

## Group no:7 (Exercise:Databases)

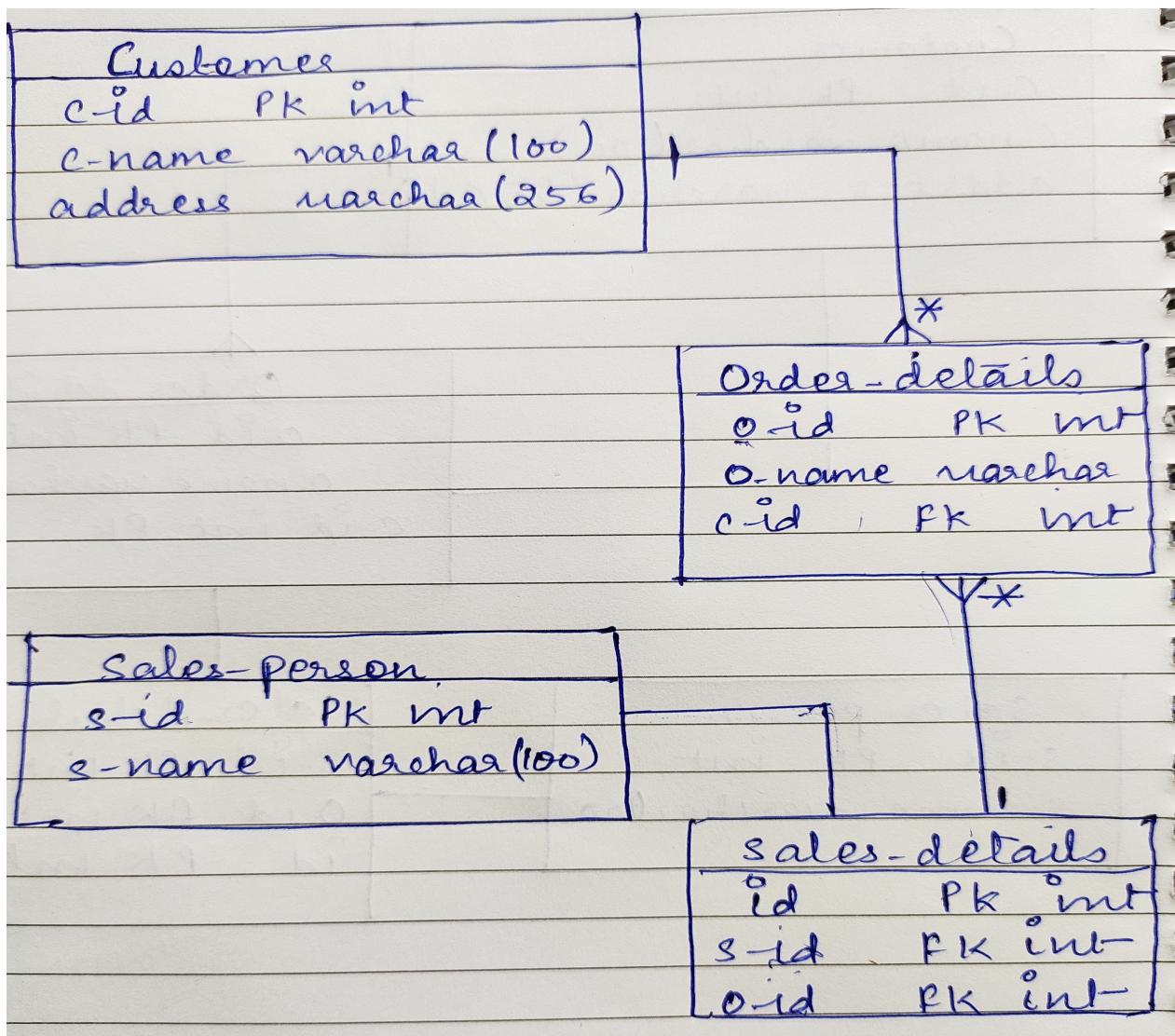
Problem Statement: There can be multiple customers, who can place multiple orders on the site. Now a sales person can handle these orders will distribute into multiple sales persons (One order will be assign to one salesperson only). So a sales person can have multiple orders of multiple customers

### 1.Create Database

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

```
mysql> [ ]
```

### 2.Design Schema



### 3.Create tables

#### Customer table

Create table Customer ( c\_id int not null,c\_name varchar(100) not null,address varchar(256) not null,primary key (c\_id) );

```
mysql> desc Customer;
+-----+-----+-----+-----+-----+
| Field | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| c_id  | int(11) | NO   | PRI | NULL    |       |
| c_name | varchar(100) | NO   |     | NULL    |       |
| address | varchar(256) | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+
```

#### Order\_details table

```
Database changed
mysql> CREATE TABLE Order_details ( o_id INT NOT NULL, o_name VARCHAR(50) NOT NULL, c_id INT , PRIMARY KEY(o_id), foreign key (c_id) references Customer(c_id) on delete cascade);
Query OK, 0 rows affected (0.39 sec)

mysql> desc Order_details;
+-----+-----+-----+-----+-----+
| Field | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| o_id  | int(11) | NO   | PRI | NULL    |       |
| o_name | varchar(50) | NO   |     | NULL    |       |
| c_id  | int(11) | YES  | MUL | NULL    |       |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> □
```

#### Sales\_person table

```
mysql> create table Sales_person (s_id int not null,s_name varchar(100) not null,primary key(s_id) );
Query OK, 0 rows affected (0.30 sec)

mysql> desc Sales_person;
+-----+-----+-----+-----+-----+
| Field | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| s_id  | int(11) | NO   | PRI | NULL    |       |
| s_name | varchar(100) | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> □
```

## Sales\_details table

```
mysql> create table Sales_details (id int not null auto_increment,s_id int ,o_id int,primary key (id),foreign key(s_id) references Sales_person(s_id) on delete cascade,foreign key(o_id) references Order_details(o_id) on delete cascade);
Query OK, 0 rows affected (0.59 sec)

mysql> desc Sales_details;
+-----+-----+-----+-----+-----+
| Field | Type   | Null | Key | Default | Extra       |
+-----+-----+-----+-----+-----+
| id   | int(11) | NO   | PRI | NULL    | auto_increment |
| s_id | int(11) | YES  | MUL | NULL    |               |
| o_id | int(11) | YES  | MUL | NULL    |               |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> [ ]
```

## 4. Insert sample data

### Customer table

```
mysql> insert into Customer(c_id,c_name,address) values (2,"ridhima","dehradun")
;
Query OK, 1 row affected (0.10 sec)

mysql> insert into Customer(c_id,c_name,address) values (3,"Anshika","Bhopal");
Query OK, 1 row affected (0.26 sec)
```

```
mysql> insert into Customer(c_id,c_name,address) values (4,"Abhhinav","Noida");
Query OK, 1 row affected (0.37 sec)

mysql> select * from Customer;
+-----+-----+-----+
| c_id | c_name | address  |
+-----+-----+-----+
| 1    | sonal  | kanpur   |
| 2    | ridhima | dehradun |
| 3    | Anshika | Bhopal   |
| 4    | Abhhinav | Noida   |
+-----+-----+-----+
4 rows in set (0.00 sec)
```

### Order\_details

```
mysql> insert into Order_details (o_id,o_name,c_id) values (101,"shirt",2);
Query OK, 1 row affected (0.06 sec)

mysql> insert into Order_details (o_id,o_name,c_id) values (102,"pant",3);
Query OK, 1 row affected (0.05 sec)

mysql> insert into Order_details (o_id,o_name,c_id) values (103,"trouser",4);
Query OK, 1 row affected (0.04 sec)

mysql> insert into Order_details (o_id,o_name,c_id) values (104,"tie",1);
Query OK, 1 row affected (0.06 sec)

mysql> insert into Order_details (o_id,o_name,c_id) values (105,"pant",1);
Query OK, 1 row affected (0.05 sec)

mysql> insert into Order_details (o_id,o_name,c_id) values (106,"trouser",2);
Query OK, 1 row affected (0.06 sec)
```

```
mysql> select * from Order_details;
+-----+-----+-----+
| o_id | o_name | c_id |
+-----+-----+-----+
| 101  | shirt  | 2   |
| 102  | pant   | 3   |
| 103  | trouser | 4   |
| 104  | tie    | 1   |
| 105  | pant   | 1   |
| 106  | trouser | 2   |
+-----+-----+-----+
6 rows in set (0.00 sec)
```

## Sales\_person

```
mysql> insert into Sales_person (s_id,s_name) values (1001,"s1");
Query OK, 1 row affected (0.06 sec)

mysql> insert into Sales_person (s_id,s_name) values (1002,"s2");
Query OK, 1 row affected (0.05 sec)

mysql> insert into Sales_person (s_id,s_name) values (1003,"s3");
Query OK, 1 row affected (0.05 sec)

mysql> insert into Sales_person (s_id,s_name) values (1004,"s4");
Query OK, 1 row affected (0.05 sec)

mysql> select * from Sales_person;
+-----+-----+
| s_id | s_name |
+-----+-----+
| 1001 | s1    |
| 1002 | s2    |
| 1003 | s3    |
| 1004 | s4    |
+-----+-----+
4 rows in set (0.00 sec)

mysql> 
```

## Sales\_details

```
mysql> insert into Sales_details (s_id,o_id) values (1001,"102");
Query OK, 1 row affected (0.05 sec)

mysql> insert into Sales_details (s_id,o_id) values (1004,"104");
Query OK, 1 row affected (0.06 sec)

mysql> insert into Sales_details (s_id,o_id) values (1004,"104");
Query OK, 1 row affected (0.05 sec)

mysql> insert into Sales_details (s_id,o_id) values (1002,"101");
Query OK, 1 row affected (0.04 sec)

mysql> insert into Sales_details (s_id,o_id) values (1003,"106");
Query OK, 1 row affected (0.04 sec)

mysql> delete from Sales_details where id=3;
Query OK, 1 row affected (0.06 sec)
```

```
mysql> select * from Sales_details;
+----+----+----+
| id | s_id | o_id |
+----+----+----+
| 1  | 1001 | 102 |
| 2  | 1004 | 104 |
| 4  | 1002 | 101 |
| 5  | 1003 | 106 |
+----+----+----+
4 rows in set (0.00 sec)
```

5.Find the sales person have multiple orders.

```
mysql> select count(*) as count ,s_id from Sales_details group by s_id having count >1;
+-----+-----+
| count | s_id |
+-----+-----+
|     3 | 1004 |
+-----+-----+
1 row in set (0.00 sec)
```

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

```
mysql> select sp.s_id,sp.s_name,sd.o_id from Sales_person sp,Sales_details sd where sp.s_id=sd.s_id;
+----+----+----+
| s_id | s_name | o_id |
+----+----+----+
| 1001 | s1    | 102 |
| 1002 | s2    | 101 |
| 1003 | s3    | 106 |
| 1004 | s4    | 104 |
| 1004 | s4    | 106 |
| 1004 | s4    | 102 |
+----+----+----+
6 rows in set (0.00 sec)
```

7.Create index

```
mysql> create index od on Order_details(o_id,o_name,c_id);
Query OK, 0 rows affected (0.32 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

## 8. How to show index on a table

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

```
mysql> select sp.s_name,sd.o_id,od.c_id from Sales_person as sp inner join Sales_details as sd on sp.s_id=sd.s_id inner join Order_details as od on sd.o_id=od.o_id;
+-----+-----+-----+
| s_name | o_id | c_id |
+-----+-----+-----+
| s1    | 102  | 3   |
| s2    | 101  | 2   |
| s3    | 106  | 2   |
| s4    | 104  | 1   |
| s4    | 106  | 2   |
| s4    | 102  | 3   |
+-----+-----+-----+
6 rows in set (0.01 sec)

mysql> [ ]
```