

1.Create Database

Cmd- create database sales;

```
mysql> show databases
+-----+
| Database |
+-----+
| information_schema |
| db1        |
| mysql      |
| performance_schema |
| sales      |
| sys        |
+-----+
6 rows in set (0.00 sec)
```

2.Design Schema

3.Create tables

```
mysql> create table customer
-> (cid bigint(20) not null auto_increment,
-> cname varchar(200) not null,
-> caddr varchar(300) not null,
-> contact int(20),
-> primary key (cid)
-> );
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> desc customer;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| cid   | bigint(20)    | NO   | PRI | NULL    | auto_increment |
| cname | varchar(200)  | NO   |     | NULL    |                |
| caddr | varchar(300)  | NO   |     | NULL    |                |
| contact | int(20)      | YES  |     | NULL    |                |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> desc orders;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| oid    | bigint(20)    | NO   | PRI | NULL    | auto_increment |
| oname  | varchar(255)  | NO   |     | NULL    |                |
| cid    | bigint(20)    | NO   | MUL | NULL    |                |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> desc salesperson;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| sid    | bigint(20)    | NO   | PRI | NULL    | auto_increment |
| sname  | varchar(255)  | NO   |     | NULL    |                |
| cid    | bigint(20)    | NO   | MUL | NULL    |                |
| oid    | bigint(20)    | NO   | MUL | NULL    |                |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

4.Insert sample data

```
mysql> insert into customer(cid,cname)values (1,'parul');
Query OK, 1 row affected (0.00 sec)

mysql> insert into customer(cid,cname)values (2,'dolly');
Query OK, 1 row affected (0.01 sec)

mysql> insert into customer(cid,cname)values (3,'anuja');
Query OK, 1 row affected (0.00 sec)

mysql> insert into customer(cid,cname)values (4,'amarjeet');
Query OK, 1 row affected (0.00 sec)

mysql> insert into orders(oid,oname,cid)values (01,rose,3);
ERROR 1054 (42S22): Unknown column 'rose' in 'field list'
mysql> insert into orders(oid,oname,cid)values (01,'rose',3);
Query OK, 1 row affected (0.00 sec)

mysql> insert into orders(oid,oname,cid)values (02,'chocolate',2);
Query OK, 1 row affected (0.00 sec)

mysql> insert into orders(oid,oname,cid)values (03,'teddy',3);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from customer  
-> ;
```

cid	cname
1	parul
2	dolly
3	anuja
4	amarjeet

4 rows in set (0.00 sec)

```
mysql> select * from orders;
```

oid	oname	cid
1	rose	3
2	chocolate	2
3	teddy	3
4	bags	1
5	coffee	4
6	ring	3

6 rows in set (0.00 sec)

```
mysql> insert into salesperson(sid,sname,cid,oid)values (01,'pallavi',3,01);
Query OK, 1 row affected (0.01 sec)

mysql> insert into salesperson(sid,sname,cid,oid)values (02,'dipika',2,02);
Query OK, 1 row affected (0.00 sec)

mysql> insert into salesperson(sid,sname,cid,oid)values (03,'gaurav',1,01);
Query OK, 1 row affected (0.00 sec)

mysql> insert into salesperson(sid,sname,cid,oid)values (04,'vidhi',2,04);
Query OK, 1 row affected (0.00 sec)

mysql> insert into salesperson(sid,sname,cid,oid)values (05,'anuja',4,06);
Query OK, 1 row affected (0.00 sec)

mysql> insert into salesperson(sid,sname,cid,oid)values (06,'ahuja',3,02);
Query OK, 1 row affected (0.00 sec)

mysql> select * from salesperson;
+-----+-----+-----+-----+
| sid | sname  | cid | oid |
+-----+-----+-----+-----+
| 1 | pallavi | 3 | 1 |
| 2 | dipika  | 2 | 2 |
| 3 | gaurav  | 1 | 1 |
| 4 | vidhi   | 2 | 4 |
| 5 | anuja   | 4 | 6 |
| 6 | ahuja   | 3 | 2 |
+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

5.Find the sales person have multiple orders.

```
mysql>
mysql> select sname from salesperson group by sname having count(oid)>1;
+-----+
| sname  |
+-----+
| dipika |
| pallavi |
+-----+
2 rows in set (0.00 sec)
```

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


```
mysql> select salesperson.sname,orders.ename from salesperson left join orders on salesperson.sid=orders.oid order by salesperson.sname;
```

sname	ename
ahuja	ring
anuja	coffee
dipika	chocolate
dipika	NULL
gaurav	teddy
pallavi	rose
pallavi	NULL
vidhi	bags

```
8 rows in set (0.01 sec)

mysql>
```

7.Create index

```
mysql> create index idx_cname on customer (cname);
Query OK, 0 rows affected (0.02 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
customer	0	PRIMARY	1	cid	A	4	NULL	NULL		BTREE	
customer	1	idx_cname	1	cname	A	4	NULL	NULL		BTREE	

```
2 rows in set (0.00 sec)
```

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

```
mysql> select salesperson.sname,salesperson.oid,customer.cname from salesperson left join customer on salesperson.oid=customer.cid order by salesperson.sname;
```

sname	oid	cname
ahuja	2	dolly
anuja	6	NULL
dipika	2	dolly
dipika	4	amarjeet
gaurav	1	parul
pallavi	1	parul
pallavi	3	anuja
vidhi	4	amarjeet

```
8 rows in set (0.00 sec)
```