

Assignment 1

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PRN No-

Subject-DBMS

41. Display the fullname of the customers by concatenating firstname and lastname and give a column alias.

```
mysql> select concat(contactfirstname," ",contactlastname) from customers;
+-----+
| concat(contactfirstname," ",contactlastname) |
+-----+
| Carine Schmitt |
| Jean King |
| Peter Ferguson |
| Janine Labrune |
| Jonas Bergulfsen |
| Susan Nelson |
| Zbyszek Piestrzeniewicz |
| Roland Keitel |
| Julie Murphy |
| Kwai Lee |
| Diego Freyre |
| Christina Berglund |
| Jytte Petersen |
+-----+
```

40. Find the lowest buyprice for each productline from the products table and display only those productlines whose lowest buyprice is less than 21.

```
mysql> select productline,min(buyprice) as lowestbuyprice from products group
p by productline having lowestbuyprice<21;
+-----+-----+
| productline | lowestbuyprice |
+-----+-----+
| Classic Cars | 15.91 |
| Vintage Cars | 20.61 |
+-----+-----+
2 rows in set (0.00 sec)
```

39. Find the lowest buyprice from the products table

```
mysql> select min(buyprice) from products;
+-----+
| min(buyprice) |
+-----+
| 15.91 |
+-----+
1 row in set (0.00 sec)
```

38. Find the maximum payment for each customer form the payments table

```
mysql> select customernumber, max(amount) from payments group by customernumber;
```

| customernumber | max(amount) |
|----------------|-------------|
| 103 | 14571.44 |
| 112 | 33347.88 |
| 114 | 82261.22 |
| 119 | 49523.67 |
| 121 | 50218.95 |
| 124 | 111654.40 |
| 128 | 33820.62 |
| 129 | 26248.78 |
| 131 | 50025.35 |
| 141 | 120166.58 |
| 144 | 36005.71 |
| 145 | 53959.21 |
| 146 | 49614.72 |
| 148 | 105743.00 |
| 151 | 58841.35 |
| 157 | 63357.13 |
| 161 | 50743.65 |
| 166 | 44160.92 |
| 167 | 85024.46 |
| 171 | 42783.81 |
| 172 | 51209.58 |
| 173 | 20355.24 |
| 175 | 42044.77 |
| 177 | 47177.59 |
| 181 | 44400.50 |
| 186 | 37602.48 |
| 187 | 52825.29 |
| 189 | 32538.74 |

37. Find the maximum amount from the payments table in the year 2004

```
mysql> select max(amount) from payments where year(paymentdate)=2004;
```

| max(amount) |
|-------------|
| 116208.40 |

1 row in set (0.00 sec)

36. Find the maximum amount from the payments table

```
mysql> select max(amount) from payments;
+-----+
| max(amount) |
+-----+
|    120166.58 |
+-----+
1 row in set (0.00 sec)

mysql> |
```

35. Find the totalprice for each order number and display those orders having total greater than 60000

```
mysql> select ordernumber,sum(priceeach*quantityordered) as totalprice from
orderdetails group by ordernumber having totalprice>60000;
+-----+-----+
| ordernumber | totalprice |
+-----+-----+
|         10165 |    67392.85 |
|         10287 |    61402.00 |
|         10310 |    61234.67 |
+-----+-----+
3 rows in set (0.00 sec)
```

34. Display the totalprice for the order number 10110

```
mysql> select ordernumber,sum(quantityordered) from orderdetails where order
number=10110;
+-----+-----+
| ordernumber | sum(quantityordered) |
+-----+-----+
|         10110 |                570 |
+-----+-----+
1 row in set (0.00 sec)
```

33. Display the total number of items of the order details table

```
mysql> select sum(quantityordered) as totalitems from orderdetails;
+-----+
| totalitems |
+-----+
|    105516 |
+-----+
1 row in set (0.00 sec)
```

32. Find the average of buyprice in each productline and display only those productlines having average buyprice greater than 50

```
mysql> select productline,avg(buyprice) from products group by productline h
aving avg(buyprice)>50;
+-----+-----+
| productline | avg(buyprice) |
+-----+-----+
| Classic Cars | 64.446316 |
| Motorcycles | 50.685385 |
| Trucks and Buses | 56.329091 |
+-----+-----+
3 rows in set (0.00 sec)
```

31. Display the average of distinct buy price of products from the products table

```
mysql> select avg(distinct buyprice) from products;
+-----+
| avg(distinct buyprice) |
+-----+
| 54.372870 |
+-----+
1 row in set (0.00 sec)
```

30. Display the average buy price of the productline "Classic Cars" from the products table

```
mysql> select productline,avg(buyprice) from products group by productline h
aving productline='classic cars';
+-----+-----+
| productline | avg(buyprice) |
+-----+-----+
| Classic Cars | 64.446316 |
+-----+-----+
1 row in set (0.01 sec)

mysql> |
```

29. Display the average buy price of all products from the products

```
mysql> select productline,avg(buyprice) from products group by productline;
+-----+-----+
| productline | avg(buyprice) |
+-----+-----+
| Classic Cars | 64.446316 |
| Motorcycles | 50.685385 |
| Planes | 49.629167 |
| Ships | 47.007778 |
| Trains | 43.923333 |
| Trucks and Buses | 56.329091 |
| Vintage Cars | 46.066250 |
+-----+-----+
7 rows in set (0.00 sec)
```

22. Display employees whose first names start with the letter T , end with the letter m, and contain any single character between

```
mysql> select firstname from employees where firstname like 't_%m';
+-----+
| firstname |
+-----+
| Tom       |
+-----+
1 row in set (0.00 sec)
```

19. Display the employees whose last names end with the string 'son'

```
mysql> select lastname from employees where lastname like '%on%';
+-----+
| lastname |
+-----+
| Patterson |
| Patterson |
| Bondur    |
| Thompson  |
| Patterson |
| Bondur    |
| Jones     |
+-----+
7 rows in set (0.00 sec)
```

20. Display employees whose last names start with the letter a

```
mysql> select lastname from employees where lastname like 'a%';  
Empty set (0.00 sec)
```

```
mysql> select lastname from employees;
```

| lastname |
|-----------|
| Murphy |
| Patterson |
| Firrelli |
| Patterson |
| Bondur |
| Bow |
| Jennings |
| Thompson |
| Firrelli |
| Patterson |
| Tseng |
| Vanauf |
| Bondur |
| Hernandez |
| Castillo |
| Bott |
| Jones |
| Fixter |
| Marsh |
| King |
| Nishi |
| Kato |
| Gerard |

```
23 rows in set (0.00 sec)
```

18. Display the distinct lastname from the employees table

```
mysql> select distinct lastname from employees;
+-----+
| lastname |
+-----+
| Murphy   |
| Patterson|
| Firrelli |
| Bondur   |
| Bow       |
| Jennings|
| Thompson  |
| Tseng     |
| Vanauf    |
| Hernandez |
| Castillo  |
| Bott      |
| Jones     |
| Fixter    |
| Marsh     |
| King      |
| Nishi     |
| Kato      |
| Gerard    |
+-----+
19 rows in set (0.00 sec)
```

2. Display all the details of the Employees table

```
mysql> select * from employees;
+-----+-----+-----+-----+-----+-----+
| employeeNumber | lastName | firstName | extension | email |
| officeCode | reportsTo | jobTitle |
+-----+-----+-----+-----+-----+
| 1002 | Murphy | Diane | x5800 | dmurphy@classicmodelcars.com |
| 1 | | NULL | President |
| 1056 | Patterson | Mary | x4611 | mpatterso@classicmodelcars.com |
| 1 | 1002 | VP Sales |
```

17. Display offices not located in USA and France from offices table

```
mysql> select country from offices where country not in('usa','france');
+-----+
| country |
+-----+
| Japan   |
| Australia |
| UK      |
+-----+
```

15. Display the lastname, firstname and officecode from the employees table whose officecode is from 1 to 3

```
mysql> select lastname,firstname,officecode from employees where officecode<=3;
+-----+-----+-----+
| lastname | firstname | officecode |
+-----+-----+-----+
| Murphy   | Diane     | 1           |
| Patterson | Mary      | 1           |
| Firrelli | Jeff      | 1           |
| Bow      | Anthony   | 1           |
| Jennings | Leslie    | 1           |
| Thompson | Leslie    | 1           |
| Firrelli | Julie     | 2           |
| Patterson | Steve     | 2           |
| Tseng     | Foon Yue  | 3           |
| Vanauf    | George    | 3           |
+-----+-----+-----+
10 rows in set (0.00 sec)
```

14. Display the details of all customers located in USA or France and have a credit limit greater than 100k

```
mysql> select customername,country,creditlimit from customers where country in('usa','france') and creditlimit>=100000;
+-----+-----+-----+
| customername | country | creditlimit |
+-----+-----+-----+
| La Rochelle Gifts | France | 118200.00 |
| Mini Gifts Distributors Ltd. | USA | 210500.00 |
| Land of Toys Inc. | USA | 114900.00 |
| Saveley & Henriot, Co. | France | 123900.00 |
| Muscle Machine Inc | USA | 138500.00 |
| Diecast Classics Inc. | USA | 100600.00 |
| Collectable Mini Designs Co. | USA | 105000.00 |
| Marta's Replicas Co. | USA | 123700.00 |
| Mini Classics | USA | 102700.00 |
| Corporate Gift Ideas Co. | USA | 105000.00 |
| Online Diecast Creations Co. | USA | 114200.00 |
+-----+-----+-----+
11 rows in set (0.00 sec)
```


13. Display the lastname, firstname , jobtitle, officecode from the employees table who works as Sales Rep or whose officecode is 1 in the sorted order of officecode and jobtitle

```
mysql> select lastname,firstname,jobtitle,officecode from employees where jobtitle='sales rep' or officecode=1 order by officecode,jobtitle;
```

| lastname | firstname | jobtitle | officecode |
|-----------|-----------|--------------------|------------|
| Murphy | Diane | President | 1 |
| Bow | Anthony | Sales Manager (NA) | 1 |
| Jennings | Leslie | Sales Rep | 1 |
| Thompson | Leslie | Sales Rep | 1 |
| Firrelli | Jeff | VP Marketing | 1 |
| Patterson | Mary | VP Sales | 1 |
| Firrelli | Julie | Sales Rep | 2 |
| Patterson | Steve | Sales Rep | 2 |
| Tseng | Foon Yue | Sales Rep | 3 |
| Vanauf | George | Sales Rep | 3 |
| Bondur | Loui | Sales Rep | 4 |
| Hernandez | Gerard | Sales Rep | 4 |
| Castillo | Pamela | Sales Rep | 4 |
| Gerard | Martin | Sales Rep | 4 |
| Nishi | Mami | Sales Rep | 5 |
| Kato | Yoshimi | Sales Rep | 5 |
| Fixter | Andy | Sales Rep | 6 |
| Marsh | Peter | Sales Rep | 6 |
| King | Tom | Sales Rep | 6 |
| Bott | Larry | Sales Rep | 7 |
| Jones | Barry | Sales Rep | 7 |

21 rows in set (0.00 sec)

11. Display the lastname, firstname , jobtitle, officecode from the employees table who works as Sales Rep and whose officecode is 1

```
mysql> select lastname,firstname,jobtitle from employees where jobtitle= 'sales rep' and officecode=1;
```

| lastname | firstname | jobtitle |
|----------|-----------|-----------|
| Jennings | Leslie | Sales Rep |
| Thompson | Leslie | Sales Rep |

2 rows in set (0.00 sec)

10. Display the lastname, firstname and jobtitle from the employees table who works as Sales Rep

```
mysql> select lastname,firstname,jobtitle from employees where jobtitle= 'sales rep';
```

| lastname | firstname | jobtitle |
|-----------|-----------|-----------|
| Jennings | Leslie | Sales Rep |
| Thompson | Leslie | Sales Rep |
| Firrelli | Julie | Sales Rep |
| Patterson | Steve | Sales Rep |
| Tseng | Foon Yue | Sales Rep |
| Vanauf | George | Sales Rep |
| Bondur | Loui | Sales Rep |
| Hernandez | Gerard | Sales Rep |
| Castillo | Pamela | Sales Rep |
| Bott | Larry | Sales Rep |
| Jones | Barry | Sales Rep |
| Fixter | Andy | Sales Rep |
| Marsh | Peter | Sales Rep |
| King | Tom | Sales Rep |
| Nishi | Mami | Sales Rep |
| Kato | Yoshimi | Sales Rep |
| Gerard | Martin | Sales Rep |

17 rows in set (0.00 sec)

8. Display the structure of the Orderdetails table

```
mysql> desc orderdetails;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| orderNumber    | int           | NO   | PRI | NULL    |       |
| productCode    | varchar(15)   | NO   | PRI | NULL    |       |
| quantityOrdered | int           | NO   |     | NULL    |       |
| priceEach      | decimal(10,2) | NO   |     | NULL    |       |
| orderLineNumber | smallint      | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

6. Display the lastname, firstname from the customers table sorted in the reverse alphabetical order of lastname

```
mysql> select contactlastname,contactfirstname from customers order by contactlastname desc,contactfirstname;
+-----+-----+
| contactlastname | contactfirstname |
+-----+-----+
| Young          | Dorothy         |
| Young          | Jeff            |
| Young          | Julie           |
| Young          | Mary            |
| Yoshido        | Juri            |
| Walker         | Brydey          |
| Victorino      | Wendy           |
| Urs            | Braun           |
| Tseng          | Jerry           |
| Tonini         | Daniel          |
| Thompson       | Steve           |
| Thompson       | Valarie         |
| Taylor         | Leslie          |
| Taylor         | Sue             |
+-----+-----+
```

```
mysql> select contactlastname,contactfirstname from customers order by contactlastname desc;
+-----+-----+
| contactlastname | contactfirstname |
+-----+-----+
| Young          | Jeff            |
| Young          | Julie           |
| Young          | Mary            |
| Young          | Dorothy         |
| Yoshido        | Juri            |
| Walker         | Brydey          |
| Victorino      | Wendy           |
| Urs            | Braun           |
| Tseng          | Jerry           |
| Tonini         | Daniel          |
+-----+-----+
```

4. Display the structure of the Customers table

```
mysql> desc customers;
+-----+-----+-----+-----+-----+-----+
| Field                | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| customerNumber       | int           | NO   | PRI | NULL    |       |
| customerName         | varchar(50)   | NO   |     | NULL    |       |
| contactLastName      | varchar(50)   | NO   |     | NULL    |       |
| contactFirstName     | varchar(50)   | NO   |     | NULL    |       |
| phone                | varchar(50)   | NO   |     | NULL    |       |
| addressLine1         | varchar(50)   | NO   |     | NULL    |       |
| addressLine2         | varchar(50)   | YES  |     | NULL    |       |
| city                 | varchar(50)   | NO   |     | NULL    |       |
| state                | varchar(50)   | YES  |     | NULL    |       |
| postalCode           | varchar(15)   | YES  |     | NULL    |       |
| country              | varchar(50)   | NO   |     | NULL    |       |
| salesRepEmployeeNumber | int           | YES  | MUL | NULL    |       |
| creditLimit          | decimal(10,2) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
13 rows in set (0.00 sec)

mysql> |
```

12. Display the name, country and state of the customers who live in CA, USA and have a credit limit greater than 100k

```
mysql> select customername, country, state from customers where country='usa' and state='ca' and creditlimit>100000;
+-----+-----+-----+
| customername                | country | state |
+-----+-----+-----+
| Mini Gifts Distributors Ltd. | USA     | CA    |
| Collectable Mini Designs Co. | USA     | CA    |
| Corporate Gift Ideas Co.    | USA     | CA    |
+-----+-----+-----+
3 rows in set (0.01 sec)
```

9. Display the ordernumber and total price of the products from the orderdetails table sorted in the ascending order of totalprice

```
mysql> select ordernumber,sum(priceeach*quantityordered) as totalprice from  
orderdetails group by ordernumber order by totalprice asc;
```

| ordernumber | totalprice |
|-------------|------------|
| 10408 | 615.45 |
| 10144 | 1128.20 |
| 10158 | 1491.38 |
| 10116 | 1627.56 |
| 10345 | 1676.14 |
| 10242 | 1679.92 |
| 10364 | 1834.56 |
| 10286 | 1960.80 |
| 10409 | 2326.18 |
| 10317 | 2434.25 |
| 10277 | 2611.84 |
| 10132 | 2880.00 |
| 10118 | 3101.40 |
| 10376 | 3452.75 |
| 10303 | 3474.66 |
| 10387 | 3516.04 |
| 10189 | 3879.96 |
| 10294 | 4424.40 |
| 10154 | 4465.85 |
| 10385 | 4466.71 |
| 10156 | 4599.52 |
| 10255 | 4632.31 |
| 10256 | 4710.73 |

1. Display the structure of employee table

```
mysql> select lastname,firstname,jobtitle from employees;
```

| lastname | firstname | jobtitle |
|-----------|-----------|----------------------|
| Murphy | Diane | President |
| Patterson | Mary | VP Sales |
| Firrelli | Jeff | VP Marketing |
| Patterson | William | Sales Manager (APAC) |
| Bondur | Gerard | Sale Manager (EMEA) |
| Bow | Anthony | Sales Manager (NA) |
| Jennings | Leslie | Sales Rep |
| Thompson | Leslie | Sales Rep |
| Firrelli | Julie | Sales Rep |
| Patterson | Steve | Sales Rep |
| Tseng | Foon Yue | Sales Rep |
| Vanauf | George | Sales Rep |
| Bondur | Loui | Sales Rep |
| Hernandez | Gerard | Sales Rep |
| Castillo | Pamela | Sales Rep |
| Bott | Larry | Sales Rep |
| Jones | Barry | Sales Rep |
| Fixter | Andy | Sales Rep |
| Marsh | Peter | Sales Rep |
| King | Tom | Sales Rep |
| Nishi | Mami | Sales Rep |
| Kato | Yoshimi | Sales Rep |
| Gerard | Martin | Sales Rep |

23 rows in set (0.00 sec)

```
mysql> |
```

5. Display the lastname, firstname from the customers table sorted in the alphabetical order of lastname

```
mysql> select contactlastname,contactfirstname from customers order by contactlastname;
```

| contactlastname | contactfirstname |
|-----------------|------------------|
| Accorti | Paolo |
| Altagar,G M | Raanan |
| Andersen | Mel |
| Anton | Carmen |
| Ashworth | Rachel |
| Barajas | Miguel |
| Benitez | Violeta |
| Bennett | Helen |
| Berglund | Christina |
| Bergulfsen | Jonas |
| Bertrand | Marie |
| Brown | Julie |
| Brown | Ann |
| Brown | William |
| Calaghan | Ben |
| Camino | Alejandra |
| Cartrain | Pascale |
| Cassidy | Dean |
| Cervantes | Francisca |
| Chandler | Brian |