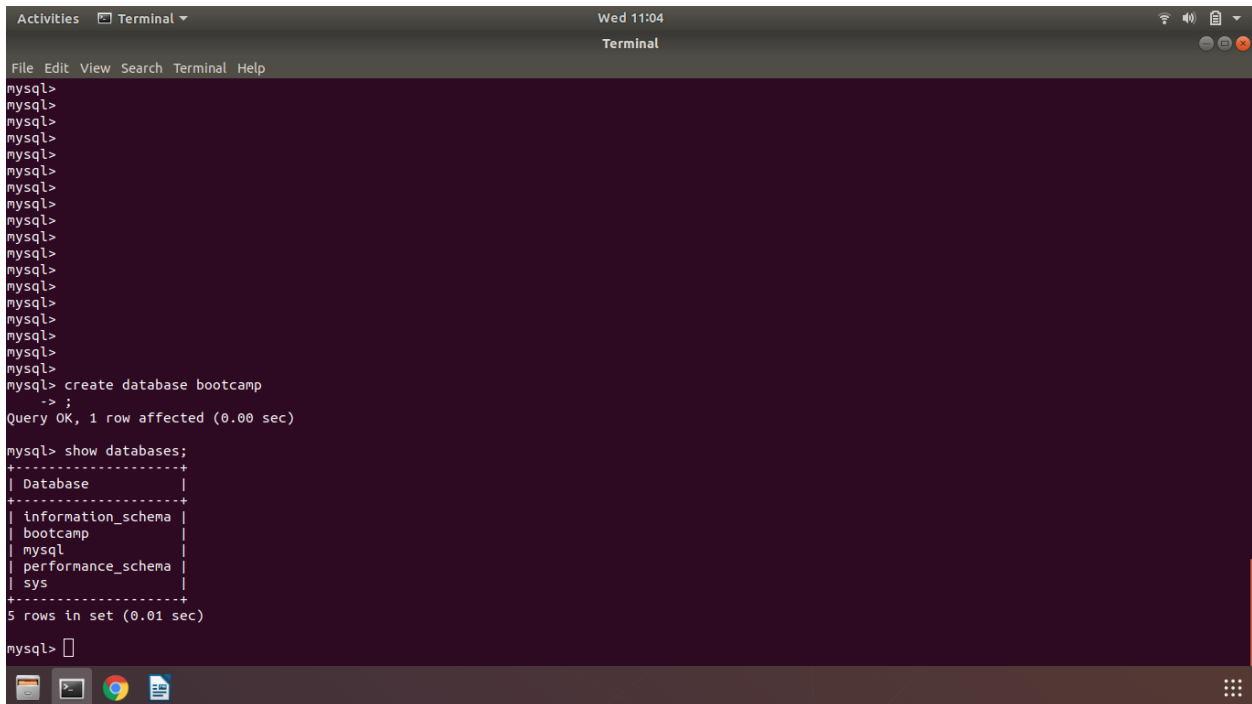


1) Create Database

create database bootcamp;

A screenshot of a Linux terminal window titled 'Terminal' with a dark background. The terminal shows a MySQL prompt 'mysql>' followed by several empty prompts. Then, the command 'create database bootcamp' is entered, followed by a semicolon. The output is 'Query OK, 1 row affected (0.00 sec)'. Next, the command 'show databases;' is entered, followed by a semicolon. The output is a table with one column 'Database' and five rows: 'information_schema', 'bootcamp', 'mysql', 'performance_schema', and 'sys'. The output is formatted with a table border. The terminal window has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The status bar at the bottom shows icons for a file manager, terminal, web browser, and a document.

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

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| bootcamp          |
| mysql             |
| performance_schema |
| sys               |
+-----+
5 rows in set (0.01 sec)

mysql> 
```

2) Design Schema

desc ord;

desc customer;

desc sales;

```
Activities Terminal Wed 20:30
Terminal
File Edit View Search Terminal Help
-> c_id int,
-> s_id int,
-> foreign key(c_id) references customer(id),
-> foreign key(s_id) references sales(id));
Query OK, 0 rows affected (0.04 sec)

mysql> desc customer;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id    | int(11)   | NO   | PRI | NULL    | auto_increment |
| name  | varchar(20) | YES  |     | NULL    |               |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> desc sales;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id    | int(11)   | NO   | PRI | NULL    | auto_increment |
| s_name | varchar(20) | YES  |     | NULL    |               |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> desc ord;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| order_id | int(11) | NO   | PRI | NULL    | auto_increment |
| c_id    | int(11) | YES  | MUL | NULL    |               |
| s_id    | int(11) | YES  | MUL | NULL    |               |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> 
```

3) Create Tables

```
create table customer(
id int primary key auto_increment,
name varchar(20));
```

```
create table sales(
id int primary key auto_increment,
s_name varchar(20));
```

```
create table ord(
order_id int primary key auto_increment,
c_id int,
s_id int,
foreign key(c_id) references customer(id),
foreign key(s_id) references sales(id));
```

```
Activities Terminal Wed 20:23
Terminal
File Edit View Search Terminal Help
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql> create table customer(
-> id int primary key auto_increment,
-> name varchar(20));
Query OK, 0 rows affected (0.05 sec)

mysql> create table sales(
-> id int primary key auto_increment,
-> s_name varchar(20));
Query OK, 0 rows affected (0.04 sec)

mysql> create table ord(
-> order_id int primary key auto_increment,
-> c_id int,
-> s_id int,
-> foreign key(c_id) references customer(id),
-> foreign key(s_id) references sales(id));
Query OK, 0 rows affected (0.04 sec)

mysql> 
```

4) Insert Sample Data

insert into customer(name) values ('ABC'),('LMN'),('XYZ'),('PQR');

insert into sales(name) values ('AAA'),('BBB');

insert into ord(c_id,s_id) values (1,2),(2,2),(3,1),(4,1);

```
Activities Terminal Wed 20:45
Terminal
File Edit View Search Terminal Help
mysql>
mysql>
mysql> select * from customer;
+----+-----+
| id | name |
+----+-----+
| 1  | ABC  |
| 2  | LMN  |
| 3  | XYZ  |
| 4  | PQR  |
+----+-----+
4 rows in set (0.00 sec)

mysql> select * from sales;
+----+-----+
| id | s_name |
+----+-----+
| 1  | AAA    |
| 2  | BBB    |
+----+-----+
2 rows in set (0.00 sec)

mysql> select * from ord;
+-----+-----+-----+
| order_id | c_id | s_id |
+-----+-----+-----+
| 5        | 1    | 2    |
| 6        | 2    | 2    |
| 7        | 3    | 1    |
| 8        | 4    | 1    |
+-----+-----+-----+
4 rows in set (0.00 sec)

mysql>
```

5) Find Sales Person having multiple orders

```
select s.s_name from sales s where (select count(*) from ord o where  
o.s_id=s.id)>1;
```

```
Activities Terminal Wed 20:56
Terminal
File Edit View Search Terminal Help
+-----+
| 1 | AAA |
| 2 | BBB |
+-----+
2 rows in set (0.00 sec)


mysql> select * from ord;
+-----+
| order_id | c_id | s_id |
+-----+
| 5 | 1 | 2 |
| 6 | 2 | 2 |
| 7 | 3 | 1 |
| 8 | 4 | 1 |
+-----+
4 rows in set (0.00 sec)

mysql> select s.s_name from sales s where (select count(*) from ord o where o.s_id=s.id)>1;
+-----+
| s_name |
+-----+
| AAA |
| BBB |
+-----+
2 rows in set (0.00 sec)

mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
```

6) Find all sales person details with order details

```
select s.s_name, s.id, o.order_id, o.c_id, o.s_id from sales s, ord o;
```



The screenshot shows a terminal window with a dark background. At the top, the title bar reads "Activities Terminal" and "Wed 21:35". The terminal content shows a MySQL prompt where a user has entered a series of empty commands. Finally, the user enters the command: `mysql> select s.s_name, s.id, o.order_id, o.c_id, o.s_id from sales s, ord o;`. The terminal displays the result of this query as a table with 5 columns: `s_name`, `id`, `order_id`, `c_id`, and `s_id`. The table contains 8 rows of data. Below the table, the terminal shows "8 rows in set (0.01 sec)". The MySQL prompt `mysql>` is visible at the bottom of the terminal window.

```
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql> select s.s_name, s.id, o.order_id, o.c_id, o.s_id from sales s, ord o;
```

s_name	id	order_id	c_id	s_id
AAA	1	5	1	2
BBB	2	5	1	2
AAA	1	6	2	2
BBB	2	6	2	2
AAA	1	7	3	1
BBB	2	7	3	1
AAA	1	8	4	1
BBB	2	8	4	1

```
8 rows in set (0.01 sec)

mysql>
```

7) Create index

```
create INDEX test on ord (order_id);
```

[illegible]

8) How to show index on a table

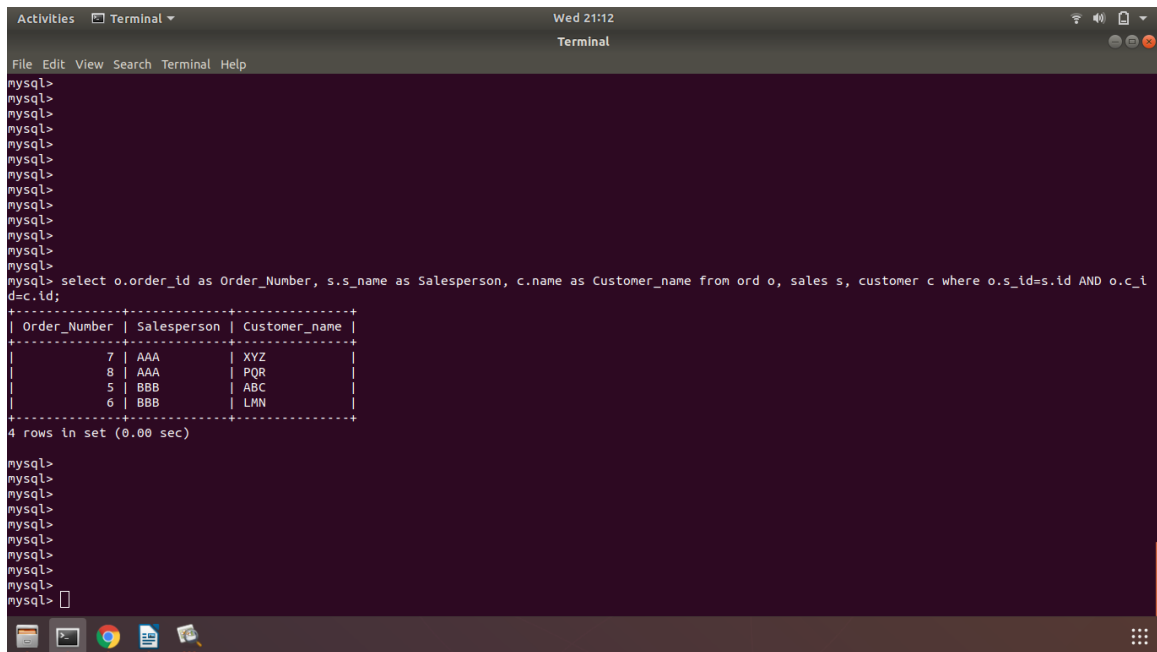
show INDEX FROM ord;

```
Activities Terminal Wed 21:47
Terminal
File Edit View Search Terminal Help
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql> show INDEX FROM ord;
+-----+
| Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment | Index_comme |
+-----+
| ord | 0 | PRIMARY | 1 | order_id | A | 4 | NULL | NULL | | BTREE | | |
| ord | 1 | c_id | 1 | c_id | A | 4 | NULL | NULL | YES | BTREE | | |
| ord | 1 | s_id | 1 | s_id | A | 2 | NULL | NULL | YES | BTREE | | |
| ord | 1 | test | 1 | order_id | A | 4 | NULL | NULL | | BTREE | | |
+-----+
4 rows in set (0.00 sec)

mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
```

9) Find order, salesperson name, user name to whom the order belongs

```
select o.order_id as Order_Number, s.s_name as Salesperson, c.name as Customer_name from ord o, sales s, customer c where o.s_id=s.id AND o.c_id=c.id;
```



The screenshot shows a terminal window with a MySQL prompt. The user has entered a query to select order details. The output is a table with 4 rows. The table has columns: Order_Number, Salesperson, and Customer_name. The data is as follows:

Order_Number	Salesperson	Customer_name
7	AAA	XYZ
8	AAA	PQR
5	BBB	ABC
6	BBB	LMN

4 rows in set (0.00 sec)