Problem Statement: There can be multiple customers, who can place multiple orders on the site. Now a sales person can handle these orders will distribute into multiple sales persons (One order will be assign to one salesperson only). So a sales person can have multiple orders of multiple customers

q-1 Create Database

```
mysql> create database session3;
Query OK, 1 row affected (0.00 sec)

mysql> use session3;
Database changed
```

q-2 Design Schema

```
mysql> create table customer
    -> (
    -> id int primary key auto_increment,
    -> name varchar(30),
    -> state varchar(10),
    -> pincode bigint
    -> );
Query OK, 0 rows affected (0.25 sec)
```

```
mysql> create table sales
    -> (
    -> s_id int primary key auto_increment,
    -> name varchar(20)
    -> );
Query OK, 0 rows affected (0.30 sec)
```

```
mysql> create table order_del
    -> (
    -> order_id int primary key auto_increment,
    -> order_name varchar(20),
    -> qty int,
    -> price double,
    -> cust_id int,
    -> sales_id int,
    -> foreign key (cust_id) references customer(id),
    -> foreign key(sales_id) references sales(s_id)
    -> );
Query OK, 0 rows affected (0.34 sec)
```

q-3 Create tables

File  Edit  View  Search  Terminal  Help

```
mysql> desc customer;
+---------+-------------+------+-----+---------+----------------+
| Field   | Type        | Null | Key | Default | Extra          |
+---------+-------------+------+-----+---------+----------------+
| id      | int(11)     | NO   | PRI | NULL    | auto_increment |
| name    | varchar(30) | YES  |     | NULL    |                |
| state   | varchar(10) | YES  |     | NULL    |                |
| pincode | bigint(20)  | YES  |     | NULL    |                |
+---------+-------------+------+-----+---------+----------------+
4 rows in set (0.01 sec)

mysql> desc order_del;
+------------+-------------+------+-----+---------+----------------+
| Field      | Type        | Null | Key | Default | Extra          |
+------------+-------------+------+-----+---------+----------------+
| order_id   | int(11)     | NO   | PRI | NULL    | auto_increment |
| order_name | varchar(20) | YES  |     | NULL    |                |
| qty        | int(11)     | YES  |     | NULL    |                |
| price      | double      | YES  |     | NULL    |                |
| cust_id    | int(11)     | YES  | MUL | NULL    |                |
| sales_id   | int(11)     | YES  | MUL | NULL    |                |
+------------+-------------+------+-----+---------+----------------+
6 rows in set (0.00 sec)
```

```
mysql> desc sales;
+-------+-------------+------+-----+---------+----------------+
| Field | Type        | Null | Key | Default | Extra          |
+-------+-------------+------+-----+---------+----------------+
| s_id  | int(11)     | NO   | PRI | NULL    | auto_increment |
| name  | varchar(20) | YES  |     | NULL    |                |
+-------+-------------+------+-----+---------+----------------+
2 rows in set (0.01 sec)
```

q-4 Insert sample data

File  Edit  View  Search  Terminal  Help

```
mysql> insert into customer values(1,'Siddharth','Delhi',110032);
Query OK, 1 row affected (0.05 sec)

mysql> insert into customer values(2,'Aman','Delhi',110052);
Query OK, 1 row affected (0.05 sec)

mysql> insert into customer values(3,'Ram','Delhi',110052);
Query OK, 1 row affected (0.03 sec)

mysql> insert into customer values(4,'Sumit','Delhi',110092);
Query OK, 1 row affected (0.05 sec)

mysql> insert into customer values(5,'Param','Delhi',110062);
Query OK, 1 row affected (0.05 sec)

mysql> select * from customer;
+----+-----------+-------+---------+
| id | name      | state | pincode |
+----+-----------+-------+---------+
|  1 | Siddharth | Delhi | 110032  |
|  2 | Aman      | Delhi | 110052  |
|  3 | Ram       | Delhi | 110052  |
|  4 | Sumit     | Delhi | 110092  |
|  5 | Param     | Delhi | 110062  |
```

```
                                    siddharth@siddharth: ~
File  Edit  View  Search  Terminal  Help
mysql> insert into sales values(1,'Dheeraj');
Query OK, 1 row affected (0.05 sec)

mysql> insert into sales values(2,'Raj');
Query OK, 1 row affected (0.04 sec)

mysql> insert into sales values(3,'Sandeep');
Query OK, 1 row affected (0.04 sec)

mysql> insert into sales values(4,'Parveen');
Query OK, 1 row affected (0.04 sec)

mysql> insert into sales values(5,'Pulkit');
Query OK, 1 row affected (0.03 sec)

mysql> select * from sales;
+------+---------+
| s_id | name    |
+------+---------+
|    1 | Dheeraj |
|    2 | Raj     |
|    3 | Sandeep |
|    4 | Parveen |
|    5 | Pulkit  |
```

```
mysql> select * from order_del;
+----------+------------+------+-------+---------+----------+
| order_id | order_name | qty  | price | cust_id | sales_id |
+----------+------------+------+-------+---------+----------+
|        1 | Paneer     |    1 |   200 |       1 |        1 |
|        2 | Dal        |    2 |   400 |       3 |        1 |
|        3 | Burger     |    4 |   200 |       5 |        2 |
|        4 | Pizza      |    1 |   500 |       4 |        4 |
|        5 | Idli       |    4 |   200 |       3 |        3 |
|        6 | Palak      |    1 |   150 |       2 |        2 |
+----------+------------+------+-------+---------+----------+
6 rows in set (0.00 sec)
```

q-5 Find the sales person have multiple orders.
q-6 Find the all sales person details along with order details

```
mysql> select * from sales join order_del on sales.s_id=order_del.order_id;
+------+---------+----------+------------+------+-------+---------+----------+
| s_id | name    | order_id | order_name | qty  | price | cust_id | sales_id |
+------+---------+----------+------------+------+-------+---------+----------+
|    1 | Dheeraj |        1 | Paneer     |    1 |   200 |       1 |        1 |
|    2 | Raj     |        2 | Dal        |    2 |   400 |       3 |        1 |
|    3 | Sandeep |        3 | Burger     |    4 |   200 |       5 |        2 |
|    4 | Parveen |        4 | Pizza      |    1 |   500 |       4 |        4 |
|    5 | Pulkit  |        5 | Idli       |    4 |   200 |       3 |        3 |
+------+---------+----------+------------+------+-------+---------+----------+
5 rows in set (0.00 sec)
```

q-7 Create index

```
mysql> alter table customer add index cid(id);
Query OK, 0 rows affected (0.33 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

q-8 How to show index on a table

```
mysql> show indexes from customer;
+-----------+------------+----------+--------------+-------------+-----------+----
-----------+----------+--------+------+------------+---------+---------------+
| Table     | Non_unique | Key_name | Seq_in_index | Column_name | Collation | Ca
rdinality | Sub_part | Packed | Null | Index_type | Comment | Index_comment |
+-----------+------------+----------+--------------+-------------+-----------+----
-----------+----------+--------+------+------------+---------+---------------+
| customer  |          0 | PRIMARY  |            1 | id          | A         |
        4 |     NULL | NULL   |      | BTREE      |         |               |
| customer  |          1 | cid      |            1 | id          | A         |
        5 |     NULL | NULL   |      | BTREE      |         |               |
+-----------+------------+----------+--------------+-------------+-----------+----
-----------+----------+--------+------+------------+---------+---------------+
2 rows in set (0.00 sec)
```

q-9 Find the order number, sale person name, along with the customer to whom that order belongs to

```
mysql> select order_id,sales.name,customer.name from order_del join sales on ord
er_del.order_id=sales.s_id join customer on order_del.order_id=customer.id;
+----------+---------+----------+
| order_id | name    | name     |
+----------+---------+----------+
|        1 | Dheeraj | Siddharth |
|        2 | Raj     | Aman     |
|        3 | Sandeep | Ram      |
|        4 | Parveen | Sumit    |
|        5 | Pulkit  | Param    |
+----------+---------+----------+
5 rows in set (0.03 sec)

mysql>
```