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Introduction to Version Control

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

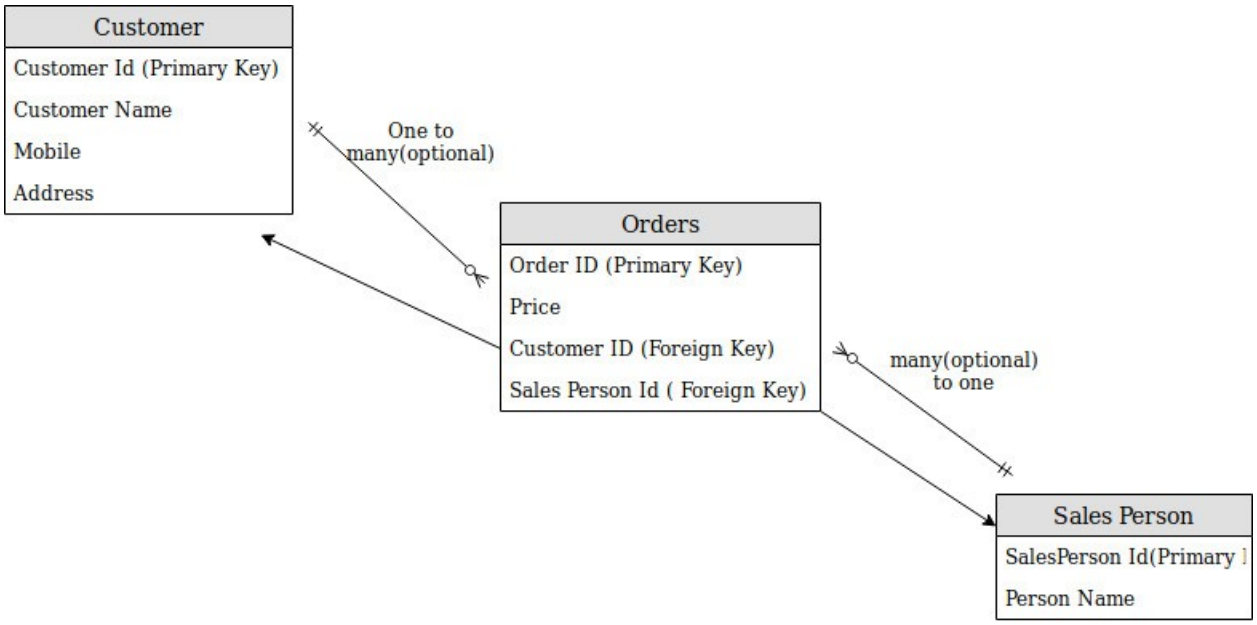
1. Create Database

```
mysql> create database exercise
    -> ;
Query OK, 1 row affected (0.01 sec)

mysql> use exercise
Database changed
mysql> select database()
    -> ;
+------------+
| database() |
+------------+
| exercise   |
+------------+
1 row in set (0.00 sec)

mysql>
```

2. Design Schema



3. Create tables

```
mysql> create table orders( or_id int NOT NULL, or_no int NOT NULL AUTO_INCREMENT, cus_id int(20) NOT NULL,
 PRIMARY KEY(or_no), FOREIGN KEY (cus_id) REFERENCES customer(cust_id));
Query OK, 0 rows affected (0.53 sec)
```

```
mysql> desc customer;
+-----------+-------------+------+-----+---------+-------+
| Field     | Type        | Null | Key | Default | Extra |
+-----------+-------------+------+-----+---------+-------+
| cust_id   | int(20)     | NO   | PRI | NULL    |       |
| cust_name | char(50)    | YES  |     | NULL    |       |
| mobile_no | bigint(20)  | YES  |     | NULL    |       |
| address   | varchar(50) | YES  |     | NULL    |       |
+-----------+-------------+------+-----+---------+-------+
4 rows in set (0.00 sec)

mysql> desc sellers;
+--------+----------+------+-----+---------+-------+
| Field  | Type     | Null | Key | Default | Extra |
+--------+----------+------+-----+---------+-------+
| s_id   | int(11)  | NO   | PRI | NULL    |       |
| s_name | char(50) | YES  |     | NULL    |       |
+--------+----------+------+-----+---------+-------+
2 rows in set (0.00 sec)

mysql> desc orders;
+--------+-------------+------+-----+---------+-------+
| Field  | Type        | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
| o_id   | int(11)     | NO   | PRI | NULL    |       |
| s_id   | int(11)     | NO   | MUL | NULL    |       |
| c_id   | int(20)     | NO   | MUL | NULL    |       |
| o_name | varchar(50) | YES  |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
4 rows in set (0.00 sec)
```

4. Insert sample data

```
mysql> insert into customer
    -> values(1,"Ritesh Singh",988888888,"a-32"),
    -> (2,"Vishal Sharma",720000000,"gzb"),
    -> (3,"Rishabh","999999999","greno");
Query OK, 3 rows affected (0.08 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> insert into sellers
    -> values(21,"Shiv"),
    -> (22,"Pratap");
Query OK, 2 rows affected (0.04 sec)
Records: 2  Duplicates: 0  Warnings: 0

mysql> insert into orders
    -> values(1011,22,1,"cola"),
    -> (1012,21,2,"pepsi"),
    -> (1013,22,3,"cola");
Query OK, 3 rows affected (0.04 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql>
```

5. Find the sales person have multiple orders.

```
mysql> SELECT  o.s_id,  s.s_name, COUNT(*)  FROM  orders o, sellers s  WHERE o.s
_id = s.s_id  GROUP BY  o.s_id  HAVING  COUNT(*) > 1;
+------+--------+----------+
| s_id | s_name | COUNT(*) |
+------+--------+----------+
|   22 | Pratap |        2 |
+------+--------+----------+
1 row in set (0.03 sec)
```

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

```
mysql> select * from sellers s, orders o  where o.s_id = s.s_id;
+------+--------+------+------+------+--------+
| s_id | s_name | o_id | s_id | c_id | o_name |
+------+--------+------+------+------+--------+
|   22 | Pratap | 1011 |   22 |    1 | cola   |
|   21 | Shiv   | 1012 |   21 |    2 | pepsi  |
|   22 | Pratap | 1013 |   22 |    3 | cola   |
+------+--------+------+------+------+--------+
3 rows in set (0.00 sec)
```

7. Create index

```
mysql> create index seller_id_index on orders(s_id);
Query OK, 0 rows affected (0.44 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 | Comment | Index_comment |
+--------+------------+----------------+--------------+-------------+-----------+-------------+----------+--------+------
------+---------+---------------+
| orders |          0 | PRIMARY        |            1 | o_id        | A         |           3 |     NULL | NULL   |
 | BTREE      |         |               |
| orders |          1 | c_id           |            1 | c_id        | A         |           3 |     NULL | NULL   |
 | BTREE      |         |               |
| orders |          1 | seller_id_index |            1 | s_id        | A         |           2 |     NULL | NULL   |
 | BTREE      |         |               |
+--------+------------+----------------+--------------+-------------+-----------+-------------+----------+--------+------
------+---------+---------------+
3 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 o.o_id AS order_number, s.s_name, c.cust_id, c.cust_name
from orders o, sellers s, customer c where o.s_id=s.s_id && o.c_id = c.
cust_id;
+--------------+--------+---------+---------------+
| order_number | s_name | cust_id | cust_name     |
+--------------+--------+---------+---------------+
|         1011 | Pratap |       1 | Ritesh Singh  |
|         1012 | Shiv   |       2 | Vishal Sharma |
|         1013 | Pratap |       3 | Rishabh       |
+--------------+--------+---------+---------------+
3 rows in set (0.00 sec)
```