

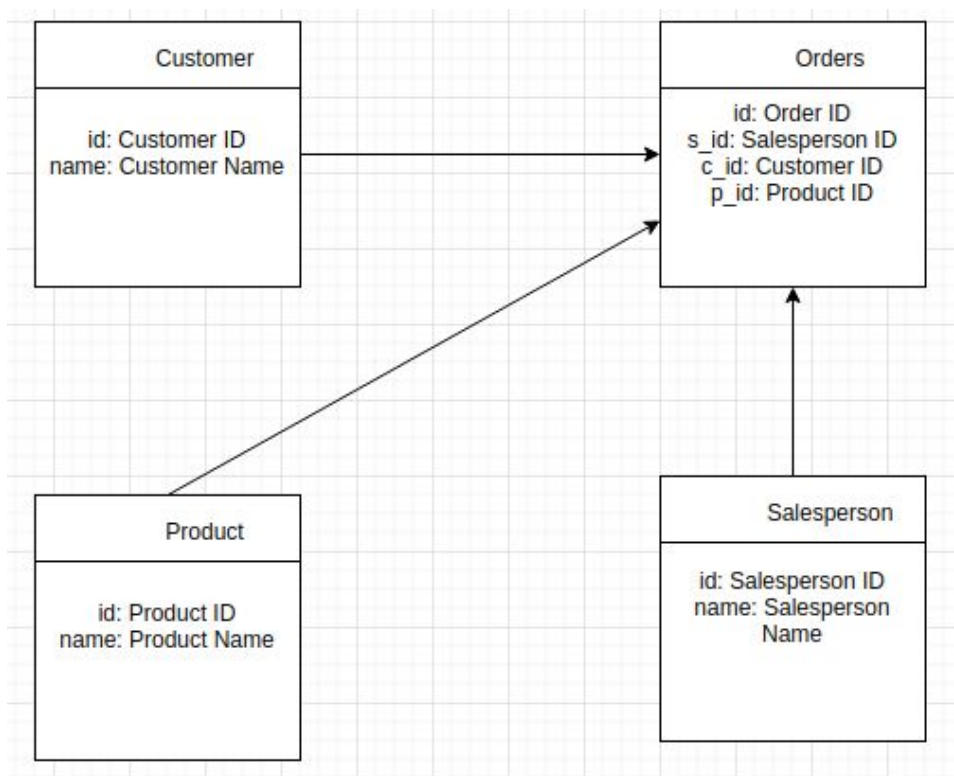
Exercise Answers

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 orderSystem;  
Query OK, 1 row affected (0.00 sec)  
  
mysql> 
```

2. Design Schema



3. Create tables

```
mysql> show tables;
+-----+
| Tables_in_ordersSystem |
+-----+
| customer                |
| orders                  |
| product                 |
| salesperson             |
+-----+
4 rows in set (0.00 sec)

mysql> 
```

```
mysql> create table customer (
-> id int primary key auto_increment,
-> name varchar(40),
-> address varchar(40)
-> );
```

Query OK, 0 rows affected (0.03 sec)

```
mysql> create table product (
-> id int primary key auto_increment,
-> name varchar(40)
-> );
```

Query OK, 0 rows affected (0.03 sec)

```
mysql> create table salesperson (
-> id int primary key auto_increment,
-> name varchar(40)
-> );
```

Query OK, 0 rows affected (0.03 sec)

4. Insert sample data

```
mysql> select * from customer;
+-----+-----+-----+
| id | name | address |
+-----+-----+-----+
| 1 | a pvt | sector 108 |
| 2 | b pvt | sector 110 |
| 3 | c pvt | ghaziabad |
+-----+-----+-----+
3 rows in set (0.00 sec)

mysql>
mysql> select * from salesperson;
+-----+-----+
| id | name |
+-----+-----+
| 1 | Shahid |
| 2 | Irshad |
+-----+-----+
2 rows in set (0.01 sec)

mysql> select * from product;
+-----+-----+
| id | name |
+-----+-----+
| 1 | Mobile Phone |
| 2 | Laptop |
| 3 | TV |
+-----+-----+
3 rows in set (0.00 sec)

mysql> 
```

```
mysql> select * from orders;
+-----+-----+-----+-----+
| id | c_id | p_id | s_id |
+-----+-----+-----+-----+
| 1 | 1 | 1 | 2 |
| 2 | 2 | 1 | 2 |
| 3 | 1 | 2 | 1 |
| 4 | 3 | 2 | 2 |
| 5 | 3 | 1 | 1 |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

5. Find the sales person have multiple orders.

```
select name, ans.CountOfOrders from salesperson, (select
s_id as id, count(s_id) as CountOfOrders from orders group
by s_id having count(s_id) > 1) as ans where salesperson.id =
ans.id;
```

```
mysql> select name, ans.Count
> 1) as ans where salesperson
+-----+-----+
| name   | CountOfOrders |
+-----+-----+
| Shahid |             2 |
| Irshad |             3 |
+-----+-----+
2 rows in set (0.00 sec)

mysql> 
```

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

```
select s.name as SalesPerson, o.id as OrderNo, p.name as
Product from orders o, salesperson s, product p where s.id =
o.s_id and p.id = o.p_id;
```

```
+-----+-----+-----+
| SalesPerson | OrderNo | Product      |
+-----+-----+-----+
| Irshad      |        1 | Mobile Phone |
| Irshad      |        2 | Mobile Phone |
| Shahid      |        3 | Laptop       |
| Irshad      |        4 | Laptop       |
| Shahid      |        5 | Mobile Phone |
+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> 
```

7. Create index

```
mysql> alter table customer add index name(name);
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

8. How to show index on a table

```
mysql> show index from customer;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment | Index_co |
|-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| customer | 0 | PRIMARY | 1 | id | A | 3 | NULL | NULL | | BTREE | | |
| customer | 1 | name | 1 | 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

select o.id as OrderNo, s.name as SalesPerson, c.name as Customer from orders o, salesperson s, customer c where s.id = o.s_id and c.id = o.c_id;

```
mysql> select o.id as OrderNo, s.name
as SalesPerson, c.name as Customer
from orders o, salesperson s, customer c
where s.id = o.s_id and c.id = o.c_id;
+-----+-----+-----+
| OrderNo | SalesPerson | Customer |
+-----+-----+-----+
| 1 | Irshad | a pvt |
| 2 | Irshad | b pvt |
| 3 | Shahid | a pvt |
| 4 | Irshad | c pvt |
| 5 | Shahid | c pvt |
+-----+-----+-----+
5 rows in set (0.01 sec)

mysql> 
```