PRACTICAL- 01

```
mysql> select * from salesman;
+-------------+------------+----------+-----------+
| salesman_id | name       | city     | comission |
+-------------+------------+----------+-----------+
|        5001 | James Hoog | New York |      0.15 |
|        5002 | Nail Knite | Paris    |      0.13 |
|        5003 | Lauson Hen |          |      0.12 |
|        5005 | Pit Alex   | London   |      0.11 |
|        5006 | Mc Lyon    | Paris    |      0.14 |
|        5007 | Paul Adam  | Rome     |      0.13 |
+-------------+------------+----------+-----------+
6 rows in set (0.00 sec)
```

```
mysql> select * from customer;
+-------------+-----------------+------------+-------+-------------+
| customer_id | customer_name   | city       | grade | salesman_id |
+-------------+-----------------+------------+-------+-------------+
|        3001 | Brad Guzan      | London     |  NULL |        NULL |
|        3002 | Nick Rimando    | New York   |   100 |        5001 |
|        3003 | Jozy Altidor    | Moscow     |   200 |        5007 |
|        3004 | Fabian Johnson  | Paris      |   300 |        5006 |
|        3005 | Graham Zusi     | California |   200 |        5002 |
|        3007 | Brad Davis      | New York   |   200 |        5001 |
|        3008 | Julian Green    | London     |   300 |        5002 |
|        3009 | Geoff Cameron   | Berlin     |   100 |        NULL |
+-------------+-----------------+------------+-------+-------------+
```

```
mysql> select * from orders;
+--------+-----------+------------+-------------+-------------+
| ord_no | purch_amt | ord_date   | customer_id | salesman_id |
+--------+-----------+------------+-------------+-------------+
|  70001 |     150.5 | 2012-10-05 |        3005 |        5002 |
|  70002 |     65.26 | 2012-10-05 |        3002 |        5001 |
|  70003 |    2480.4 | 2012-10-10 |        3009 |        NULL |
|  70004 |     110.5 | 2012-08-17 |        3009 |        NULL |
|  70005 |    2400.6 | 2012-07-27 |        3007 |        5001 |
|  70007 |     948.5 | 2012-09-10 |        3005 |        5002 |
|  70008 |      5760 | 2012-09-10 |        3002 |        5001 |
|  70009 |    270.65 | 2012-09-10 |        3001 |        NULL |
|  70010 |   1983.43 | 2012-10-10 |        3004 |        5006 |
|  70011 |     75.29 | 2012-08-17 |        3003 |        5007 |
|  70012 |    250.45 | 2012-06-27 |        3008 |        5002 |
+--------+-----------+------------+-------------+-------------+
```

1. Display name and commission for all the salesmen.

```
mysql> select name,comission from salesman;
+-------------+------------+
| name        | comission  |
+-------------+------------+
| James Hoog  |       0.15 |
| Nail Knite  |       0.13 |
| Lauson Hen  |       0.12 |
| Pit Alex    |       0.11 |
| Mc Lyon     |       0.14 |
| Paul Adam   |       0.13 |
+-------------+------------+
6 rows in set (0.02 sec)
```

2. Retrieve salesman id of all salesmen from orders table without any repeats.

```
mysql> select distinct salesman_id from salesman;
+-------------+
| salesman_id |
+-------------+
|        5001 |
|        5002 |
|        5003 |
|        5005 |
|        5006 |
|        5007 |
+-------------+
6 rows in set (0.00 sec)
```

3. Display names and city of salesman, who belongs to the city of Paris.

```
mysql> select name,city from salesman where city='paris';
+------------+-------+
| name       | city  |
+------------+-------+
| Nail Knite | Paris |
| Mc Lyon    | Paris |
+------------+-------+
2 rows in set (0.01 sec)
```

4. Display all the information for those customers with a grade of 200.

```
mysql> select * from customer where grade=200;
+-------------+---------------+------------+-------+-------------+
| customer_id | customer_name | city       | grade | salesman_id |
+-------------+---------------+------------+-------+-------------+
|        3003 | Jozy Altidor  | Moscow     |   200 |        5007 |
|        3005 | Graham Zusi   | California |   200 |        5002 |
|        3007 | Brad Davis    | New York   |   200 |        5001 |
+-------------+---------------+------------+-------+-------------+
3 rows in set (0.00 sec)
```

5. Display the order number, order date and the purchase amount for order(s) which will be delivered by the salesman with ID 5001

```
mysql> select ord_no,ord_date,purch_amt from orders where salesman_id=5001;;
+--------+------------+-----------+
| ord_no | ord_date   | purch_amt |
+--------+------------+-----------+
|  70002 | 2012-10-05 |     65.26 |
|  70005 | 2012-07-27 |    2400.6 |
|  70008 | 2012-09-10 |      5760 |
+--------+------------+-----------+
3 rows in set (0.01 sec)
```

6. Display all the customers, who are either belongs to the city New York or not had a grade above 100.

```
mysql> select * from customer where city='New York' or not grade >100;;
+-------------+---------------+----------+-------+-------------+
| customer_id | customer_name | city     | grade | salesman_id |
+-------------+---------------+----------+-------+-------------+
|        3002 | Nick Rimando  | New York |   100 |        5001 |
|        3007 | Brad Davis    | New York |   200 |        5001 |
|        3009 | Geoff Cameron | Berlin   |   100 |        NULL |
+-------------+---------------+----------+-------+-------------+
```

7. Find those salesmen with all information who gets the commission within a range of 0.12 and 0.14.

```
mysql> select salesman_id,name,city,comission from salesman where comission between 0.12 AND 0.14;;
+------------+-----------+------+-----------+
| salesman_id | name      | city | comission |
+------------+-----------+------+-----------+
|       5002 | Nail Knite | Paris |      0.13 |
|       5007 | Paul Adam  | Rome  |      0.13 |
+------------+-----------+------+-----------+
```

8. Find all those customers with all information whose names are ending with the letter 'n'.

```
mysql>  select * from customer where customer_name like '%n';;
+-------------+----------------+--------+-------+-------------+
| customer_id | customer_name  | city   | grade | salesman_id |
+-------------+----------------+--------+-------+-------------+
|        3001 | Brad Guzan     | London |  NULL |        NULL |
|        3004 | Fabian Johnson | Paris  |   300 |        5006 |
|        3008 | Julian Green   | London |   300 |        5002 |
|        3009 | Geoff Cameron  | Berlin |   100 |        NULL |
+-------------+----------------+--------+-------+-------------+
4 rows in set (0.01 sec)
```

9. Find those salesmen with all information whose name containing the 1st character is 'N' and the 4th character is 'l' and rests may be any character.

```
mysql> select * from salesman where name like'N__l%';;
+-------------+------------+-------+-----------+
| salesman_id | name       | city  | comission |
+-------------+------------+-------+-----------+
|        5002 | Nail Knite | Paris |      0.13 |
+-------------+------------+-------+-----------+
1 row in set (0.00 sec)
```

10. Find that customer with all information who does not get any grade except NULL.

```
mysql> select * from customer where grade is null;;
+-------------+---------------+--------+-------+-------------+
| customer_id | customer_name | city   | grade | salesman_id |
+-------------+---------------+--------+-------+-------------+
|        3001 | Brad Guzan    | London |  NULL |        NULL |
+-------------+---------------+--------+-------+-------------+
1 row in set (0.00 sec)
```

11. Find the total purchase amount of all orders.

```
mysql> select sum(purch_amt) from orders;;
+--------------------+
| sum(purch_amt)     |
+--------------------+
| 14495.580047607422 |
+--------------------+
1 row in set (0.00 sec)

ERROR:
```

12. Find the number of salesman currently listing for all of their customers.

```
mysql> select count(salesman_id) from orders;;
+---------------------+
| count(salesman_id) |
+---------------------+
|                   8 |
+---------------------+
1 row in set (0.01 sec)

ERROR:
```

13. Find the highest grade for each of the cities of the customers.

```
mysql>  select city,max(grade) from customer Group by city;;
+------------+------------+
| city       | max(grade) |
+------------+------------+
| London     |        300 |
| New York   |        200 |
| Moscow     |        200 |
| Paris      |        300 |
| California |        200 |
| Berlin     |        100 |
+------------+------------+
6 rows in set (0.01 sec)
```

14. Find the highest purchase amount ordered by each customer with their ID and highest purchase amount.

```
mysql> select customer_id,max(purch_amt) from orders group by customer_id;;
+-------------+----------------+
| customer_id | max(purch_amt) |
+-------------+----------------+
|        3001 |         270.65 |
|        3002 |           5760 |
|        3003 |          75.29 |
|        3004 |        1983.43 |
|        3005 |          948.5 |
|        3007 |         2400.6 |
|        3008 |         250.45 |
|        3009 |         2480.4 |
+-------------+----------------+
8 rows in set (0.00 sec)

ERROR:
```

15. Find the highest purchase amount ordered by each customer on a particular date with their ID, order date and highest purchase amount.

```
mysql> select customer_id,ord_date,max(purch_amt) from orders group by customer_id,ord_date;
+-------------+------------+----------------+
| customer_id | ord_date   | max(purch_amt) |
+-------------+------------+----------------+
|        3005 | 2012-10-05 |          150.5 |
|        3002 | 2012-10-05 |          65.26 |
|        3009 | 2012-10-10 |         2480.4 |
|        3009 | 2012-08-17 |          110.5 |
|        3007 | 2012-07-27 |         2400.6 |
|        3005 | 2012-09-10 |          948.5 |
|        3002 | 2012-09-10 |           5760 |
|        3001 | 2012-09-10 |         270.65 |
|        3004 | 2012-10-10 |        1983.43 |
|        3003 | 2012-08-17 |          75.29 |
|        3008 | 2012-06-27 |         250.45 |
+-------------+------------+----------------+
```

16. Find the highest purchase amount on a date '2012-08-17' for each salesman with their ID.

```
mysql> select salesman_id,max(purch_amt) from orders where ord_date='2012-08-17' group by salesman_id;;
+-------------+----------------+
| salesman_id | max(purch_amt) |
+-------------+----------------+
|        NULL |          110.5 |
|        5007 |          75.29 |
+-------------+----------------+
2 rows in set (0.01 sec)
```

17. Find the highest purchase amount with their customer ID and order date, for only those customers who have the highest purchase amount in a day is more than 2000.

```
mysql> select customer_id,ord_date,max(purch_amt) from orders group by customer_id,ord_date having max(purch_amt)>2000;;
+-------------+------------+----------------+
| customer_id | ord_date   | max(purch_amt) |
+-------------+------------+----------------+
|        3003 | 2012-10-10 |         1480.4 |
|        3007 | 2012-07-27 |         2400.6 |
|        3002 | 2012-09-10 |           5760 |
+-------------+------------+----------------+
3 rows in set (0.00 sec)
```

18. Write a SQL statement that counts all orders for a date August 17th, 2012.

```
mysql> select count(*) from orders where ord_date='2012-08-17';;
+----------+
| count(*) |
+----------+
|        2 |
+----------+
1 row in set (0.00 sec)
```