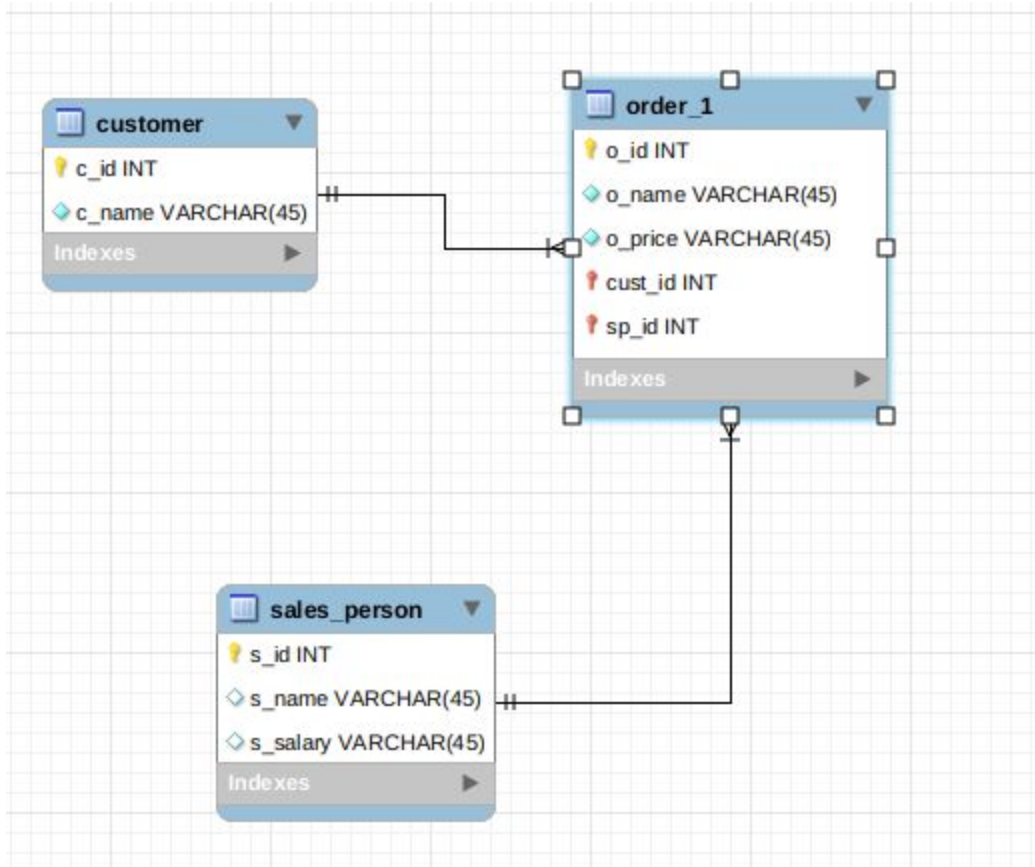# Assignment-3 (Introduction to database)

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.

1.Create databse

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

mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| bootcamp           |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
5 rows in set (0.00 sec)
```

2.Design schema

3.Create table

```
mysql> create table order_1(o_id int primary key,o_item varchar(20), o_price int,cust_id int not null, foreign key cust_ord(cust_id) reference
s customers(c_id));
Query OK, 0 rows affected (0.42 sec)

mysql> desc order_1;
+---------+-------------+------+-----+---------+-------+
| Field   | Type        | Null | Key | Default | Extra |
+---------+-------------+------+-----+---------+-------+
| o_id    | int(11)     | NO   | PRI | NULL    |       |
| o_item  | varchar(20) | YES  |     | NULL    |       |
| o_price | int(11)     | YES  |     | NULL    |       |
| cust_id | int(11)     | NO   | MUL | NULL    |       |
+---------+-------------+------+-----+---------+-------+
4 rows in set (0.01 sec)

mysql> desc customers;
+--------+-------------+------+-----+---------+-------+
| Field  | Type        | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
| c_id   | int(11)     | NO   | PRI | NULL    |       |
| c_name | varchar(20) | YES  |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
2 rows in set (0.00 sec)
```

```
mysql> create table sales_person(s_id int primary key,s_name varchar(20),s_salary int);
Query OK, 0 rows affected (0.35 sec)

mysql> desc sales_person;
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| s_id     | int(11)     | NO   | PRI | NULL    |       |
| s_name   | varchar(20) | YES  |     | NULL    |       |
| s_salary | int(11)     | YES  |     | NULL    |       |
+----------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

4.Insert sample data

```
mysql> insert into customers values(1,'ansh');
Query OK, 1 row affected (0.08 sec)

mysql> insert into customers values(2,'harsh');
Query OK, 1 row affected (0.09 sec)

mysql> insert into customers values(3,'ram');
Query OK, 1 row affected (0.10 sec)

mysql> select * from customers;
+------+--------+
| c_id | c_name |
+------+--------+
|    1 | ansh   |
|    2 | harsh  |
|    3 | ram    |
+------+--------+
3 rows in set (0.00 sec)

mysql> insert into order_1 values(101,'lapi',50000,1);
Query OK, 1 row affected (0.08 sec)

mysql> insert into order_1 values(102,'phone',15000,2);
Query OK, 1 row affected (0.07 sec)

mysql> select * from order_1;
+------+--------+---------+---------+
| o_id | o_item | o_price | cust_id |
+------+--------+---------+---------+
|  101 | lapi   |   50000 |       1 |
|  102 | phone  |   15000 |       2 |
+------+--------+---------+---------+
2 rows in set (0.00 sec)
```

```
mysql> select * from sales_person;
+------+--------+----------+
| s_id | s_name | s_salary |
+------+--------+----------+
|   10 | mohan  |    16465 |
|   11 | sohan  |    15465 |
+------+--------+----------+
2 rows in set (0.00 sec)
```

5.Find the sales person have multiple orders.

```
mysql> select s.s_name,count(o_id) from order_1 ord ,sales_person s where s.s_id=ord.sp_id group by (ord.sp_id) having count(*)>1;
+--------+-------------+
| s_name | count(o_id) |
+--------+-------------+
| mohan  |           2 |
+--------+-------------+
1 row in set (0.00 sec)
```

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

```
mysql> select * from sales_person sp inner join order_1 ord where sp.s_id=ord.sp_id;
+------+--------+----------+------+-------+---------+---------+-------+
| s_id | s_name | s_salary | o_id | o_item| o_price | cust_id | sp_id |
+------+--------+----------+------+-------+---------+---------+-------+
|   10 | mohan  |    16465 |  101 | lapi  |   50000 |       1 |    10 |
|   11 | sohan  |    15465 |  102 | phone |   15000 |       2 |    11 |
+------+--------+----------+------+-------+---------+---------+-------+
2 rows in set (0.00 sec)
```

7.Create index

```
mysql> create index index_name on customers (c_name);
Query OK, 0 rows affected (0.36 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

8.How to show index on a table

```
mysql> show index from customers;
+-----------+------------+------------+--------------+-------------+-----------+-------------+----------+--------+------+------------+---------+
| Table     | Non_unique | Key_name   | Seq_in_index | Column_name | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment |
| Index_comment |
+-----------+------------+------------+--------------+-------------+-----------+-------------+----------+--------+------+------------+---------+
| customers |          0 | PRIMARY    |            1 | c_id        | A         |           2 |     NULL | NULL   |      | BTREE      |         |
|           |            |            |              |             |           |             |          |        |      |            |         |
| customers |          1 | index_name |            1 | c_name      | A         |           3 |     NULL | NULL   | YES  | BTREE      |         |
|           |            |            |              |             |           |             |          |        |      |            |         |
+-----------+------------+------------+--------------+-------------+-----------+-------------+----------+--------+------+------------+---------+
2 rows in set (0.00 sec)
```

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

```
mysql> select c.c_name,ord.o_id,s.s_name from order_1 ord ,sales_person s ,customers c where c.c_id=ord.cust_id and  ord.sp_id=s.s_id;
+--------+------+--------+
| c_name | o_id | s_name |
+--------+------+--------+
| ansh   |  101 | mohan  |
| harsh  |  102 | sohan  |
| ansh   |  103 | mohan  |
+--------+------+--------+
3 rows in set (0.00 sec)

mysql>
```