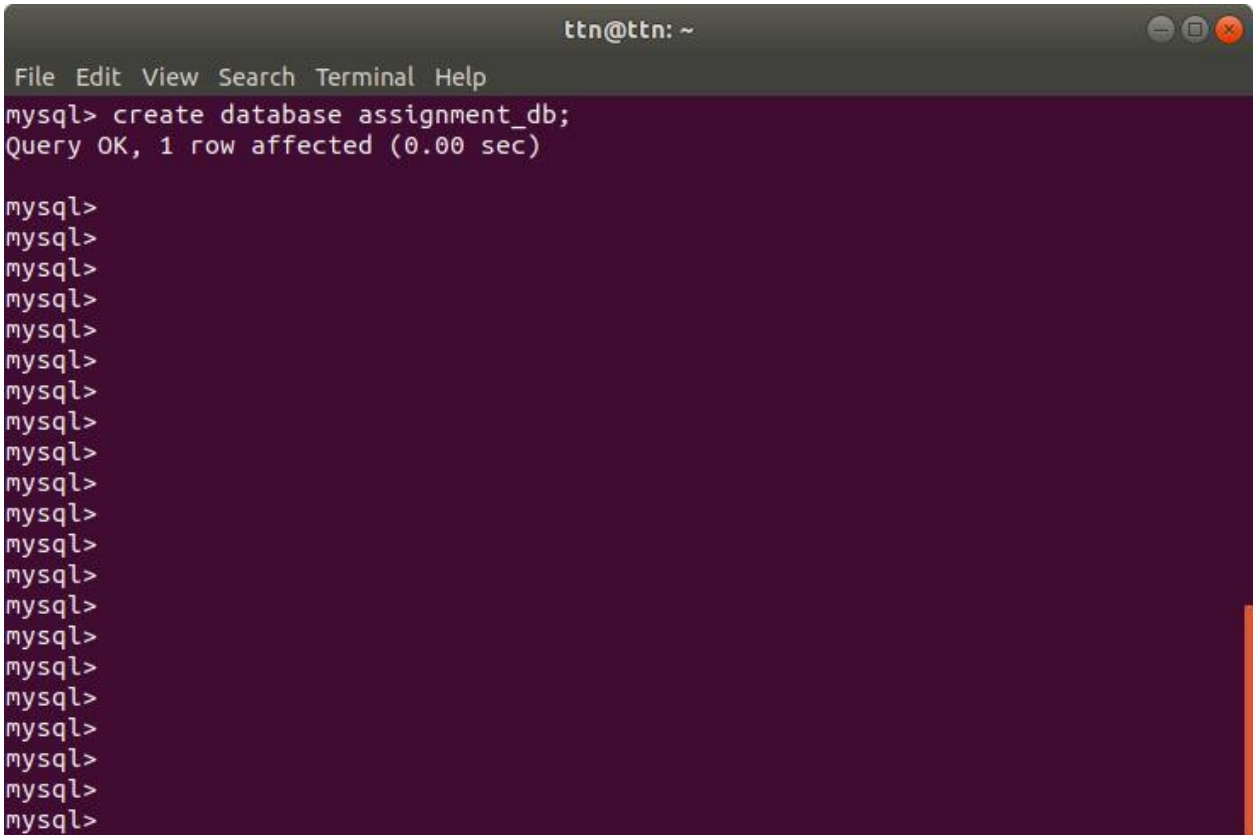
Problem Statement: There can be multiple customers, who can place multiple orders on the site. Now a sales person can handle these orders will distribute into multiple sales persons (One order will be assign to one salesperson only). So a sales person can have multiple orders of multiple customers

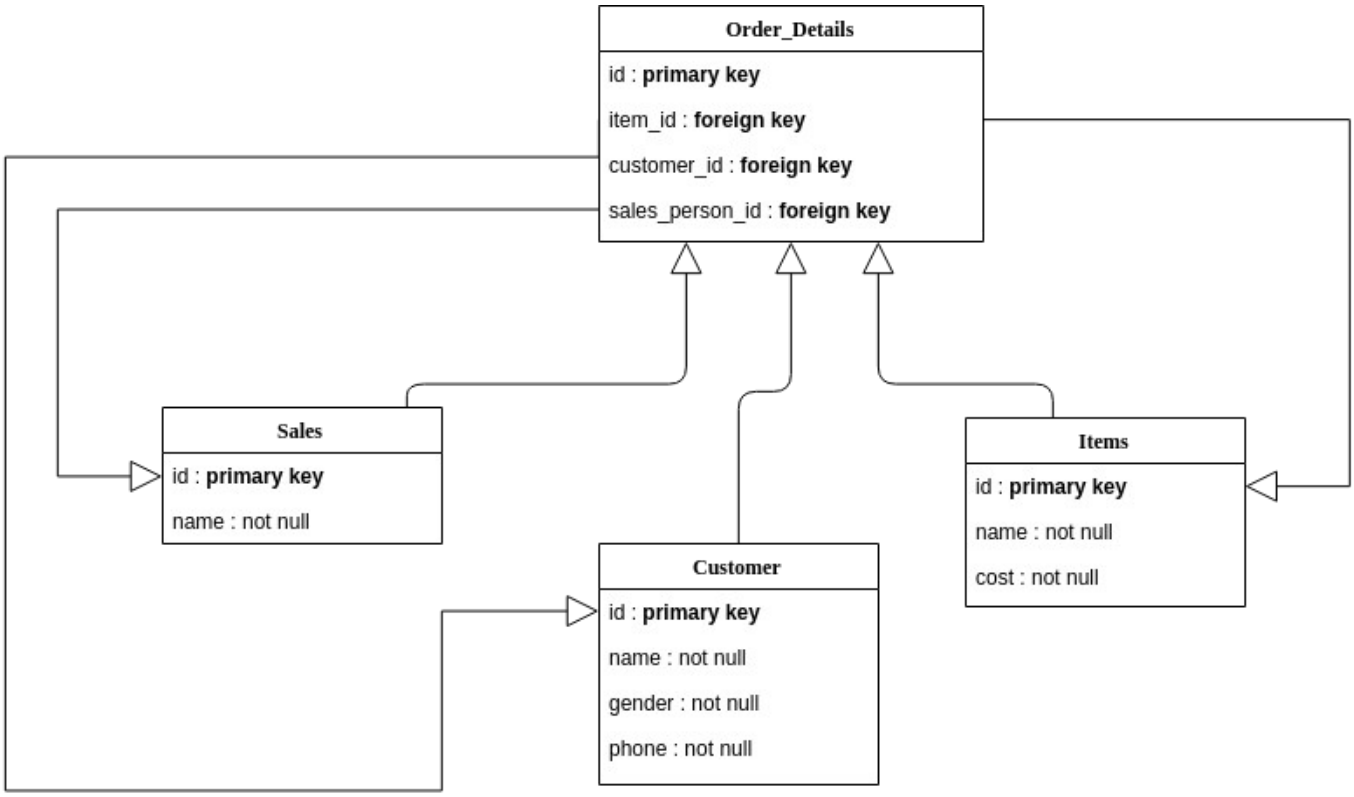
1. Create Database

   create database database_name;



2. Design Schema

->

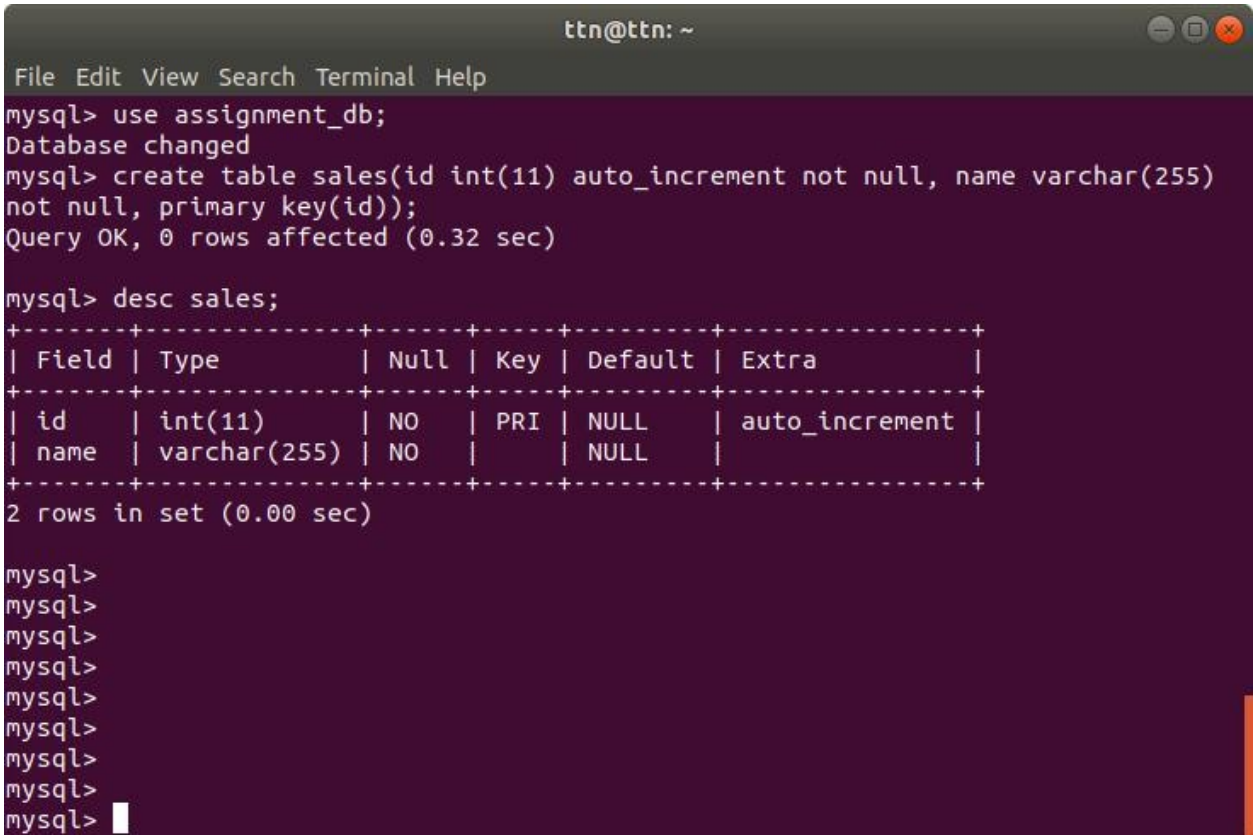


3. Create tables

->

a.

Creating table Sales:



b. Creating table Customer:

```
mysql> create table customer(id int(11) auto_increment not null, name varchar(25
5) not null, gender varchar(1) not null, phone varchar(11) not null,primary key(
id));
Query OK, 0 rows affected (0.29 sec)
```

```
mysql> desc customer;
+--------+--------------+------+-----+---------+----------------+
| Field  | Type         | Null | Key | Default | Extra          |
+--------+--------------+------+-----+---------+----------------+
| id     | int(11)      | NO   | PRI | NULL    | auto_increment |
| name   | varchar(255) | NO   |     | NULL    |                |
| gender | varchar(1)   | NO   |     | NULL    |                |
| phone  | varchar(11)  | NO   |     | NULL    |                |
+--------+--------------+------+-----+---------+----------------+
4 rows in set (0.00 sec)
```

c. Creating table Items:

```
ttn@ttn: ~
File  Edit  View  Search  Terminal  Help
mysql> create table items(id int(11) auto_increment not null, name varchar(100)
not null, cost int(11) not null, primary key(id));
Query OK, 0 rows affected (0.32 sec)

mysql> desc items;
+-------+-------------+------+-----+---------+----------------+
| Field | Type        | Null | Key | Default | Extra          |
+-------+-------------+------+-----+---------+----------------+
| id    | int(11)     | NO   | PRI | NULL    | auto_increment |
| name  | varchar(100)| NO   |     | NULL    |                |
| cost  | int(11)     | NO   |     | NULL    |                |
+-------+-------------+------+-----+---------+----------------+
3 rows in set (0.01 sec)

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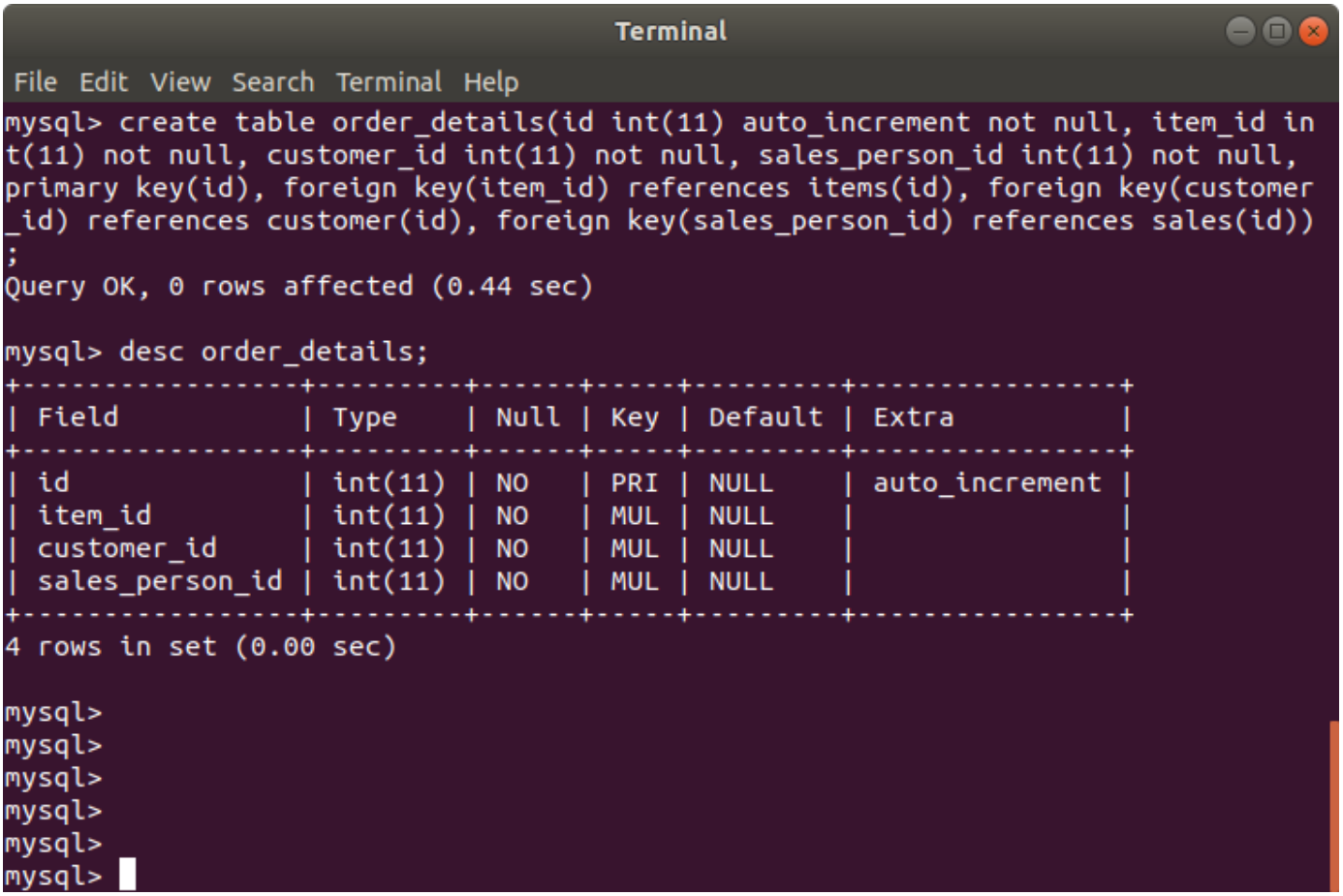

d. Creating table order_details:



4. Insert sample data Inserting sample data in: a. Sales Table

```
mysql> insert into sales values(1, 'sp1');
Query OK, 1 row affected (0.09 sec)

mysql> insert into sales values(2, 'sp2');
Query OK, 1 row affected (0.10 sec)

mysql> insert into sales values(3, 'sp3');
Query OK, 1 row affected (0.09 sec)

mysql> insert into sales values(4, 'sp4');
Query OK, 1 row affected (0.08 sec)

mysql> insert into sales values(5, 'sp5');
Query OK, 1 row affected (0.09 sec)
```

```
mysql> select * from sales;
+----+------+
| id | name |
+----+------+
|  1 | sp1  |
|  2 | sp2  |
|  3 | sp3  |
|  4 | sp4  |
|  5 | sp5  |
+----+------+
5 rows in set (0.00 sec)
```

b. Customer table

```
mysql> insert into customer values(1,'abc','m',12345);
Query OK, 1 row affected (0.09 sec)

mysql> insert into customer values(2,'def','m',1345);
Query OK, 1 row affected (0.09 sec)
```

```
mysql> insert into customer values(3,'desf','f',14345);
Query OK, 1 row affected (0.09 sec)

mysql> insert into customer values(4,'zsf','f',12345);
Query OK, 1 row affected (0.08 sec)

mysql> insert into customer values(5,'zaaf','f',14500);
Query OK, 1 row affected (0.08 sec)
```

```
mysql> select *from customer;
+----+------+--------+-------+
| id | name | gender | phone |
+----+------+--------+-------+
|  1 | abc  | m      | 12345 |
|  2 | def  | m      | 1345  |
|  3 | desf | f      | 14345 |
|  4 | zsf  | f      | 12345 |
|  5 | zaaf | f      | 14500 |
+----+------+--------+-------+
5 rows in set (0.01 sec)
```

c. Items Table

```
mysql> insert into items values(1,'laptop',10000);
Query OK, 1 row affected (0.09 sec)

mysql> insert into items values(2,'computer',8000);
Query OK, 1 row affected (0.10 sec)

mysql> insert into items values(3,'mobile',4000);
Query OK, 1 row affected (0.09 sec)

mysql> insert into items values(4,'radio',1000);
Query OK, 1 row affected (0.08 sec)

mysql> insert into items values(5,'battery',1200);
Query OK, 1 row affected (0.04 sec)
```

```
mysql> select *from items;
+----+----------+-------+
| id | name     | cost  |
+----+----------+-------+
|  1 | laptop   | 10000 |
|  2 | computer |  8000 |
|  3 | mobile   |  4000 |
|  4 | radio    |  1000 |
|  5 | battery  |  1200 |
+----+----------+-------+
5 rows in set (0.00 sec)
```

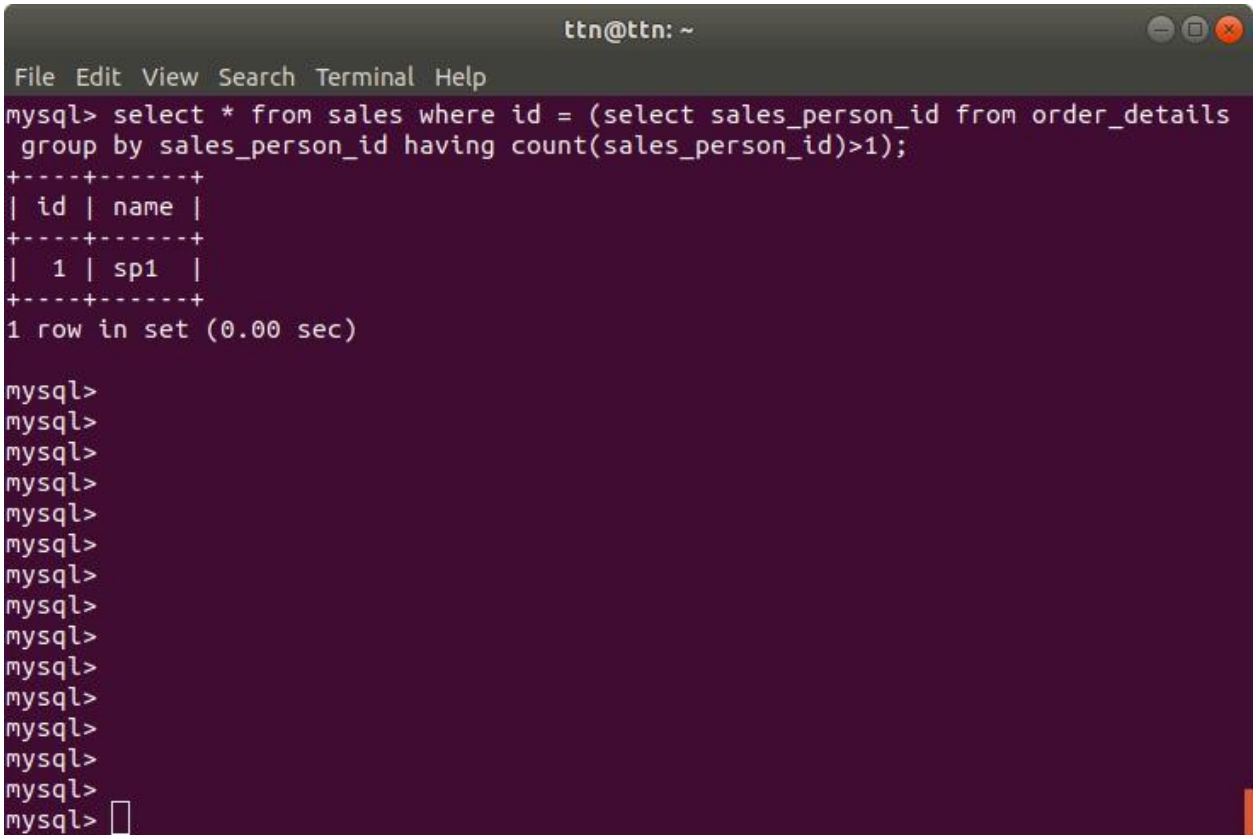
d. Order_Details table

```
mysql> insert into order_details values(1,1,1,1);
Query OK, 1 row affected (0.09 sec)

mysql> insert into order_details values(2,2,1,1);
Query OK, 1 row affected (0.08 sec)

mysql> insert into order_details values(3,1,2,2);
Query OK, 1 row affected (0.09 sec)

mysql> insert into order_details values(4,5,3,4);
Query OK, 1 row affected (0.08 sec)

mysql> insert into order_details values(5,4,5,3);
Query OK, 1 row affected (0.09 sec)
```

```
mysql> select * from order_details;
+----+---------+-------------+-----------------+
| id | item_id | customer_id | sales_person_id |
+----+---------+-------------+-----------------+
|  1 |       1 |           1 |               1 |
|  2 |       2 |           1 |               1 |
|  3 |       1 |           2 |               2 |
|  4 |       5 |           3 |               4 |
|  5 |       4 |           5 |               3 |
+----+---------+-------------+-----------------+
5 rows in set (0.00 sec)
```

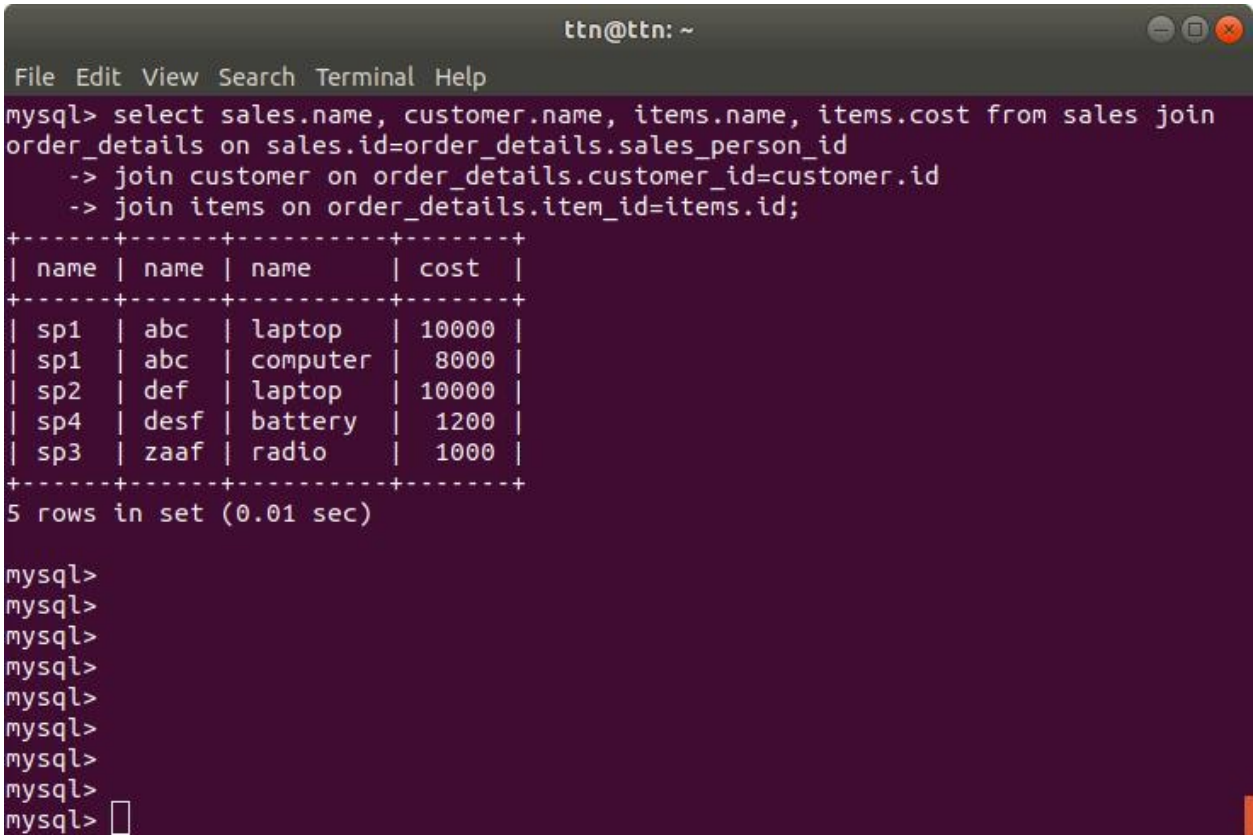
5. Find the sales person have multiple orders.

-> select * from sales where id = (select sales_person_id from order_details group by sales_person_id having count(sales_person_id)>1);



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

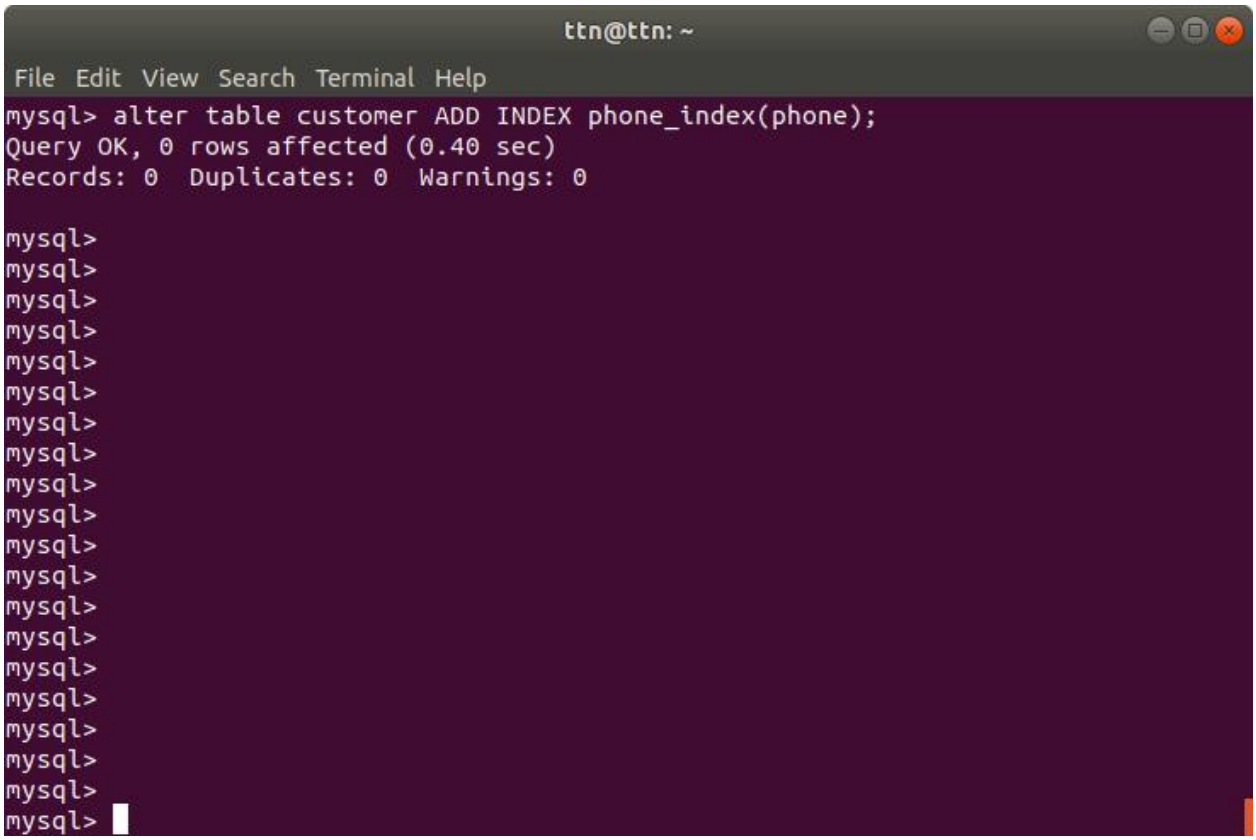
-> select sales.name, customer.name, items.name, items.cost from sales
join order_details on sales.id=order_details.sales_person_id
join customer on order_details.customer_id=customer.id
join items on order_details.item_id=items.id;



Here first name column denotes sales person name, second name column denotes customer name and third name column denotes item name.

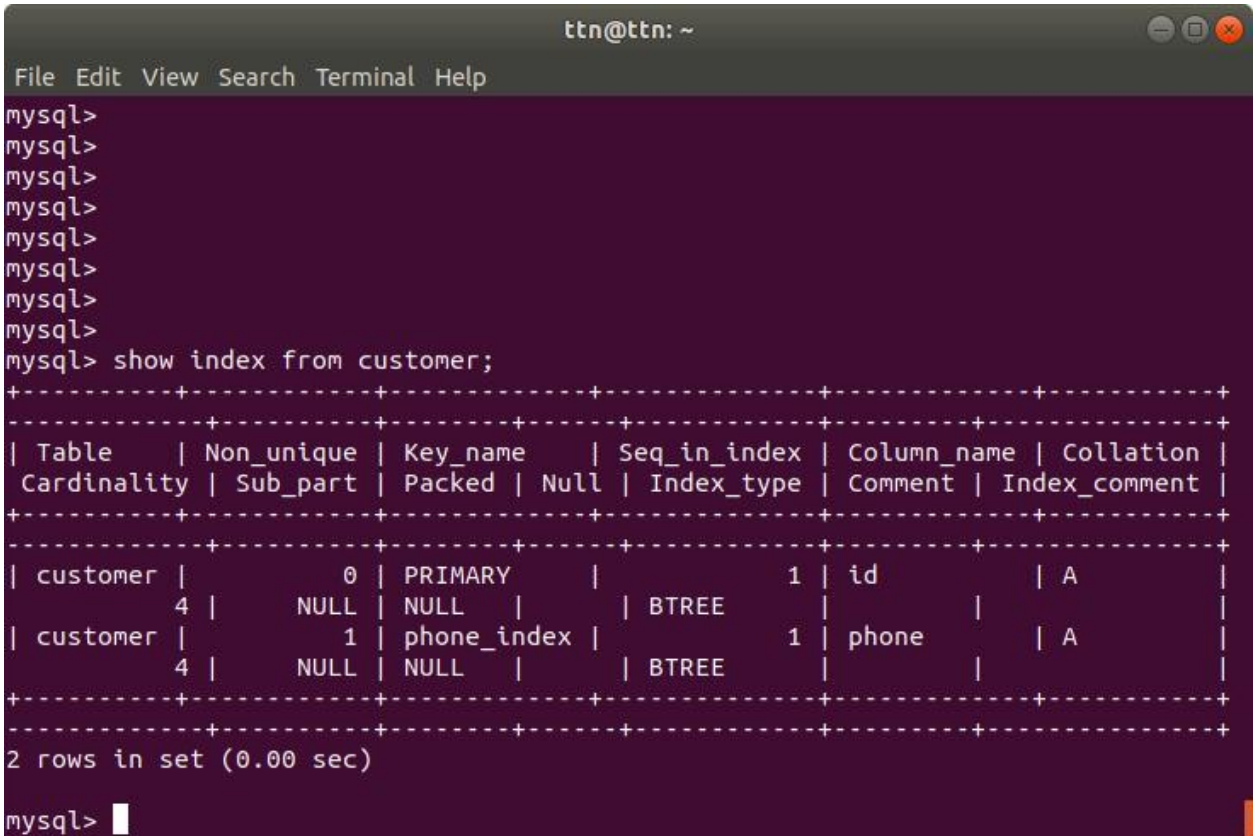
7. Create index

-> alter table table_name ADD INDEX index_name(column_list);



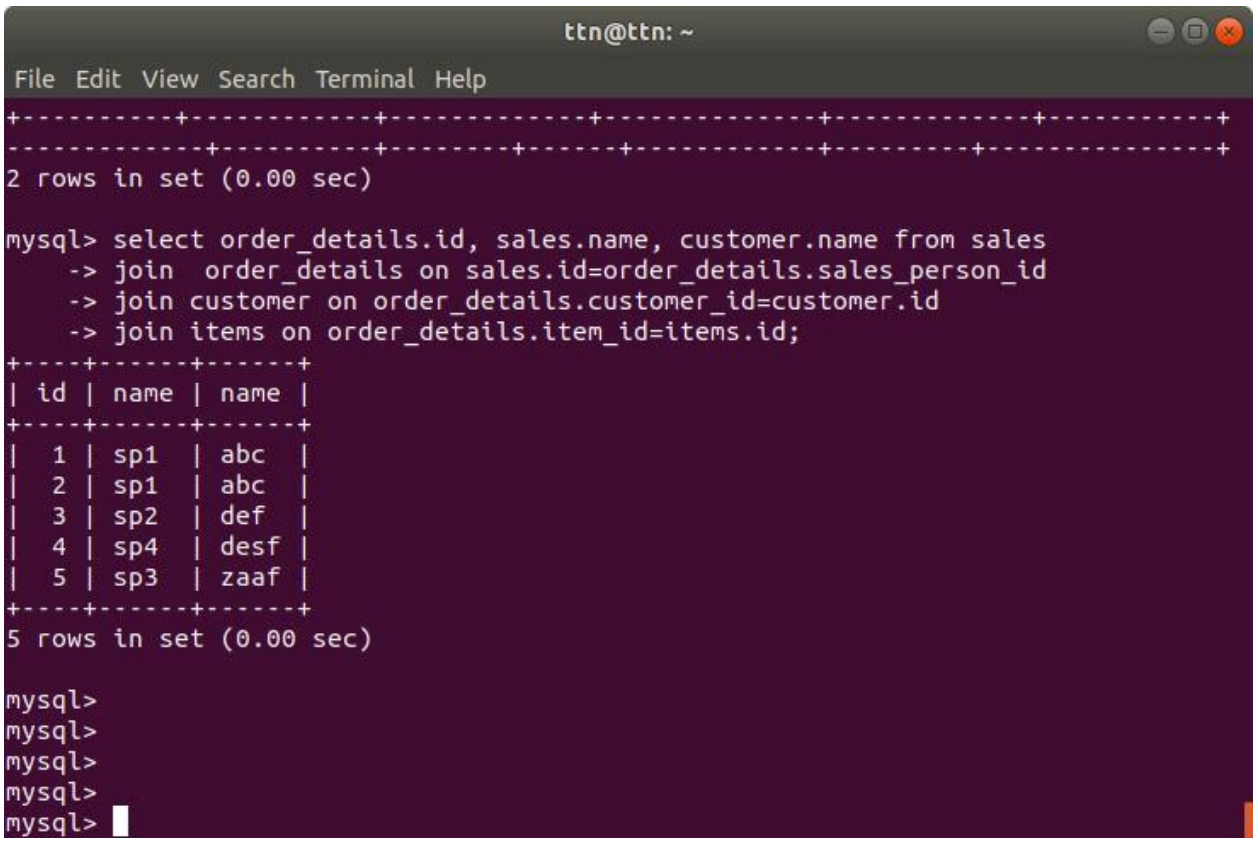
8. How to show index on a table

-> show index from table_name;



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

-> select order_details.id, sales.name, customer.name from sales join order_details on sales.id=order_details.sales_person_id join customer on order_details.customer_id=customer.id join items on order_details.item_id=items.id;



Here first name column denotes sales person name and second column denotes customer name.