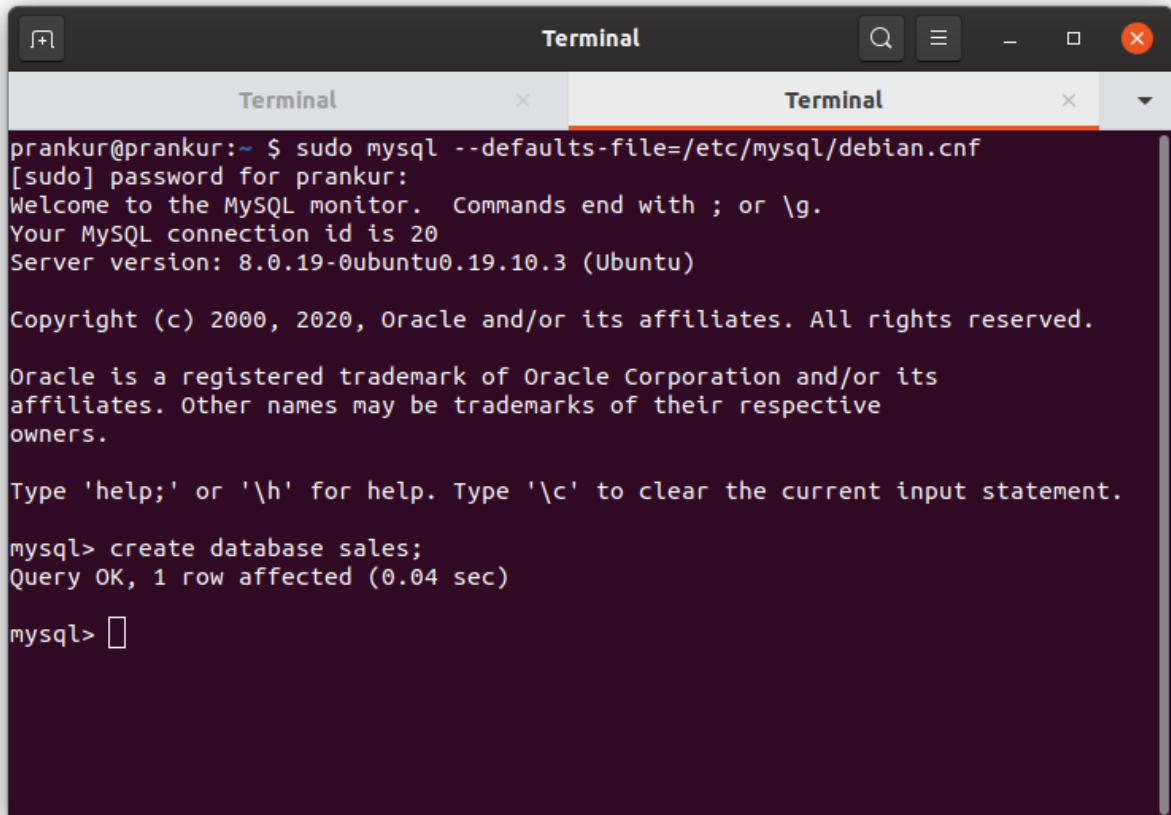


## Database Assignment :-

Ans 1-

A terminal window titled "Terminal" with a dark background and light text. The window shows the command to install MySQL using sudo, followed by the MySQL monitor's welcome message, version information, and copyright notice. The user then enters the command to create a database named 'sales', and the terminal shows the successful execution of the query.

```
prankur@prankur:~ $ sudo mysql --defaults-file=/etc/mysql/debian.cnf
[sudo] password for prankur:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 20
Server version: 8.0.19-0ubuntu0.19.10.3 (Ubuntu)

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owners.

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

mysql> create database sales;
Query OK, 1 row affected (0.04 sec)

mysql> 
```

Ans 2-

```
mysql> desc cust;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| cid   | bigint        | NO   | PRI | NULL    | auto_increment |
| cname | varchar(225)  | YES  |     | NULL    |                |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> desc salp;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| sid   | bigint        | NO   | PRI | NULL    | auto_increment |
| sname | varchar(225)  | YES  |     | NULL    |                |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

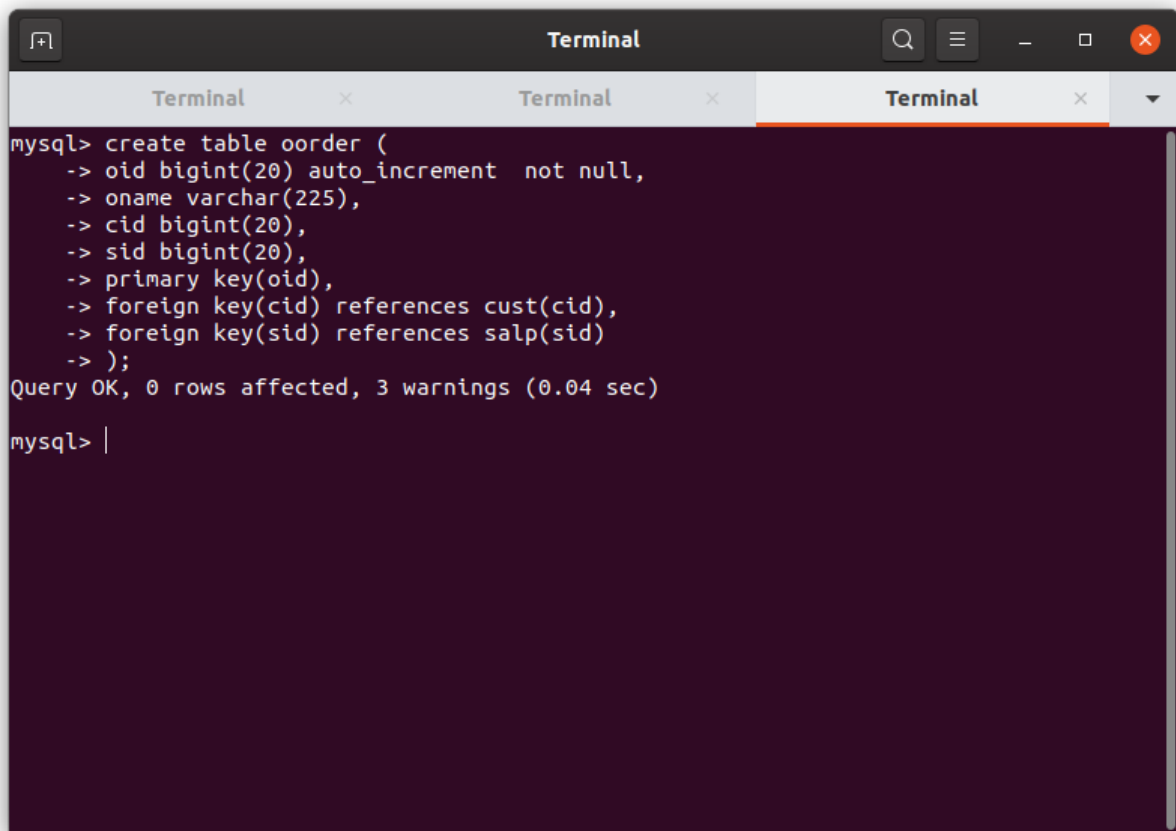
mysql> desc oorder;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| oid   | bigint        | NO   | PRI | NULL    | auto_increment |
| oname | varchar(225)  | YES  | MUL | NULL    |                |
| cid   | bigint        | YES  | MUL | NULL    |                |
| sid   | bigint        | YES  | MUL | NULL    |                |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> |
```

Ans 3-

```
mysql> Create table cust (
-> cid bigint(20) auto_increment not null,
-> cname varchar(225),
-> primary key(cid)
-> );
Query OK, 0 rows affected, 1 warning (0.06 sec)

mysql> create table salp(
-> sid bigint(20) auto_increment not null,
-> sname varchar(225),
-> primary key(sid)
-> );
Query OK, 0 rows affected, 1 warning (0.05 sec)
```

A screenshot of a terminal window with a dark background and light-colored text. The window has a title bar with the word "Terminal" and standard window controls (minimize, maximize, close). Below the title bar, there are three tabs, each labeled "Terminal" with a close button. The active tab is the rightmost one. The terminal content shows a MySQL command prompt "mysql>" followed by a "create table" statement for a table named "oorder". The statement defines columns "oid", "oname", "cid", and "sid" with their respective data types and constraints, including a primary key and two foreign keys. After the command, the terminal displays the message "Query OK, 0 rows affected, 3 warnings (0.04 sec)". The prompt "mysql>" is followed by a vertical bar character "|".

```
mysql> create table oorder (  
  -> oid bigint(20) auto_increment not null,  
  -> oname varchar(225),  
  -> cid bigint(20),  
  -> sid bigint(20),  
  -> primary key(oid),  
  -> foreign key(cid) references cust(cid),  
  -> foreign key(sid) references salp(sid)  
  -> );  
Query OK, 0 rows affected, 3 warnings (0.04 sec)  
mysql> |
```

Ans 4-

```
Activities Terminal Feb 5 8:39 PM en Wi-Fi 40%  
Terminal  
Terminal  
Terminal  
mysql> insert into cust values(1,"Akash");  
Query OK, 1 row affected (0.04 sec)  
  
mysql> insert into cust values(2,"akansha");  
Query OK, 1 row affected (0.04 sec)  
  
mysql> insert into cust values(3,"abhilasha");  
Query OK, 1 row affected (0.01 sec)  
  
mysql> insert into cust values(4,"ayushmann");  
Query OK, 1 row affected (0.01 sec)  
  
mysql> insert into cust values(5,"avinash");  
Query OK, 1 row affected (0.03 sec)  
  
mysql> insert into salp values(1,"prateek");  
Query OK, 1 row affected (0.04 sec)  
  
mysql> insert into salp values(2,"pooja");  
Query OK, 1 row affected (0.04 sec)  
  
mysql> insert into salp values(3,"suresh");  
Query OK, 1 row affected (0.04 sec)  
  
mysql> insert into oorder values(1,"shoes1",1,1);  
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 '1,1)' at line 1  
mysql> insert into oorder values(1,"shoes1",1,1);  
Query OK, 1 row affected (0.04 sec)  
  
mysql> insert into oorder values(2,"laptop",2,3);  
Query OK, 1 row affected (0.04 sec)  
  
mysql> insert into oorder values(3,"computer",4,2);  
Query OK, 1 row affected (0.04 sec)  
  
mysql> insert into oorder values(4 "Buttons" 3 3);
```

Ans 5-

```
Terminal  
Terminal  
Terminal  
mysql> select * from oorder;  
+----+-----+----+----+  
| oid | oname | cid | sid |  
+----+-----+----+----+  
| 1 | shoes1 | 1 | 1 |  
| 2 | laptop | 2 | 3 |  
| 3 | computer | 4 | 2 |  
| 4 | Buttons | 3 | 3 |  
| 5 | Monitor | 5 | 1 |  
| 6 | Lights | 4 | 2 |  
| 7 | Bulbs | 3 | 2 |  
| 8 | Mobile | 5 | 4 |  
| 9 | Shirt | 2 | 5 |  
| 10 | Pants | 4 | 5 |  
+----+-----+----+----+  
10 rows in set (0.00 sec)  
  
mysql> select * from salp where sid in  
-> (select sid from oorder  
-> group by sid  
-> having count(distinct oid)>1);  
+----+-----+  
| sid | sname |  
+----+-----+  
| 1 | prateek |  
| 2 | pooja |  
| 3 | suresh |  
| 5 | prataksh |  
+----+-----+  
4 rows in set (0.00 sec)  
  
mysql> select * from salp;  
+----+-----+  
| sid | sname |  
+----+-----+  
| 1 | prateek |  
| 2 | pooja |  
| 3 | suresh |  
| 4 | sakshi |  
| 5 | prataksh |  
+----+-----+  
5 rows in set (0.00 sec)
```

Ans 6-

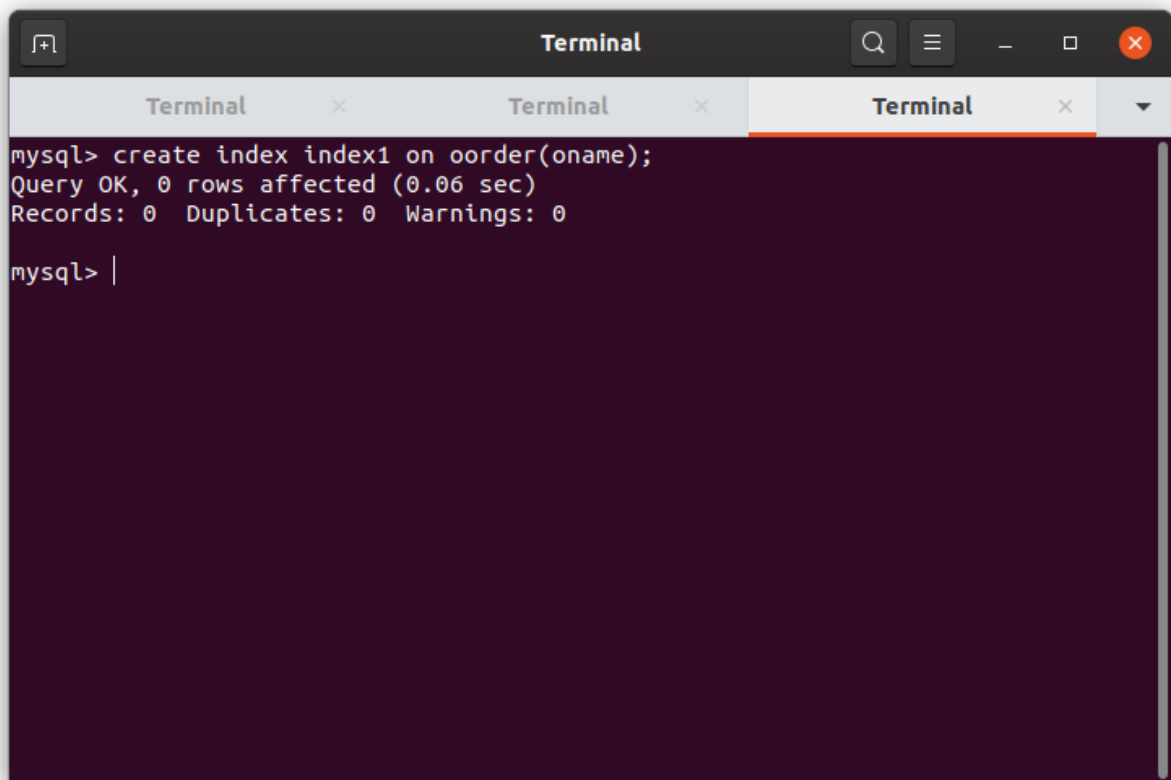
```
mysql> select * from salp inner join oorder on salp.sid = oorder.sid;
```

sid	sname	oid	oname	cid	sid
1	prateek	1	shoes1	1	1
1	prateek	5	Monitor	5	1
2	pooja	3	computer	4	2
2	pooja	6	Lights	4	2
2	pooja	7	Bulbs	3	2
3	suresh	2	laptop	2	3
3	suresh	4	Buttons	3	3
4	sakshi	8	Mobile	5	4
5	prataksh	9	Shirt	2	5
5	prataksh	10	Pants	4	5

```
10 rows in set (0.00 sec)

mysql> |
```

Ans 7-

A screenshot of a terminal window with a dark background and light text. The window has a title bar with the word "Terminal" and standard macOS window controls (search, menu, zoom, and close). Below the title bar, there are three tabs, each labeled "Terminal" with a close button. The active tab is the rightmost one. The terminal content shows a MySQL command being executed: "mysql> create index index1 on oorder(online);". The output of the command is displayed on the next two lines: "Query OK, 0 rows affected (0.06 sec)" and "Records: 0 Duplicates: 0 Warnings: 0". The prompt "mysql> " is followed by a vertical bar cursor on the next line.

```
mysql> create index index1 on oorder(online);
Query OK, 0 rows affected (0.06 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> |
```

Ans 8-

```
mysql> show index from oorder;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment | Index_comment |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| oorder | YES | 0 | PRIMARY | | | 8 | NULL | NULL | NULL | BTREE | | |
| oorder | YES | 1 | cid | cid | A | 5 | NULL | NULL | YES | BTREE | | |
| oorder | YES | 1 | sid | sid | A | 4 | NULL | NULL | YES | BTREE | | |
| oorder | YES | 1 | index1 | oname | A | 10 | NULL | NULL | YES | BTREE | | |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
4 rows in set (0.02 sec)

mysql> |
```

Ans 9-

```
50 rows in set (0.00 sec)

mysql> select oorder.oid,oorder.oname,salp.sname,cust.cname from oorder inner
join salp on oorder.sid = salp.sid inner join cust on oorder.cid=cust.cid;
+-----+-----+-----+-----+
| oid | oname | sname | cname |
+-----+-----+-----+-----+
| 1 | shoes1 | prateek | Akash |
| 2 | laptop | suresh | akansha |
| 9 | Shirt | prataksh | akansha |
| 4 | Buttons | suresh | abhilasha |
| 7 | Bulbs | pooja | abhilasha |
| 3 | computer | pooja | ayushmann |
| 6 | Lights | pooja | ayushmann |
| 10 | Pants | prataksh | ayushmann |
| 5 | Monitor | prateek | avinash |
| 8 | Mobile | sakshi | avinash |
+-----+-----+-----+-----+
10 rows in set (0.00 sec)

mysql> |
```

