```
MariaDB [orderprocessing]> create table Salesman(
    -> salesman_id int not null,
    -> salesman_name varchar(20) not null,
    -> city varchar(20) not null,
    -> commission int not null,
    -> primary key(salesman_id)
    -> );
Query OK, 0 rows affected (0.097 sec)

MariaDB [orderprocessing]> create table Customer(
    -> customer_id int not null,
    -> customer_name varchar(20) not null,
    -> city varchar(20) not null,
    -> grade int not null,
    -> salesman_id int,
    -> primary key(customer_id),
    -> foreign key(salesman_id) references Salesman(sale
sman_id) on delete set
    -> null
    -> );
Query OK, 0 rows affected (0.015 sec)

MariaDB [orderprocessing]> create table Orders(
    -> order_id int not null,
    -> purchase_amt int not null,
    -> order_date date not null,
    -> customer_id int not null,
    -> salesman_id int,
    -> primary key(order_id),
    -> foreign key(customer_id) references Customer(cust
omer_id),
    -> foreign key(salesman_id) references Salesman(sale
sman_id) on delete set
    -> null
    -> );
Query OK, 0 rows affected (0.018 sec)

MariaDB [orderprocessing]> insert into Salesman(salesman
_id,salesman_name,city,commission)
    -> values (1000,'John','Bangalore',25),
    -> (2000,'Ravi','Bangalore',20),
    -> (3000,'Kumar','Mysore',15),
    -> (4000,'Smith','Delhi',30),
    -> (5000,'Harsha','Hyderabad',15);
Query OK, 5 rows affected (0.047 sec)
Records: 5  Duplicates: 0  Warnings: 0

MariaDB [orderprocessing]> insert into Customer(customer
_id,customer_name,city,grade,salesman_id)
    -> values (10,'Preethi','Bangalore',100,1000),
    -> (11,'Vivek','Mangalore',300,1000),
    -> (12,'Bhaskar','Chennai',400,2000),
    -> (13,'Chethan','Bangalore',200,2000),
```

```
       -> (14,'Mamatha','Bangalore',400,3000);
Query OK, 5 rows affected (0.006 sec)
Records: 5  Duplicates: 0  Warnings: 0

MariaDB [orderprocessing]> insert into Orders(order_id,p
urchase_amt,order_date,customer_id,salesman_id)
       -> values (50,5000,'2017-05-04',10,1000),
       -> (51,450,'2017-01-20',10,2000),
       -> (52,1000,'2017-02-24',13,2000),
       -> (53,3500,'2017-04-13',14,3000),
       -> (54,550,'2017-03-09',12,2000);
Query OK, 5 rows affected (0.006 sec)
Records: 5  Duplicates: 0  Warnings: 0

MariaDB [orderprocessing]> select * from Salesman;
+-------------+---------------+-----------+------------+
| salesman_id | salesman_name | city      | commission |
+-------------+---------------+-----------+------------+
|        1000 | John          | Bangalore |         25 |
|        2000 | Ravi          | Bangalore |         20 |
|        3000 | Kumar         | Mysore    |         15 |
|        4000 | Smith         | Delhi     |         30 |
|        5000 | Harsha        | Hyderabad |         15 |
+-------------+---------------+-----------+------------+
5 rows in set (0.003 sec)

MariaDB [orderprocessing]> select * from Customer;
+-------------+---------------+-----------+-------+-----
---------+
| customer_id | customer_name | city      | grade | sale
sman_id |
+-------------+---------------+-----------+-------+-----
---------+
|          10 | Preethi       | Bangalore |   100 |
   1000 |
|          11 | Vivek         | Mangalore |   300 |
   1000 |
|          12 | Bhaskar       | Chennai   |   400 |
   2000 |
|          13 | Chethan       | Bangalore |   200 |
   2000 |
|          14 | Mamatha       | Bangalore |   400 |
   3000 |
+-------------+---------------+-----------+-------+-----
---------+
5 rows in set (0.002 sec)
```

```
MariaDB [orderprocessing]> select * from Orders;
+----------+--------------+------------+-------------+--
-----------+
| order_id | purchase_amt | order_date | customer_id | s
alesman_id |
+----------+--------------+------------+-------------+--
-----------+
|       50 |         5000 | 2017-05-04 |          10 |
      1000 |
|       51 |          450 | 2017-01-20 |          10 |
      2000 |
|       52 |         1000 | 2017-02-24 |          13 |
      2000 |
|       53 |         3500 | 2017-04-13 |          14 |
      3000 |
|       54 |          550 | 2017-03-09 |          12 |
      2000 |
+----------+--------------+------------+-------------+--
-----------+
5 rows in set (0.012 sec)

MariaDB [orderprocessing]>
MariaDB [orderprocessing]> select count(customer_name) f
rom Customer where grade > (select avg(grade)
    -> from Customer where city = 'Bangalore');
+----------------------+
| count(customer_name) |
+----------------------+
|                    3 |
+----------------------+
1 row in set (0.069 sec)

MariaDB [orderprocessing]> select distinct c.salesman_id
,s.salesman_name from Customer c,Salesman s
    -> where c.salesman_id = s.salesman_id
    -> and 1 < (select count(customer_id) from Customer
where salesman_id =
    -> c.salesman_id);
+-------------+---------------+
| salesman_id | salesman_name |
+-------------+---------------+
|        1000 | John          |
|        2000 | Ravi          |
+-------------+---------------+
2 rows in set (0.027 sec)
```

```
MariaDB [orderprocessing]> select s.salesman_name,c.cust
omer_name from Salesman s,Customer c
    -> where s.salesman_id = c.salesman_id and c.city =
s.city
    -> union
    -> select s.salesman_name,'No Match' from Salesman s
,Customer c
    -> where s.salesman_id = c.salesman_id and c.city !=
 s.city;
+---------------+---------------+
| salesman_name | customer_name |
+---------------+---------------+
| John          | Preethi       |
| Ravi          | Chethan       |
| John          | No Match      |
| Ravi          | No Match      |
| Kumar         | No Match      |
+---------------+---------------+
5 rows in set (0.009 sec)

MariaDB [orderprocessing]> create view salesman_view as
select o.order_date,salesman_id,sum(o.purchase_amt) from
 Orders o group by order_date having sum(purchase_amt) =
 (select max(sum(purchase_amt)) from Customer where orde
r_date = o.order_date and salesman_id = o.salesman_id);
Query OK, 0 rows affected (0.091 sec)
```

```
MariaDB [orderprocessing]> Delete from Salesman where sa
lesman_id = 1000; select * from Salesman; select * from
Orders;
Query OK, 1 row affected (0.103 sec)

+-------------+---------------+-----------+------------+
| salesman_id | salesman_name | city      | commission |
+-------------+---------------+-----------+------------+
|        2000 | Ravi          | Bangalore |         20 |
|        3000 | Kumar         | Mysore    |         15 |
|        4000 | Smith         | Delhi     |         30 |
|        5000 | Harsha        | Hyderabad |         15 |
+-------------+---------------+-----------+------------+
4 rows in set (0.006 sec)

+----------+--------------+------------+-------------+--
-----------+
| order_id | purchase_amt | order_date | customer_id | s
alesman_id |
+----------+--------------+------------+-------------+--
-----------+
|       50 |         5000 | 2017-05-04 |          10 |
      NULL |
|       51 |          450 | 2017-01-20 |          10 |
      2000 |
|       52 |         1000 | 2017-02-24 |          13 |
      2000 |
|       53 |         3500 | 2017-04-13 |          14 |
      3000 |
|       54 |          550 | 2017-03-09 |          12 |
      2000 |
+----------+--------------+------------+-------------+--
-----------+
5 rows in set (0.001 sec)

MariaDB [orderprocessing]> █
```