasures, Inc.	Cancelled
Atelier graphique	Cancelled
Australian Collectables, Ltd	Cancelled

4. Identify the order where required date is later than 30 days after their orders.

```
1 • use `newlabdata`;
2 • select orders.orderNumber
3   from orders
4   where (orders.requiredDate - orders.orderDate) > 30;
```



Result Grid | Filter Rows: | Edit: | Export/Im

orderNumber
10103
10104
10107
10112
10113
10119
10120
10126
10132
10133
10140
10145
10152

5. Identify the order where shipment date is within 15 days after the order.

```
1  use `newlabdata`;
2  select orders.orderNumber
3  from orders
4  where (orders.shippedDate - orders.orderDate) <15;
```

Result Grid | Filter Rows: | Edit: | Export/Impo

orderNumber
10100
10101
10102
10105
10106
10107
10108
10109
10110
10111
10112
10113
10114
10115

6. List the customer and their total number of order. You need to sort the result by descending order of number of order.

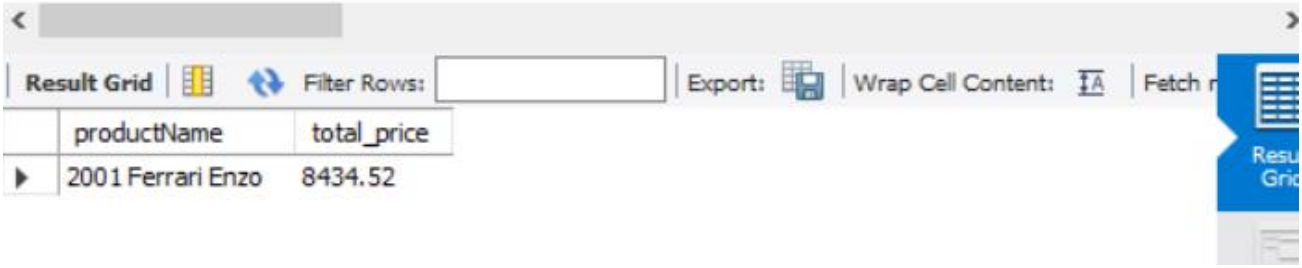
```
1 • use `newlabdata`;
2 • select customers.customerName ,sum(orderdetails.quantityOrdered) as 'total'
3   from orderdetails
4   inner join orders on orders.orderNumber = orderdetails.orderNumber
5   inner join customers on customers.customerNumber = orders.customerNumber
6   group by customers.customerName
7   order by total desc;
8
9
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

customerName	total
Euro+ Shopping Channel	9327
Mini Gifts Distributors Ltd.	6366
Australian Collectors, Co.	1926
La Rochelle Gifts	1832
AV Stores, Co.	1778
Muscle Machine Inc	1775
Down Under Souveniers, Inc	1691
The Sharp Gifts Warehouse	1656
Rovelli Gifts	1650
Kelly's Gift Shop	1647

7. Which product has the highest sales?

```
1 •  use `newlabdata`;
2 •  select products.productName ,
3    orderdetails.quantityOrdered * orderdetails.priceEach as 'total_price'
4    from orderdetails
5    inner join products on products.productCode = orderdetails.productCode
6    group by products.productName
7    order by total_price desc
8    limit 1;
9
```



8. Display the product by name and its total sales.

```
use `newlabdata`;
select products.productName ,
sum(orderdetails.quantityOrdered) as 'total_sales'
from orderdetails
inner join products on products.productCode = orderdetails.productCode
group by products.productName
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

productName	total_sales
1969 Harley Davidson Ultimate Chopper	1057
1952 Alpine Renault 1300	961
1996 Moto Guzzi 1100i	999
2003 Harley-Davidson Eagle Drag Bike	985
1972 Alfa Romeo GTA	1030
1962 LanciaA Delta 16V	932
1968 Ford Mustang	933
2001 Ferrari Enzo	1019
1958 Setra Bus	972
2002 Suzuki XREO	1028

9. Display the total payments of each days.

```
use `newlabdata`;
select paymentDate,sum(amount) from payments
group by paymentDate
order by paymentDate asc;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Conte

paymentDate	sum(amount)
2003-01-16	10223.83
2003-01-28	10549.01
2003-01-30	5494.78
2003-02-16	50218.95
2003-02-20	53959.21
2003-02-25	40206.20
2003-03-02	52151.81
2003-03-09	51001.22
2003-03-12	22292.62
2003-03-20	25833.14

10. Display the average of each payments.

```
1 •  use `newlabdata`;
2 •  select paymentDate,avg(amount) from payments
3    group by paymentDate
4    order by paymentDate asc;
5
6
7
8
```

Result Grid | Filter Rows: | Export: | Wrap Cell

paymentDate	avg(amount)
2003-01-16	10223.830000
2003-01-28	10549.010000
2003-01-30	5494.780000
2003-02-16	50218.950000
2003-02-20	53959.210000
2003-02-25	40206.200000
2003-03-02	52151.810000
2003-03-09	51001.220000
2003-03-12	22292.620000
2003-03-20	25833.140000