1. From the following table, create a view for those salespersons belong to the city 'New York'.

   Sample table: Salesman
   salesman_id | name | city | commission
   ------------+-----------+----------+-----------
   5001 | James Hoog | New York | 0.15
   5002 | Nail Knite | Paris | 0.13
   5005 | Pit Alex | London | 0.11
   5006 | Mc Lyon | Paris | 0.14
   5007 | Paul Adam | Rome | 0.13
   5003 | Lauson Hen | San Jose | 0.12

   Query :
   create view salesown1_view as select salesman_id,name,city from salesman;
   select * from salesown1_view where city='new york' ;
   Output :

```
mysql> create view salesown1_view as select salesman_id,name,city from salesman;
Query OK, 0 rows affected (0.01 sec)

mysql> select * from salesown1_view where city='new york' ;
+-------------+------------+----------+
| salesman_id | name       | city     |
+-------------+------------+----------+
|        5001 | James Hoog | New York |
+-------------+------------+----------+
1 row in set (0.00 sec)
```

2. From the following table, create a view for all salespersons. Return salesperson ID, name, and city.

   Query :
   create view salesown1_view as select * from salesman;
   select * from salesown1_view;
   Output :

```
mysql> select * from salesown1_view;
+-------------+------------+----------+
| salesman_id | name       | city     |
+-------------+------------+----------+
|        5001 | James Hoog | New York |
|        5002 | Nail Knite | Paris    |
|        5005 | Pit Alex   | London   |
|        5006 | Mc Lyon    | Paris    |
|        5007 | Paul Adam  | Rome     |
|        5003 | Lauson Hen | San Jose |
+-------------+------------+----------+
6 rows in set (0.00 sec)
```

3. From the following table, create a view to find the salespersons of the city 'New York
   Question repeated

4. From the following table, create a view to count the number of customers in each grade.

   Customer table
   customer_id | cust_name | city | grade | salesman_id
   ------------+---------------+------------+-------+-------------
   3002 | Nick Rimando | New York | 100 | 5001
   3007 | Brad Davis | New York | 200 | 5001
   3005 | Graham Zusi | California | 200 | 5002
   3008 | Julian Green | London | 300 | 5002
   3004 | Fabian Johnson | Paris | 300 | 5006
   3009 | Geoff Cameron | Berlin | 100 | 5003
   3003 | Jozy Altidor | Moscow | 200 | 5007
   3001 | Brad Guzan | London | | 5005

   Query :
   create view count_cust as select grade,count(*) from customer group by grade;

   select * from count_cust;

   Output :

```
mysql> create view count_cust as select grade,count(*) from customer group by grade;
Query OK, 0 rows affected (0.03 sec)

mysql>  select * from count_cust;
+-------+----------+
| grade | count(*) |
+-------+----------+
|   100 |        2 |
|   200 |        3 |
|   300 |        2 |
|  NULL |        1 |
+-------+----------+
4 rows in set (0.02 sec)
```

5. From the following table, create a view to count the number of unique customer, compute average and total purchase amount of customer orders by each date.

   Sample table : orders

   ord_no purch_amt ord_date customer_id salesman_id
   ---------- ---------- ---------- ---------- ----------
   70001 150.5 2012-10-05 3005 5002
   70009 270.65 2012-09-10 3001 5005
   70002 65.26 2012-10-05 3002 5001
   70004 110.5 2012-08-17 3009 5003
   70007 948.5 2012-09-10 3005 5002
   70005 2400.6 2012-07-27 3007 5001
   70008 5760 2012-09-10 3002 5001
   70010 1983.43 2012-10-10 3004 5006
   70003 2480.4 2012-10-10 3009 5003
   70012 250.45 2012-06-27 3008 5002
   70011 75.29 2012-08-17 3003 5007
   70013 3045.6 2012-04-25 3002 5001

   Query :
   create view customercount2 as select ord_date, count(distinct customer_id),avg(purch_amt),sum(purch_amt) from orders group by ord_date;

   select * from customercount2;

   Output :

```
mysql> create view customercount2 as select ord_date,
       count(distinct customer_id),avg(purch_amt),sum(purch_amt) from orders group by ord_date;
Query OK, 0 rows affected (0.01 sec)

mysql>  select * from customercount2;
+------------+----------------------------+--------------------+--------------------+
| ord_date   | count(distinct customer_id) | avg(purch_amt)     | sum(purch_amt)     |
+------------+----------------------------+--------------------+--------------------+
| 2012-04-25 |                          1 |   3045.60009765625 |   3045.60009765625 |
| 2012-06-27 |                          1 |  250.4499969482422 |  250.4499969482422 |
| 2012-07-27 |                          1 |   2400.60009765625 |   2400.60009765625 |
| 2012-08-17 |                          2 |  92.89500045776367 | 185.79000091552734 |
| 2012-09-10 |                          3 |  2326.383331298828 |  6979.149993896484 |
| 2012-10-05 |                          2 | 107.88000106811523 | 215.76000213623047 |
| 2012-10-10 |                          2 | 2231.9149780273438 | 4463.8299560546875 |
+------------+----------------------------+--------------------+--------------------+
7 rows in set (0.03 sec)
```

6. From the following tables, create a view to get the salesperson and customer by name. Return order name, purchase amount, salesperson ID, name, customer name.

Sample table: salesman

salesman_id | name | city | commission
------------+------------+----------+------------
5001 | James Hoog | New York | 0.15
5002 | Nail Knite | Paris | 0.13
5005 | Pit Alex | London | 0.11
5006 | Mc Lyon | Paris | 0.14
5007 | Paul Adam | Rome | 0.13
5003 | Lauson Hen | San Jose | 0.12

Sample table: customer

customer_id | cust_name | city | grade | salesman_id
------------+----------------+------------+-------+-------------
3002 | Nick Rimando | New York | 100 | 5001
3007 | Brad Davis | New York | 200 | 5001
3005 | Graham Zusi | California | 200 | 5002
3008 | Julian Green | London | 300 | 5002
3004 | Fabian Johnson | Paris | 300 | 5006
3009 | Geoff Cameron | Berlin | 100 | 5003
3003 | Jozy Altidor | Moscow | 200 | 5007
3001 | Brad Guzan | London | | 5005

Sample table: orders

ord_no purch_amt ord_date customer_id salesman_id
---------- ---------- ---------- ----------- -----------
70001 150.5 2012-10-05 3005 5002
70009 270.65 2012-09-10 3001 5005
70002 65.26 2012-10-05 3002 5001
70004 110.5 2012-08-17 3009 5003
70007 948.5 2012-09-10 3005 5002
70005 2400.6 2012-07-27 3007 5001
70008 5760 2012-09-10 3002 5001
70010 1983.43 2012-10-10 3004 5006
70003 2480.4 2012-10-10 3009 5003
70012 250.45 2012-06-27 3008 5002
70011 75.29 2012-08-17 3003 5007

Query :

create view nameorders as select ord_no, purch_amt, a.salesman_id, name, cust_name FROM orders a, customer b, salesman c WHERE a.customer_id = b.customer_id AND a.salesman_id = c.salesman_id;

select * from nameorders;

Output :

```
mysql>  create view nameorders as select ord_no, purch_amt, a.salesman_id, name,
        cust_name FROM orders a, customer b, salesman c
        WHERE a.customer_id = b.customer_id AND a.salesman_id = c.salesman_id;
Query OK, 0 rows affected (0.03 sec)

mysql> select * from nameorders;
+--------+-----------+-------------+------------+-----------------+
| ord_no | purch_amt | salesman_id | name       | cust_name       |
+--------+-----------+-------------+------------+-----------------+
|  70013 |    3045.6 |        5001 | James Hoog | Nick Rimando    |
|  70008 |      5760 |        5001 | James Hoog | Nick Rimando    |
|  70002 |     65.26 |        5001 | James Hoog | Nick Rimando    |
|  70005 |    2400.6 |        5001 | James Hoog | Brad Davis      |
|  70007 |     948.5 |        5002 | Nail Knite | Graham Zusi     |
|  70001 |     150.5 |        5002 | Nail Knite | Graham Zusi     |
|  70012 |    250.45 |        5002 | Nail Knite | Julian Green    |
|  70010 |   1983.43 |        5006 | Mc Lyon    | Fabian Johnson  |
|  70003 |    2480.4 |        5003 | Lauson Hen | Geoff Cameron   |
|  70004 |     110.5 |        5003 | Lauson Hen | Geoff Cameron   |
|  70011 |     75.29 |        5007 | Paul Adam  | Jozy Altidor    |
|  70009 |    270.65 |        5005 | Pit Alex   | Brad Guzan      |
+--------+-----------+-------------+------------+-----------------+
12 rows in set (0.03 sec)
```

7. From the following table, create a view to find all the customers who have the highest grade. Return all the fields of customer.
   Refer customer table

Query :

create view highestgrade as select * from customer where grade=(select max(grade) from customer);
select * from highestgrade;

Output :

```
mysql> create view highestgrade as select * from customer where grade=(select max(grade) from customer);
Query OK, 0 rows affected (0.04 sec)

mysql> select * from highestgrade;
+-------------+---------------+--------+-------+-------------+
| customer_id | cust_name     | city   | grade | salesman_id |
+-------------+---------------+--------+-------+-------------+
|        3008 | Julian Green  | London |   300 |        5002 |
|        3004 | Fabian Johnson| Paris  |   300 |        5006 |
+-------------+---------------+--------+-------+-------------+
2 rows in set (0.00 sec)
```

8. From the following table, create a view to count number of the salesperson in each city. Return city, number of salespersons.
   Refer salesman table

   Query :
   create view citycount as select city,count(*) from salesman group by city;
   select * from citycount;
   Output :

```
mysql> create view citycount as select city,count(*) from salesman group by city;
Query OK, 0 rows affected (0.03 sec)

mysql> select * from citycount;
+----------+----------+
| city     | count(*) |
+----------+----------+
| New York |        1 |
| Paris    |        2 |
| London   |        1 |
| Rome     |        1 |
| San Jose |        1 |
+----------+----------+
5 rows in set (0.00 sec)
```

9. From the following table, create a view to compute average purchase amount and total purchase amount for each salesperson. Return name, average purchase and total purchase amount. (Assume all names are unique).
   Refer salesman and orders table

   Query :
   create view uniq_name as select name , avg(purch_amt),sum(purch_amt) from salesman s,orders o where s.salesman_id=o.salesman_id group by name;

   select * from uniq_name;

   Output :

```
mysql>  create view uniq_name as select name , avg(purch_amt),sum(purch_amt)
        from salesman s,orders o where s.salesman_id=o.salesman_id group by name;
Query OK, 0 rows affected (0.01 sec)

mysql> select * from uniq_name;
+------------+--------------------+--------------------+
| name       | avg(purch_amt)     | sum(purch_amt)     |
+------------+--------------------+--------------------+
| Nail Knite | 449.81666564941406 | 1349.4499969482422 |
| Pit Alex   |  270.6499938964844 |  270.6499938964844 |
| James Hoog | 2817.8650493621826 |  11271.46019744873 |
| Lauson Hen |  1295.449951171875 |   2590.89990234375 |
| Mc Lyon    | 1983.4300537109375 | 1983.4300537109375 |
| Paul Adam  |  75.29000091552734 |  75.29000091552734 |
+------------+--------------------+--------------------+
6 rows in set (0.00 sec)
```

10. From the following tables, create a view to find those salespeople who handle more than one customer. Return all the fields of salesperson. Refer customer and salesman table

Query :

create view salespeople as select * from salesman s where 1<(select count(*)from customer c where s.salesman_id=c.salesman_id);

select * from salespeople;

Output :

```
mysql> create view salespeople as select * from salesman s
       where 1<(select count(*)from customer c where s.salesman_id=c.salesman_id);
Query OK, 0 rows affected (0.03 sec)

mysql> select * from salespeople;
+-------------+------------+----------+------------+
| salesman_id | name       | city     | commission |
+-------------+------------+----------+------------+
|        5001 | James Hoog | New York |       0.15 |
|        5002 | Nail Knite | Paris    |       0.13 |
+-------------+------------+----------+------------+
2 rows in set (0.02 sec)
```