1. Create Database

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

mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| db_session         |
| mysql              |
| performance_schema |
| sales              |
| sys                |
+--------------------+
6 rows in set (0.01 sec)
```

2. Design Schema

```
mysql> describe orders;
+---------------+--------------+------+-----+---------+-------+
| Field         | Type         | Null | Key | Default | Extra |
+---------------+--------------+------+-----+---------+-------+
| order_num     | bigint(20)   | NO   | PRI | NULL    |       |
| sp_name       | char(20)     | NO   |     | NULL    |       |
| sp_id         | bigint(20)   | NO   |     | NULL    |       |
| cust_name     | char(20)     | YES  |     | NULL    |       |
| order_details | varchar(200) | YES  |     | NULL    |       |
+---------------+--------------+------+-----+---------+-------+
5 rows in set (0.00 sec)
```

3. Create tables

```
mysql> use sales
Database changed
mysql> create table orders(
    -> order_num bigint(20) not null,
    -> sp_name char(20) not null,
    -> sp_id bigint(20) not null,
    -> cust_name char (20),
    -> order_details varchar(200),
    -> primary key(order_num)
    -> );
Query OK, 0 rows affected (0.29 sec)

mysql>
```

4. Insert sample data

```
mysql> insert into orders values(42,'Ram',1,'titu','sugar');
Query OK, 1 row affected (0.06 sec)

mysql> insert into orders values(43,'Shyam',2,'chunnu','candy');
Query OK, 1 row affected (0.04 sec)

mysql> insert into orders values(44,'Ghanshyam',3,'munnu','chocolate');
Query OK, 1 row affected (0.07 sec)

mysql> insert into orders values(45,'Ram',1,'uttam','salt');
Query OK, 1 row affected (0.06 sec)

mysql> insert into orders values(46,'Ghanshyam',3,'dhanno','grass');
Query OK, 1 row affected (0.06 sec)

mysql> select * from orders;
+-----------+-----------+-------+-----------+---------------+
| order_num | sp_name   | sp_id | cust_name | order_details |
+-----------+-----------+-------+-----------+---------------+
|        42 | Ram       |     1 | titu      | sugar         |
|        43 | Shyam     |     2 | chunnu    | candy         |
|        44 | Ghanshyam |     3 | munnu     | chocolate     |
|        45 | Ram       |     1 | uttam     | salt          |
|        46 | Ghanshyam |     3 | dhanno    | grass         |
+-----------+-----------+-------+-----------+---------------+
5 rows in set (0.00 sec)

mysql>
```

5. Find the sales person have multiple orders.

```
mysql> select sp_name from orders group by sp_name having count(sp_id)>1
    -> ;
+-----------+
| sp_name   |
+-----------+
| Ghanshyam |
| Ram       |
+-----------+
2 rows in set (0.00 sec)

mysql>
```

6. Find the all sales person details along with order details

```
mysql> select sp_id,sp_name,order_details from orders
    -> ;
+-------+-----------+---------------+
| sp_id | sp_name   | order_details |
+-------+-----------+---------------+
|     1 | Ram       | sugar         |
|     2 | Shyam     | candy         |
|     3 | Ghanshyam | chocolate     |
|     1 | Ram       | salt          |
|     3 | Ghanshyam | grass         |
+-------+-----------+---------------+
5 rows in set (0.00 sec)

mysql>
```

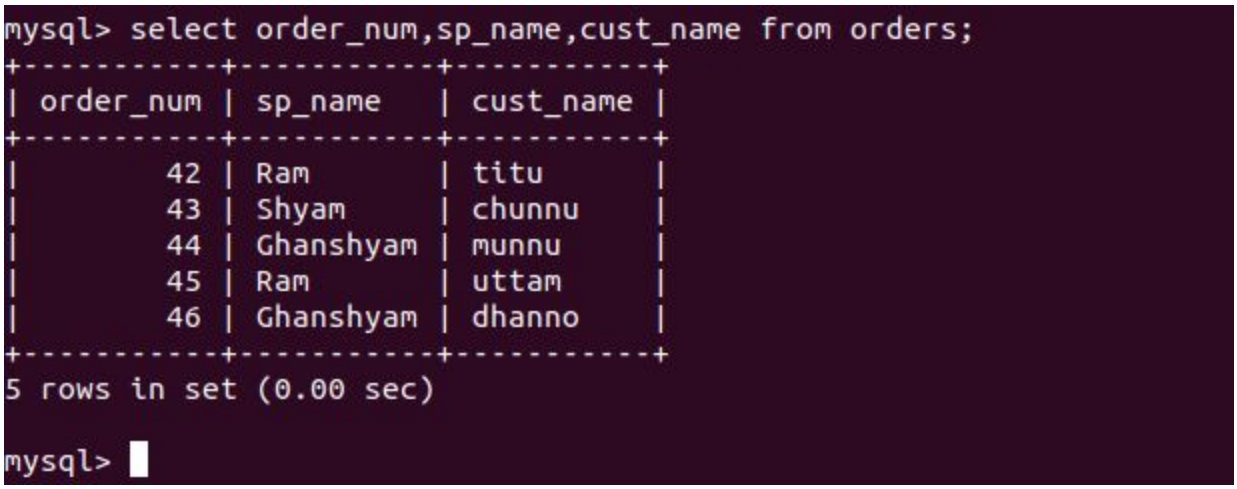
7. Create index

```
mysql> create index orders_index on orders(order_details);
Query OK, 0 rows affected (0.38 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

8. How to show index on a table

```
mysql> show index from orders;
+--------+------------+--------------+--------------+---------------+-----------+-------------+----------+--------+------+------------+---------
--+---------------+
| Table  | Non_unique | Key_name     | Seq_in_index | Column_name   | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Commen
t | Index_comment |
+--------+------------+--------------+--------------+---------------+-----------+-------------+----------+--------+------+------------+---------
--+---------------+
| orders |          0 | PRIMARY      |            1 | order_num     | A         |           4 |     NULL | NULL   |      | BTREE      |
  |               |
| orders |          1 | orders_index |            1 | order_details | A         |           5 |     NULL | NULL   | YES  | BTREE      |
  |               |
+--------+------------+--------------+--------------+---------------+-----------+-------------+----------+--------+------+------------+---------
--+---------------+
2 rows in set (0.00 sec)
```

9. Find the order number, sales person name, along with the customer to whom that order belongs to



```
mysql> select order_num,sp_name,cust_name from orders;
+-----------+-----------+-----------+
| order_num | sp_name   | cust_name |
+-----------+-----------+-----------+
|        42 | Ram       | titu      |
|        43 | Shyam     | chunnu    |
|        44 | Ghanshyam | munnu     |
|        45 | Ram       | uttam     |
|        46 | Ghanshyam | dhanno    |
+-----------+-----------+-----------+
5 rows in set (0.00 sec)

mysql>
```