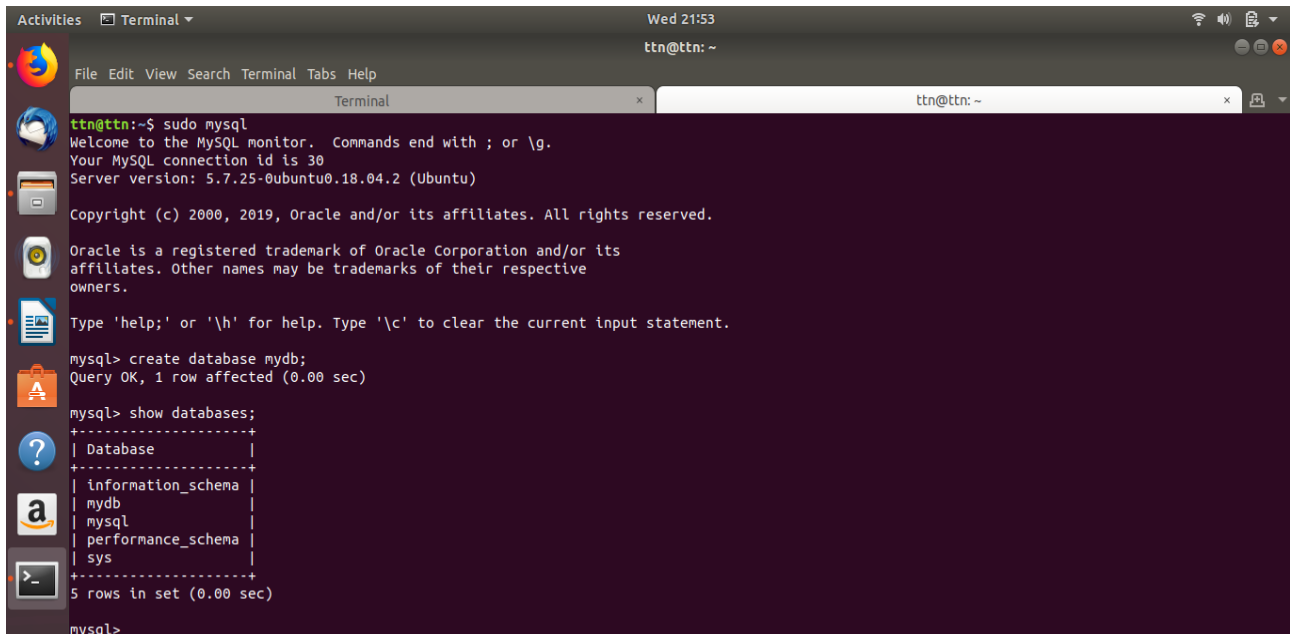


## Q1. Create Database

Output:



A terminal window titled 'Terminal' with a menu bar (File, Edit, View, Search, Terminal, Tabs, Help) and a status bar (Wed 21:53, ttn@ttn: ~). The terminal shows the execution of 'sudo mysql' and the MySQL monitor interface. The user is prompted to enter commands, and they enter 'create database mydb;'. The output shows 'Query OK, 1 row affected (0.00 sec)'. Then, they enter 'show databases;', and the output shows a list of databases: information\_schema, mydb, mysql, performance\_schema, and sys. The terminal also displays the MySQL version (5.7.25-0ubuntu0.18.04.2) and copyright information.

```
ttn@ttn:~$ sudo mysql
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 30
Server version: 5.7.25-0ubuntu0.18.04.2 (Ubuntu)

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affiliates. Other names may be trademarks of their respective
owners.

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

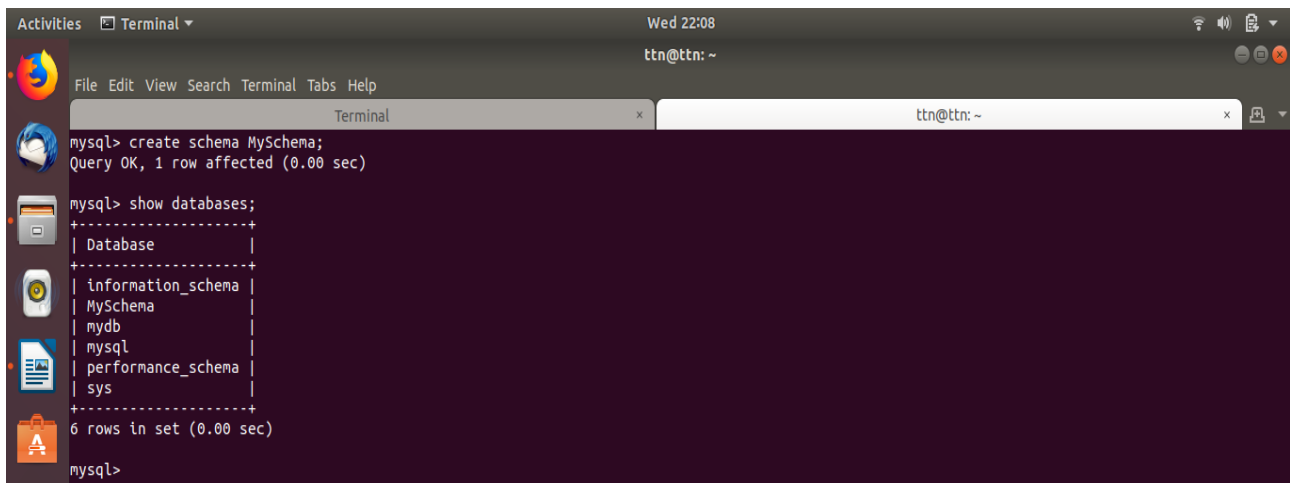
mysql> create database mydb;
Query OK, 1 row affected (0.00 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mydb       |
| mysql     |
| performance_schema |
| sys       |
+-----+
5 rows in set (0.00 sec)

mysql>
```

## Q2. Design Schema

Output:



A terminal window titled 'Terminal' with a menu bar (File, Edit, View, Search, Terminal, Tabs, Help) and a status bar (Wed 22:08, ttn@ttn: ~). The terminal shows the execution of 'mysql> create schema MySchema;' and the output 'Query OK, 1 row affected (0.00 sec)'. Then, they enter 'show databases;', and the output shows a list of databases: information\_schema, MySchema, mydb, mysql, performance\_schema, and sys. The terminal also displays the MySQL version (5.7.25-0ubuntu0.18.04.2) and copyright information.

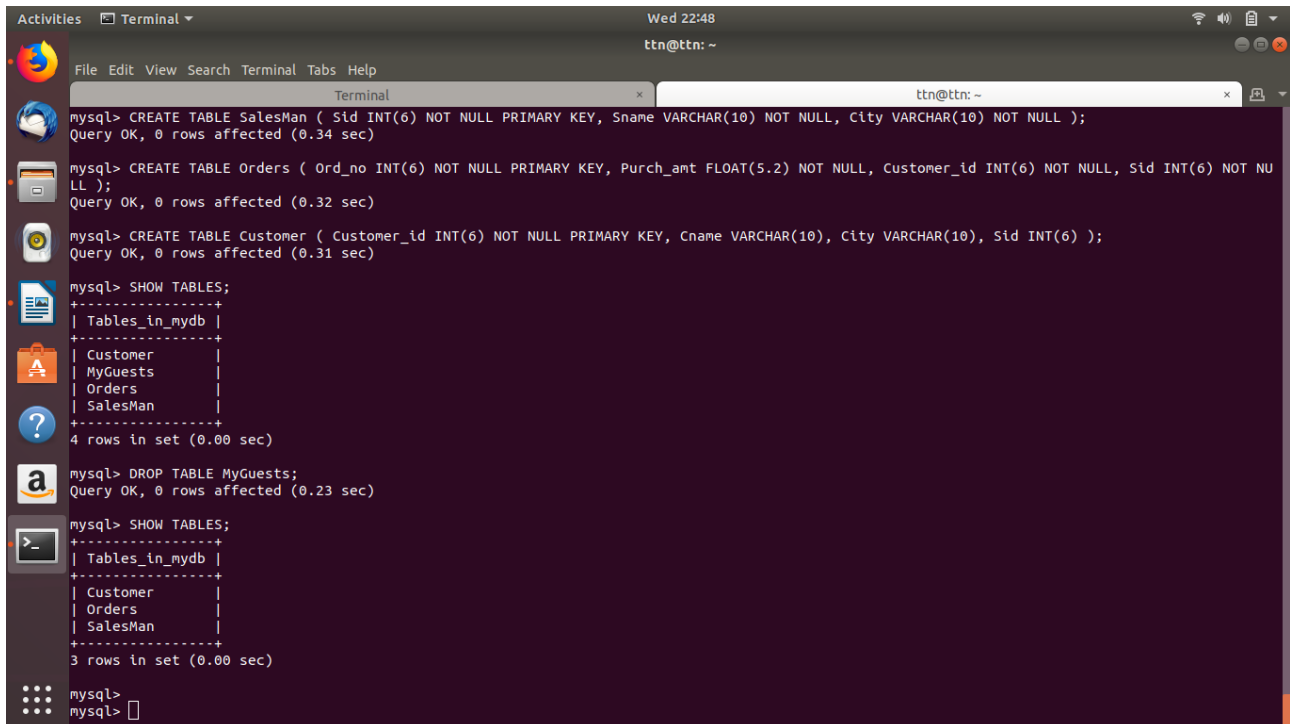
```
mysql> create schema MySchema;
Query OK, 1 row affected (0.00 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| MySchema         |
| mydb             |
| mysql            |
| performance_schema |
| sys              |
+-----+
6 rows in set (0.00 sec)

mysql>
```

### Q3. Create tables

Output:



```
mysql> CREATE TABLE SalesMan ( Sid INT(6) NOT NULL PRIMARY KEY, Sname VARCHAR(10) NOT NULL, City VARCHAR(10) NOT NULL );
Query OK, 0 rows affected (0.34 sec)

mysql> CREATE TABLE Orders ( Ord_no INT(6) NOT NULL PRIMARY KEY, Purch_amt FLOAT(5,2) NOT NULL, Customer_id INT(6) NOT NULL, Sid INT(6) NOT NULL );
Query OK, 0 rows affected (0.32 sec)

mysql> CREATE TABLE Customer ( Customer_id INT(6) NOT NULL PRIMARY KEY, Cname VARCHAR(10), City VARCHAR(10), Sid INT(6) );
Query OK, 0 rows affected (0.31 sec)

mysql> SHOW TABLES;
+-----+
| Tables_in_mydb |
+-----+
| Customer        |
| MyGuests        |
| Orders          |
| SalesMan        |
+-----+
4 rows in set (0.00 sec)

mysql> DROP TABLE MyGuests;
Query OK, 0 rows affected (0.23 sec)

mysql> SHOW TABLES;
+-----+
| Tables_in_mydb |
+-----+
| Customer        |
| Orders          |
| SalesMan        |
+-----+
3 rows in set (0.00 sec)

mysql>
mysql>
```

#### Q4. Insert sample data

Output:

```
Activities Terminal Wed 23:17 ttn@ttn: ~
File Edit View Search Terminal Tabs Help
Terminal ttn@ttn: ~
mysql> INSERT INTO SalesMan (Sid, Sname, City) VALUES (5001, "James Hoog", "New York");
Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO SalesMan (Sid, Sname, City) VALUES (5002, "Nail Knite", "Paris"), (5005, "Pit Alex", "London"), (5006, "Mc Lyon", "Paris");
Query OK, 3 rows affected (0.06 sec)
Records: 3 Duplicates: 0 Warnings: 0

mysql> mysql> INSERT INTO Orders (70001, 150.5, 3005, 5002);
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 '70001, 150.5, 3005, 5002)' at line 1
mysql> INSERT INTO Orders (Order_no, Purch_amt, Customer_id, Sid) VALUES (70001, 150.5, 3005, 5002);
ERROR 1054 (42S22): Unknown column 'Order_no' in 'field list'
mysql> mysql> INSERT INTO Orders (Ord_no, Purch_amt, Customer_id, Sid) VALUES (70001, 150.5, 3005, 5002);
Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO Orders (Ord_no, Purch_amt, Customer_id, Sid) VALUES (70001, 1mysql> INSERT INTO Orders (Ord_no, Purch_amt, Customer_id, Sid
) VALUE
mysql> INSERT INTO Orders (Ord_no, Purch_amt, Customer_id, Sid) VALUES (mysql> INSERT INTO Orders (Ordmysql> INSERT INTO Orders (Order_no, Pur
mysql> INSERT INTO Orders (Ord_no, Purch_amt, Customer_id, Sid) VALUES (70009, 270.65, 3001, 5005);
Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO Orders (Ord_no, Purch_amt, Customer_id, Sid) VALUES (70002, 70.65, 3002, 5001);
Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO Orders (Ord_no, Purch_amt, Customer_id, Sid) VALUES (70004, 110.5, 3009, 5003);
Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO Orders (Ord_no, Purch_amt, Customer_id, Sid) VALUES (70005, 2210.5, 3007, 5001);
Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO Customer (mysql> )
-> ;
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 ')' at line 1
mysql> INSERT INTO Customer (Costomer_id, Cname, City, Sid) VALUES (mysql> INSERT INTO Customer (Costo1mysql> INSERT INTO Customer (Customer_id
d, Cname, City, Sid) VALUES (3002, "Nick Rimu", "New York", 5001);
ERROR 1054 (42S22): Unknown column 'Customer_id' in 'field list'
```

```
Activities Terminal Wed 23:20 ttn@ttn: ~
File Edit View Search Terminal Tabs Help
Terminal ttn@ttn: ~
mysql> mysql> SELECT * SalesMan;
ERROR 1146 (42502): Table 'mydb.S' doesn't exist
mysql> SELECT * from SalesMan;
+-----+
| Sid | Sname | City |
+-----+
| 5001 | James Hoog | New York |
| 5002 | Nail Knite | Paris |
| 5005 | Pit Alex | London |
| 5006 | Mc Lyon | Paris |
+-----+
4 rows in set (0.00 sec)

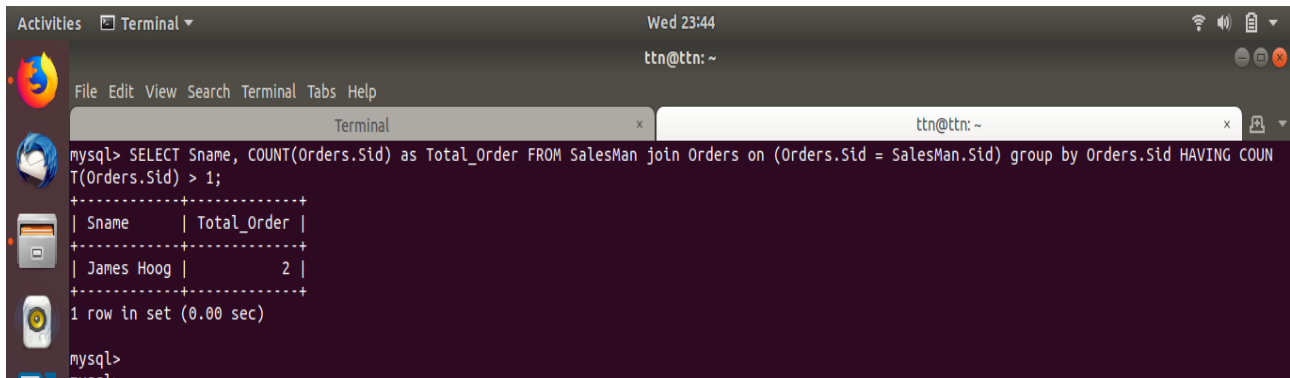
mysql> SELECT * from Orders;
+-----+
| Ord_no | Purch_amt | Customer_id | Sid |
+-----+
| 70001 | 150.5 | 3005 | 5002 |
| 70002 | 70.65 | 3002 | 5001 |
| 70004 | 110.5 | 3009 | 5003 |
| 70005 | 2210.5 | 3007 | 5001 |
| 70009 | 270.65 | 3001 | 5005 |
+-----+
5 rows in set (0.00 sec)

mysql> SELECT * from Customer;
+-----+
| Customer_id | Cname | City | Sid |
+-----+
| 3001 | Brad Guzan | London | 5005 |
| 3002 | Nick Rimu | New York | 5001 |
| 3005 | Graham Zu | California | 5002 |
+-----+
3 rows in set (0.00 sec)

mysql>
```

Q5. Find the sales person have multiple orders.

Output:



```
mysql> SELECT Sname, COUNT(Orders.Sid) as Total_Order FROM SalesMan join Orders on (Orders.Sid = SalesMan.Sid) group by Orders.Sid HAVING COUNT(Orders.Sid) > 1;
```

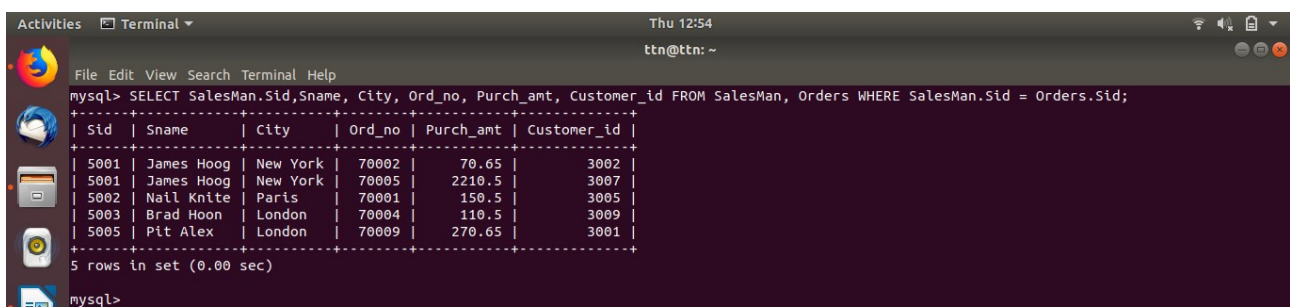
Sname	Total_Order
James Hoog	2

1 row in set (0.00 sec)

mysql>

Q6. Find the all sales person details along with order details.

Output:



```
mysql> SELECT SalesMan.Sid,Sname, City, Ord_no, Purch_amt, Customer_id FROM SalesMan, Orders WHERE SalesMan.Sid = Orders.Sid;
```

Sid	Sname	City	Ord_no	Purch_amt	Customer_id
5001	James Hoog	New York	70002	70.65	3002
5001	James Hoog	New York	70005	2210.5	3007
5002	Nail Knite	Paris	70001	150.5	3005
5003	Brad Hoon	London	70004	110.5	3009
5005	Pit Alex	London	70009	270.65	3001

5 rows in set (0.00 sec)

mysql>

Q7. Create index

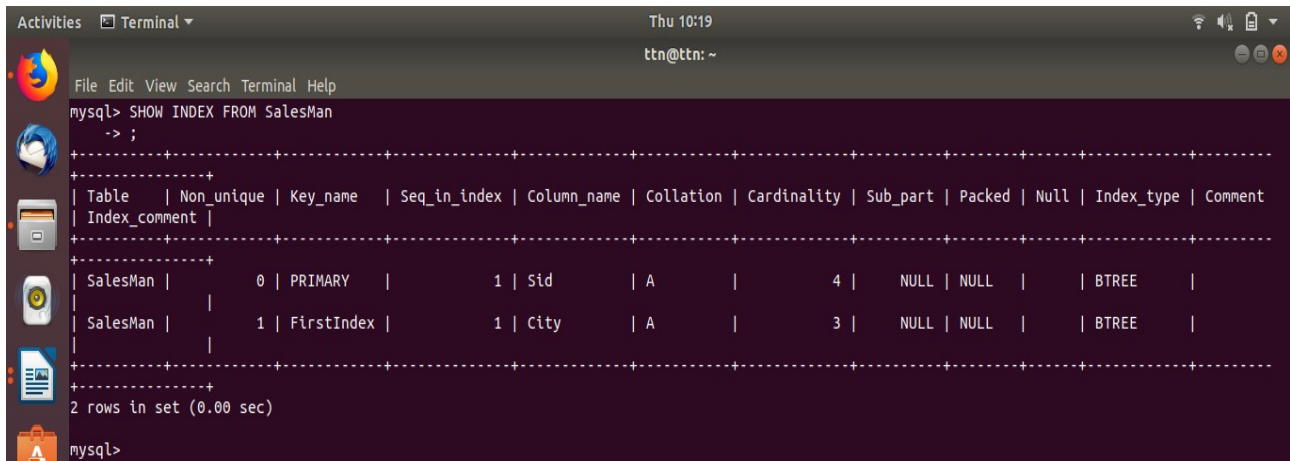
Output:



```
mysql> CREATE INDEX FirstIndex
-> ON SalesMan(City);
ERROR 1046 (3D000): No database selected
mysql> USE mydb
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A
Database changed
mysql> CREATE INDEX FirstIndex ON SalesMan(City);
Query OK, 0 rows affected (0.40 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql>
```

Q8. How to show index on a table

Output:



The image shows a terminal window with a dark background. At the top, the title bar reads 'Activities' and 'Terminal'. The system clock shows 'Thu 10:19'. The user is logged in as 'ttn@ttn: ~'. The terminal contains the following text:

```
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	FirstIndex	1	City	A	3		NULL	NULL	BTREE	

2 rows in set (0.00 sec)

```
mysql>
```

Q9. Find the order number, sale person name, along with the customer to whom that order belongs to

Output:

```
Activities Terminal Thu 11:18 ttn@ttn: ~
mysql> SELECT * FROM SalesMan;
+-----+-----+-----+
| Sid | Sname | City |
+-----+-----+-----+
| 5001 | James Hoog | New York |
| 5002 | Nail Knite | Paris |
| 5003 | Brad Hoon | London |
| 5005 | Pit Alex | London |
| 5006 | Mc Lyon | Paris |
+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> SELECT * FROM Customer;
+-----+-----+-----+-----+
| Customer_id | Cname | City | Sid |
+-----+-----+-----+-----+
| 3001 | Brad Guzan | London | 5005 |
| 3002 | Nick Rimu | New York | 5001 |
| 3005 | Graham Zu | California | 5002 |
| 3007 | Hoon Po | London | 5003 |
| 3009 | King Cho | Paris | 5006 |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> SELECT * FROM Orders;
+-----+-----+-----+-----+
| Ord_no | Purch_amt | Customer_id | Sid |
+-----+-----+-----+-----+
| 70001 | 150.5 | 3005 | 5002 |
| 70002 | 70.65 | 3002 | 5001 |
| 70004 | 110.5 | 3009 | 5003 |
| 70005 | 2210.5 | 3007 | 5001 |
| 70009 | 270.65 | 3001 | 5005 |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql>
```

```
Activities Terminal Thu 07:37 ttn@ttn: ~
mysql> SELECT Ord_no, Sname AS SalesMan_Name, Customer.Customer_id, Cname AS Customer_Name FROM SalesMan, Orders, Customer WHERE Orders.Sid = SalesMan.Sid and SalesMan.Sid = Customer.Sid;
+-----+-----+-----+-----+
| Ord_no | SalesMan_Name | Customer_id | Customer_Name |
+-----+-----+-----+-----+
| 70009 | Pit Alex | 3001 | Brad Guzan |
| 70002 | James Hoog | 3002 | Nick Rimu |
| 70005 | James Hoog | 3002 | Nick Rimu |
| 70001 | Nail Knite | 3005 | Graham Zu |
| 70004 | Brad Hoon | 3007 | Hoon Po |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql>
```