

1.

create database Shopping;

```
shobhit@Shobhit-Bisaria:~$ sudo mysql -u root -p
[sudo] password for shobhit:
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 13
Server version: 5.7.29-0ubuntu0.18.04.1 (Ubuntu)

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

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

2.

desc Customer;

```
shobhit@Shobhit-Bisaria:~$ mysql -u root -p
[sudo] password for shobhit:
mysql> desc Customer;
+-----+-----+-----+-----+-----+-----+
| Field | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id    | int(10)| NO   | PRI | NULL    | auto_increment |
| name  | varchar(40)| YES |     | NULL    |               |
| email | varchar(40)| YES |     | NULL    |               |
| mobile| bigint(15)| YES |     | NULL    |               |
+-----+-----+-----+-----+-----+-----+
```

desc Salesperson;

```
mysql> desc Salesperson;
+-----+-----+-----+-----+-----+-----+
| Field | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id    | int(10)| NO   | PRI | NULL    | auto_increment |
| name  | varchar(40)| YES |     | NULL    |               |
+-----+-----+-----+-----+-----+-----+
```

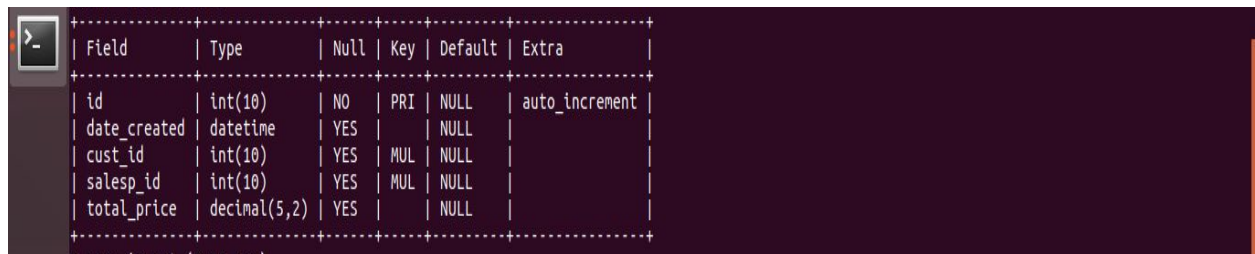
desc Product;

```
mysql> desc Product;
+-----+-----+-----+-----+-----+-----+
| Field | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id    | int(10)| NO   | PRI | NULL    | auto_increment |
| name  | varchar(40)| YES |     | NULL    |               |
+-----+-----+-----+-----+-----+-----+
```

desc Order_Product;

```
mysql> desc Order_Product;
+-----+-----+-----+-----+-----+-----+
| Field | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id    | int(10)| NO   | PRI | NULL    | auto_increment |
| prod_id | int(10)| YES | MUL | NULL    |               |
| qty   | int(10)| YES |     | NULL    |               |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)
```

desc Orders;



Field	Type	Null	Key	Default	Extra
id	int(10)	NO	PRI	NULL	auto_increment
date_created	datetime	YES		NULL	
cust_id	int(10)	YES	MUL	NULL	
salesp_id	int(10)	YES	MUL	NULL	
total_price	decimal(5,2)	YES		NULL	

3.

create table Customer(id int(10) auto_increment primary key, name varchar(40), email varchar(40), mobile bigint(15));

create table Product(id int(10)auto_increment primary key, name varchar(40));

create table Salesperson(id int(10)auto_increment primary key, name varchar(40), price decimal(5,2));

create table Order_Product(id int(10)auto_increment primary key, prod_id int(10), qty int(10), foreign key (prod_id)references Product(id));

create table Orders(id int(10)auto_increment primary key, date_created datetime, cust_id int(10),salesp_id int(10), total_price decimal(5,2), foreign key (cust_id)references Customer(id),foreign key (salesp_id)references Salesperson(id));

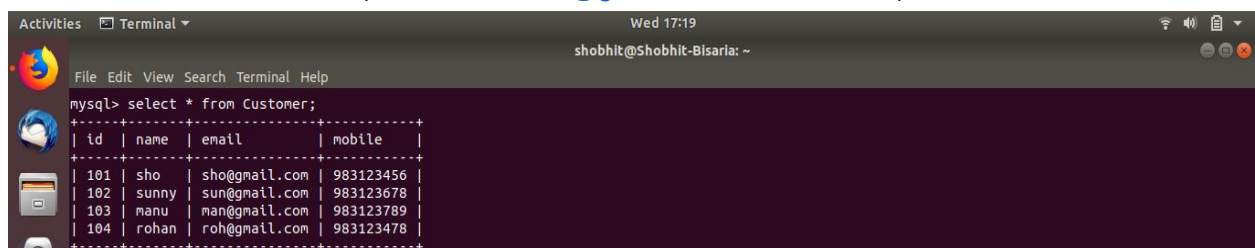
show tables;



```
mysql> show tables;
+-----+
| Tables_in_Shopping |
+-----+
| Customer            |
| Order_Product       |
| Orders              |
| Product             |
| Salesperson         |
+-----+
```

4.

insert into Customer values(101, "sho","sho@gmail.com",983123456);



```
mysql> select * from Customer;
+----+-----+-----+-----+
| id | name | email | mobile |
+----+-----+-----+-----+
| 101 | sho  | sho@gmail.com | 983123456 |
| 102 | sunny | sun@gmail.com | 983123678 |
| 103 | manu | man@gmail.com | 983123789 |
| 104 | rohan | roh@gmail.com | 983123478 |
+----+-----+-----+-----+
```

insert into Salesperson values(1,"a");

```
mysql> select * from Product;
+----+-----+
| id | name | price |
+----+-----+
| 1 | abc  | 50.00 |
| 2 | pqr  | 100.00 |
| 3 | xyz  | 200.00 |
| 4 | mno  | 150.00 |
+----+-----+
```

insert into Product values(1,"abc",50.00);

```
mysql> select * from Salesperson;
+----+-----+
| id | name |
+----+-----+
| 1 | a    |
| 2 | b    |
| 3 | c    |
| 4 | d    |
+----+-----+
```

insert into Order_Product values(1,1,5);

```
mysql> select * from Order_Product;
+----+-----+
| id | prod_id | qty |
+----+-----+
| 1 | 1       | 5   |
| 2 | 2       | 4   |
| 3 | 4       | 4   |
| 4 | 3       | 4   |
+----+-----+
4 rows in set (0.00 sec)
```

insert into Orders values(1,now(),101,1,200.00);

```
mysql> select * from Orders;
+----+-----+-----+-----+-----+
| id | date_created      | cust_id | salesp_id | total_price |
+----+-----+-----+-----+-----+
| 1 | 2020-02-05 17:17:11 | 101    | 1         | 200.00      |
| 2 | 2020-02-05 17:17:29 | 102    | 1         | 300.00      |
| 3 | 2020-02-05 17:17:45 | 101    | 2         | 300.00      |
| 4 | 2020-02-05 17:17:58 | 103    | 3         | 500.00      |
| 5 | 2020-02-05 17:18:54 | 101    | 3         | 650.00      |
+----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

5.

select count(*),s.name from Salesperson s inner join Orders o on s.id=o.salesp_id group by s.id having count(*)>1;

```
mysql> select count(*),s.name from Salesperson s inner join Orders o on s.id=o.salesp_id group by s.id having count(*)>1;
+-----+-----+
| count(*) | name |
+-----+-----+
| 2        | a    |
| 2        | c    |
+-----+-----+
2 rows in set (0.01 sec)

mysql>
```

6.

select s.*,o.* from Salesperson s inner join Orders o on s.id=o.salesp_id;

```
mysql> select s.*,o.* from Salesperson s inner join Orders o on s.id=o.salesp_id;
+-----+-----+-----+-----+-----+-----+-----+
| id | name | id | date_created | cust_id | salesp_id | total_price |
+-----+-----+-----+-----+-----+-----+-----+
| 1 | a | 1 | 2020-02-05 17:17:11 | 101 | 1 | 200.00 |
| 1 | a | 2 | 2020-02-05 17:17:29 | 102 | 1 | 300.00 |
| 2 | b | 3 | 2020-02-05 17:17:45 | 101 | 2 | 300.00 |
| 3 | c | 4 | 2020-02-05 17:17:58 | 103 | 3 | 500.00 |
| 3 | c | 5 | 2020-02-05 17:18:54 | 101 | 3 | 650.00 |
+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql>
```

7.

create index myIndex on Customer(name);

```
mysql> create index myIndex on Customer(name);
Query OK, 0 rows affected (0.05 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

8.

show index from Customer;

```
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 | id | A | 4 | NULL | NULL | YES | BTREE | |
| Customer | 1 | myIndex | 1 | name | A | 4 | NULL | NULL | YES | BTREE | |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql>
```

9.

select c.name customer_name,s.name salesperson_id,o.id order_id from Customer c inner join Orders o on c.id=o.cust_id inner join Salesperson s on s.id=o.salesp_id;

```
mysql> select c.name customer_name,s.name salesperson_id,o.id order_id from Customer c inner join Orders o on c.id=o.cust_id inner join Salesperson s on s.id=o.salesp_id;
+-----+-----+-----+
| customer_name | salesperson_id | order_id |
+-----+-----+-----+
| sho | a | 1 |
| sunny | a | 2 |
| sho | b | 3 |
| manu | c | 4 |
| sho | c | 5 |
+-----+-----+-----+
5 rows in set (0.00 sec)

mysql>
```