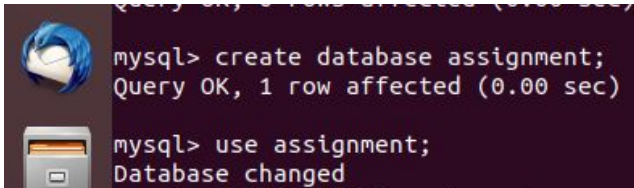


## 1.Create Database

Answer:

```
create database assignment;
```

A terminal window with a dark background. On the left, there are two icons: a blue bird-like icon and a server rack icon. The text in the terminal shows the execution of MySQL commands to create a database named 'assignment' and then switch to using that database.

```
mysql> create database assignment;  
Query OK, 1 row affected (0.00 sec)  
  
mysql> use assignment;  
Database changed
```

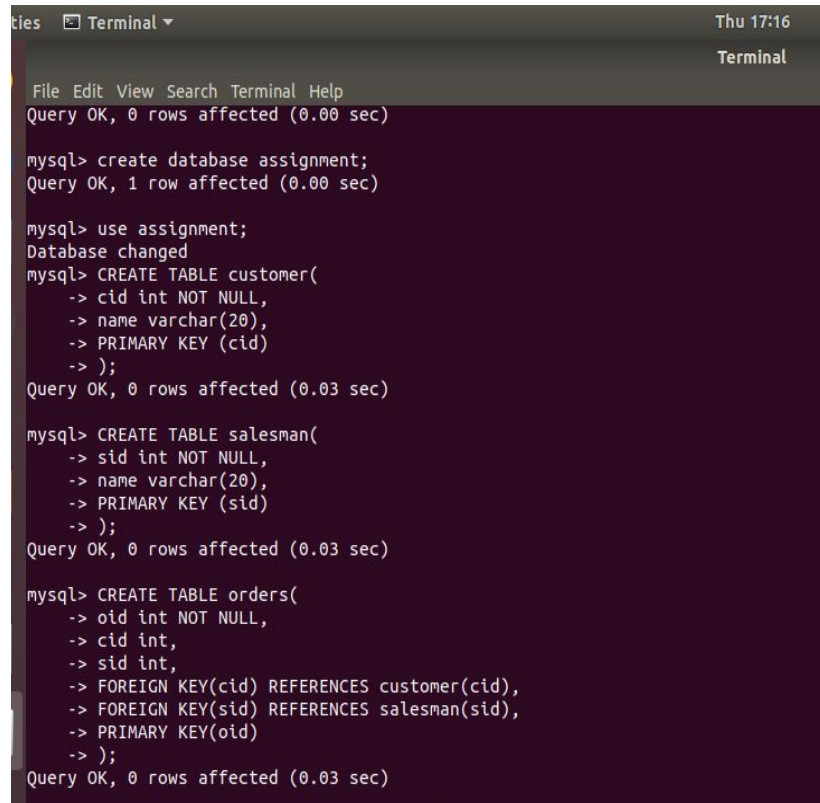
## 3.Create tables

Answer:

```
CREATE TABLE customer(  
cid int NOT NULL,  
name varchar(20),  
PRIMARY KEY (cid)  
);
```

```
CREATE TABLE salesman(  
sid int NOT NULL,  
name varchar(20),  
PRIMARY KEY (sid)  
);
```

```
CREATE TABLE orders(  
oid int NOT NULL,  
cid int,  
sid int,  
FOREIGN KEY(cid) REFERENCES customer(cid),  
FOREIGN KEY(sid) REFERENCES salesman(sid),  
PRIMARY KEY(oid)  
);
```

A terminal window with a dark background and a menu bar at the top (File, Edit, View, Search, Terminal, Help). The terminal shows the execution of MySQL commands to create three tables: 'customer', 'salesman', and 'orders'. The 'orders' table includes foreign key constraints referencing the 'customer' and 'salesman' tables.

```
Query OK, 0 rows affected (0.00 sec)  
  
mysql> create database assignment;  
Query OK, 1 row affected (0.00 sec)  
  
mysql> use assignment;  
Database changed  
mysql> CREATE TABLE customer(  
-> cid int NOT NULL,  
-> name varchar(20),  
-> PRIMARY KEY (cid)  
-> );  
Query OK, 0 rows affected (0.03 sec)  
  
mysql> CREATE TABLE salesman(  
-> sid int NOT NULL,  
-> name varchar(20),  
-> PRIMARY KEY (sid)  
-> );  
Query OK, 0 rows affected (0.03 sec)  
  
mysql> CREATE TABLE orders(  
-> oid int NOT NULL,  
-> cid int,  
-> sid int,  
-> FOREIGN KEY(cid) REFERENCES customer(cid),  
-> FOREIGN KEY(sid) REFERENCES salesman(sid),  
-> PRIMARY KEY(oid)  
-> );  
Query OK, 0 rows affected (0.03 sec)
```

#### 4.Insert sample data

Answer:

```
INSERT INTO customer values (1, "Ajay");
INSERT INTO customer values (2, "Chirag");
INSERT INTO customer values (3, "Jatin");
INSERT INTO customer values (4, "Akash");
INSERT INTO customer values (5, "Harshit");
INSERT INTO customer values (6, "Vikas");
INSERT INTO customer values (6, "Arshad");
```

```
INSERT INTO salesman values (1,"Jayant");
INSERT INTO salesman values (2,"Swapnil");
INSERT INTO salesman values (3,"Tushar");
INSERT INTO salesman values (4,"Himanshu");
```

```
INSERT INTO orders values(1, 1, 1);
INSERT INTO orders values(2, 1, 1);
INSERT INTO orders values(3, 2, 3);
INSERT INTO orders values(4, 4, 2);
```

```
mysql> INSERT INTO customer values (1, "Ajay");
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO customer values (2, "Chirag");
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO customer values (3, "Jatin");
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO customer values (4, "Aakash");
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO customer values (5, "Harshit");
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO customer values (6, "Vikash");
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO customer values (7, "Arshad");
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO salesman values (1,"Jayant");
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO salesman values (2,"Swapnil");
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO salesman values (3,"Tushar");
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO salesman values (4,"Himanshu");
Query OK, 1 row affected (0.01 sec)
```

File Edit View Search Terminal Help

```
mysql> INSERT INTO salesman values (1,"Jayant");
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO salesman values (2,"Swapnil");
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO salesman values (3,"Tushar");
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO salesman values (4,"Himanshu");
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO orders values(1, 1, 1);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO orders values(2, 1, 1);
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO orders values(3, 2, 3);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO orders values(4, 4, 2);
Query OK, 1 row affected (0.01 sec)
```

5. Find the sales person have multiple orders.

Answer:

```
select name
from salesman,orders
where oid>1 AND salesman.sid=orders.sid;
```

```
mysql> select name from salesman,orders where oid>1 AND salesman.sid=orders.sid;
+-----+
| name |
+-----+
| Jayant |
| Swapnil |
| Tushar |
+-----+
3 rows in set (0.00 sec)

mysql> 
```

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

Answer:

```
select salesman.sid,name,oid
from salesman,orders
where salesman.sid=orders.sid;
```

```
mysql>
mysql> select salesman.sid,name,oid
-> from salesman,orders
-> where salesman.sid=orders.sid;
+-----+-----+-----+
| sid | name | oid |
+-----+-----+-----+
| 1 | Jayant | 1 |
| 1 | Jayant | 2 |
| 2 | Swapnil | 4 |
| 3 | Tushar | 3 |
+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> 
```

7. Create index

Answer:

```
create index Indexdemo on salesman (sid,name);
```

```
mysql> create index Indexdemo on salesman (sid,name);
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

## 8.How to show index on a table.

Answer:

**show index from salesman;**

```
mysql> show index from salesman;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| salesman | 0 | PRIMARY | 1 | sid | A | 4 | NULL | NULL | | BTREE | |
| salesman | 1 | Indexdemo | 1 | sid | A | 4 | NULL | NULL | | BTREE | |
| salesman | 1 | Indexdemo | 2 | name | A | 4 | NULL | NULL | YES | BTREE | |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql>
```

## 9.Find the order number, sale person name, along with the customer to whom that order belongs to.

Answer:

**Select o.oid,s.name,c.name  
from orders o,salesman s,customer c  
Where c.cid=o.cid;**


```
mysql>
mysql> Select o.oid,s.name,c.name from orders o,salesman s,customer c Where c.cid=o.cid;
+-----+-----+-----+
| oid | name | name |
+-----+-----+-----+
| 1 | Jayant | Ajay |
| 2 | Jayant | Ajay |
| 3 | Jayant | Chirag |
| 4 | Jayant | Aakash |
| 1 | Swapnil | Ajay |
| 2 | Swapnil | Ajay |
| 3 | Swapnil | Chirag |
| 4 | Swapnil | Aakash |
| 1 | Tushar | Ajay |
| 2 | Tushar | Ajay |
| 3 | Tushar | Chirag |
| 4 | Tushar | Aakash |
| 1 | Himanshu | Ajay |
| 2 | Himanshu | Ajay |
| 3 | Himanshu | Chirag |
| 4 | Himanshu | Aakash |
+-----+-----+-----+
16 rows in set (0.00 sec)

mysql>
```

2.Design Schema

customer		
	cid	int
	name	varchar(20)

salesman		
	sid	int
	name	varchar(20)

orders		
	oid	int
	cid	int
	sid	int

