# 1.Create Database
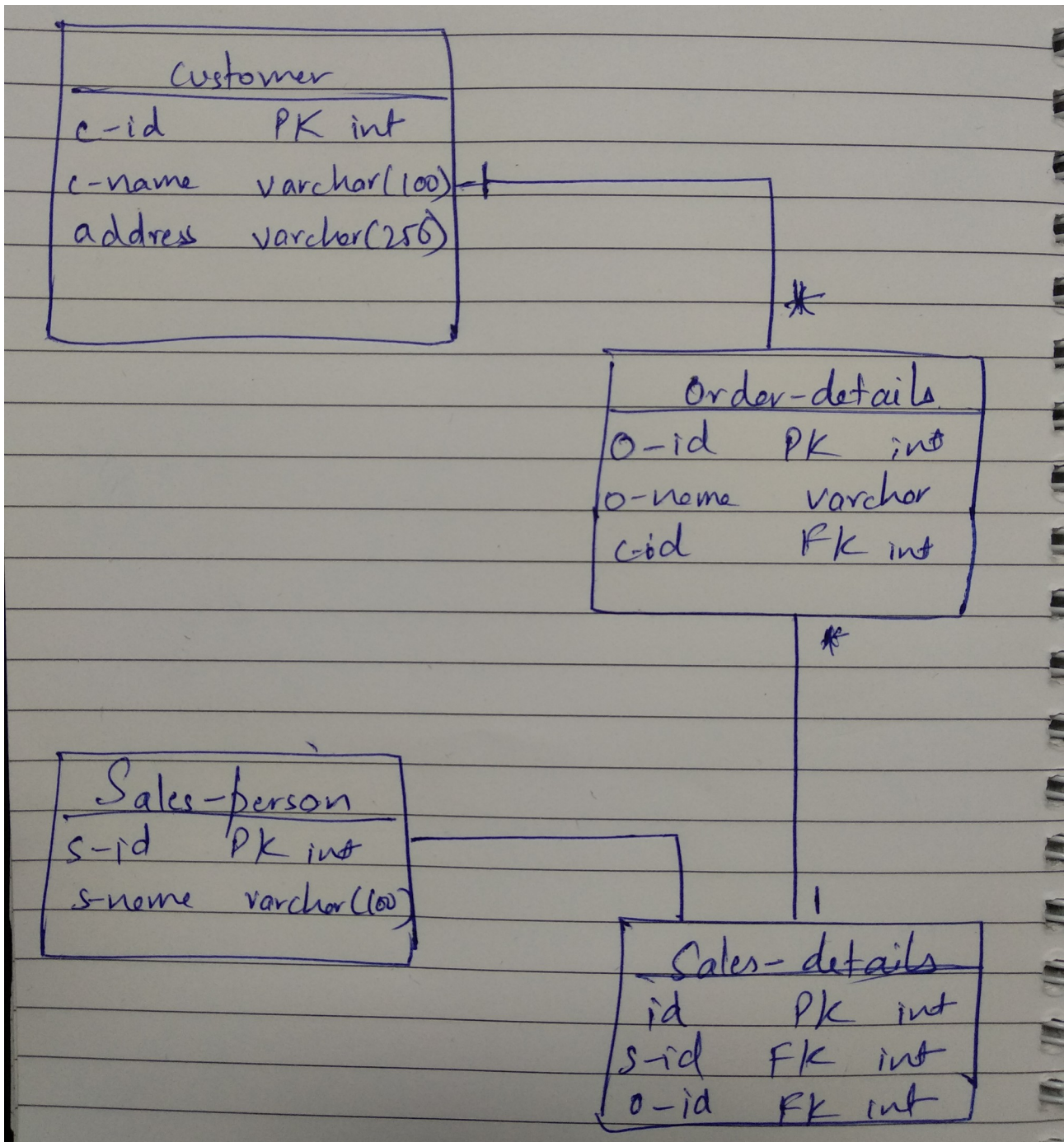
```
mysql> create database online;
Query OK, 1 row affected (0.00 sec)

mysql> use online;
Database changed
mysql> create table
```

# 2.Design schema

### 3.Create tables

CUSTOMER TABLE

```
mysql> create table customer(
    -> ID INT NOT NULL,
    -> C_NAME VARCHAR(20) NOT NULL,
    -> C_ADD CHAR(25),
    -> PRIMARY KEY(ID)
    -> );
Query OK, 0 rows affected (0.04 sec)
```

order_details TABLE

```
mysql> create table order_details(O_ID INT, ORDER_ITEM VARCHAR(20), ID INT(11),
PRIMARY KEY(O_ID),FOREIGN KEY(ID) REFERENCES customer(ID));
Query OK, 0 rows affected (0.04 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 (0.05 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),foreign key(
o_id) references order_details(O_ID));
Query OK, 0 rows affected (0.05 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

```
mysql> insert into customer(ID,C_NAME,C_ADD) values(100,"sonal","kanpur");
Query OK, 1 row affected (0.01 sec)

mysql> insert into customer(ID,C_NAME,C_ADD) values(101,"atisha","bangalore");
Query OK, 1 row affected (0.04 sec)

mysql> insert into customer(ID,C_NAME,C_ADD) values(102,"naina","noida");
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into order_details(O_ID,ORDER_ITEM,ID) values(001,"shorts",100);
Query OK, 1 row affected (0.03 sec)

mysql> insert into order_details(O_ID,ORDER_ITEM,ID) values(002,"shorts",101);
Query OK, 1 row affected (0.01 sec)

mysql> insert into order_details(O_ID,ORDER_ITEM,ID) values(003,"top",103);
Query OK, 1 row affected (0.04 sec)

mysql> insert into order_details(O_ID,ORDER_ITEM,ID) values(004,"pant",102);
Query OK, 1 row affected (0.04 sec)
```

```
mysql> insert into sales_person(s_id,s_name) values(111,"rakesh");
Query OK, 1 row affected (0.04 sec)

mysql> insert into sales_person(s_id,s_name) values(112,"anil");
Query OK, 1 row affected (0.04 sec)

mysql> insert into sales_person(s_id,s_name) values(113,"mohan");
Query OK, 1 row affected (0.03 sec)

mysql> insert into sales_person(s_id,s_name) values(114,"rohan");
Query OK, 1 row affected (0.03 sec)

mysql>
```

```
mysql> insert into sales_details(s_id,o_id) values(111,2);
Query OK, 1 row affected (0.01 sec)

mysql> insert into sales_details(s_id,o_id) values(112,3);
Query OK, 1 row affected (0.00 sec)

mysql> insert into sales_details(s_id,o_id) values(113,1);
Query OK, 1 row affected (0.01 sec)

mysql> insert into sales_details(s_id,o_id) values(114,4);
Query OK, 1 row affected (0.03 sec)

mysql>
```

5.Find the Sales Person have multiple orders.

```
mysql> select count(*) as count ,s_id from sales_details group by s_id having co
unt >1 ;
Empty set (0.04 sec)

mysql> insert into sales_details(s_id,o_id) values(113,3);
Query OK, 1 row affected (0.04 sec)

mysql> select count(*) as count ,s_id from sales_details group by s_id having co
unt >1 ;
+-------+------+
| count | s_id |
+-------+------+
|     2 |  113 |
+-------+------+
1 row in set (0.00 sec)

mysql>
```

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 wh
ere sp.s_id=sd.s_id;
+------+--------+------+
| s_id | s_name | o_id |
+------+--------+------+
|  111 | rakesh |    2 |
|  112 | anil   |    3 |
|  113 | mohan  |    1 |
|  114 | rohan  |    4 |
|  113 | mohan  |    3 |
+------+--------+------+
5 rows in set (0.01 sec)

mysql>
```

7.Create index

```
mysql> create index sno on sales_person(s_id,s_name);
Query OK, 0 rows affected (0.05 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

8.How to show index on a table

```
mysql> show indesex from sales_person;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax
to use near 'indesex from sales_person' at line 1
mysql> show indexes from sales_person;
```

| Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment | Index_comment |
|-------|-----------|----------|--------------|-------------|-----------|-------------|----------|--------|------|-----------|---------|---------------|
| sales_person | 0 | PRIMARY | 1 | s_id | A | 4 | NULL | NULL | | BTREE | | |
| sales_person | 1 | sno | 1 | s_id | A | 4 | NULL | NULL | | BTREE | | |
| sales_person | 1 | sno | 2 | s_name | A | 4 | NULL | NULL | | BTREE | | |

```
3 rows in set (0.00 sec)

mysql>
```

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

```
mysql> select sp.s_name,sd.o_id,od.id from sales_person as sp inner join sales_d
etails as sd on sp.s_id=sd.s_id inner join order_details as od on sd.o_id=od.o_i
d;
+--------+------+------+
| s_name | o_id | id   |
+--------+------+------+
| rakesh |    2 |  101 |
| anil   |    3 |  103 |
| mohan  |    1 |  100 |
| rohan  |    4 |  102 |
| mohan  |    3 |  103 |
+--------+------+------+
5 rows in set (0.01 sec)

mysql>
```