

## Debugs of mysql server for mac.

- <https://gist.github.com/zubaer-ahammed/c81c9a0e37adc1cb9a6cdc61c4190f52>
- <https://stackoverflow.com/questions/6474775/setting-the-mysql-root-user-password-on-os-x>
- <https://stackoverflow.com/questions/7927854/start-mysql-server-from-command-line-on-mac-os-lion>
- <https://linuxize.com/post/how-to-check-mysql-version/>
- <https://stackoverflow.com/questions/22009582/error-1064-42000-you-have-an-error-in-your-sql-syntax-check-the-manual-that/22009889>
- <https://www.tutorialspoint.com/resolve-usage-of-quotes-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>
- <https://dev.mysql.com/doc/refman/8.0/en/resetting-permissions.html>

## Create Database

We can create databases using the (create database <databasename>) command.

```
mysql> create database TTN;  
Query OK, 1 row affected (0.01 sec)
```

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

## Create tables and show designed schema

Keeping in mind the future use of the whole database we have created 3 tables with the following schema.

1. Table for storing customer data

```
[mysql> use TTN
Database changed
mysql> create table cust_data(cust_id int auto_increment primary key, cust_name
varchar(10), cust_contact int);
Query OK, 0 rows affected (0.01 sec)

mysql> desc cust_data;
```

Field	Type	Null	Key	Default	Extra
cust_id	int	NO	PRI	NULL	auto_increment
cust_name	varchar(10)	YES		NULL	
cust_contact	int	YES		NULL	

```
3 rows in set (0.00 sec)
```

2. Table for storing data for salesperson

```
mysql> create table salesperson(sp_id int auto_increment primary key, vendor_name
varchar(10), vendor_contact int);
Query OK, 0 rows affected (0.01 sec)

[mysql> desc salesperson
-> ;
```

Field	Type	Null	Key	Default	Extra
sp_id	int	NO	PRI	NULL	auto_increment
vendor_name	varchar(10)	YES		NULL	
vendor_contact	int	YES		NULL	

```
3 rows in set (0.00 sec)
```

3. Table for storing the data for the orders

```
[mysql> create table order_info(order_id int auto_increment primary key, vendor_id
int, cust_id int);
Query OK, 0 rows affected (0.01 sec)

[mysql> desc order_info;
```

Field	Type	Null	Key	Default	Extra
order_id	int	NO	PRI	NULL	auto_increment
vendor_id	int	YES		NULL	
cust_id	int	YES		NULL	

```
3 rows in set (0.00 sec)
```

## Insert sample data

### Inserting data in all of the tables

#### 1. Customer data

```
mysql> insert into cust_data(cust_id, cust_name, cust_contact) values (101, 'Alex', 01485131), (102, 'John', 01498352), (103, 'Nancy', 08493157), (104, 'Billy', 08795234), (105, 'Jane', 87492353);
Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0
```

```
[mysql> select * from cust_data;
```

cust_id	cust_name	cust_contact
101	Alex	1485131
102	John	1498352
103	Nancy	8493157
104	Billy	8795234
105	Jane	87492353

```
5 rows in set (0.00 sec)
```

#### 2. Salesperson data

```
[mysql> insert into salesperson(sp_id, vendor_name, vendor_contact) values (1, 'Annu', 01485131), (2, 'Anna', 01498352), (3, 'Amma', 08493157), (4, 'Appa', 08795234), (5, 'Akka', 87492353);
Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0
```

```
[mysql> select * from salesperson;
```

sp_id	vendor_name	vendor_contact
1	Annu	1485131
2	Anna	1498352
3	Amma	8493157
4	Appa	8795234
5	Akka	87492353

```
5 rows in set (0.00 sec)
```

### 3. Order data

```
mysql> insert into order_info(order_id, vendor_id, cust_id)
-> values
-> (589, 3, 101),
-> (784, 1, 103),
-> (121, 3, 104),
-> (546, 4, 102),
-> (580, 5, 105),
-> (213, 2, 101);
```

```
Query OK, 6 rows affected (0.01 sec)
Records: 6 Duplicates: 0 Warnings: 0
```

```
mysql> select * from order_info;
```

order_id	vendor_id	cust_id
121	3	104
213	2	101
546	4	102
580	5	105
589	3	101
784	1	103

```
6 rows in set (0.00 sec)
```

Find the sales person who has multiple orders.

For this task we first created a relation between the tables by binding their primary id's with a foreign key relationship.

```
mysql> alter table order_info add foreign key (vendor_id) references salesperson
(sp_id);
```

```
Query OK, 6 rows affected (0.02 sec)
Records: 6 Duplicates: 0 Warnings: 0
```

```
mysql> alter table order_info add foreign key (cust_id) references cust_data(cus
t_id);
```

```
Query OK, 6 rows affected (0.03 sec)
Records: 6 Duplicates: 0 Warnings: 0
```

```
mysql> select salesperson.vendor_name from salesperson inner join order_info on
[salesperson.sp_id=order_info.vendor_id group by vendor_name having count(vendor_
name)>1;
```

vendor_name
Amma

```
1 row in set (0.00 sec)
```

Find the all sales person details along with order details

There are 2 different ways to do it as follows:

```
[mysql> select salesperson.sp_id, salesperson.vendor_name, salesperson.vendor_contact, order_info.order_id from salesperson,order_info where order_info.vendor_id=salesperson.sp_id;
```

sp_id	vendor_name	vendor_contact	order_id
1	Annu	1485131	784
2	Anna	1498352	213
3	Amma	8493157	121
3	Amma	8493157	589
4	Appa	8795234	546
5	Akka	87492353	580

6 rows in set (0.00 sec)

```
[mysql> select salesperson.sp_id, salesperson.vendor_name, salesperson.vendor_contact, order_info.order_id from salesperson left join order_info on order_info.vendor_id=salesperson.sp_id;
```

sp_id	vendor_name	vendor_contact	order_id
1	Annu	1485131	784
2	Anna	1498352	213
3	Amma	8493157	121
3	Amma	8493157	589
4	Appa	8795234	546
5	Akka	87492353	580

6 rows in set (0.00 sec)

## Create index

```
[mysql> create index idx_c_name on cust_data(cust_name)
-> ;
Query OK, 0 rows affected (0.02 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

## How to show index on a table

```
[mysql> show index from cust_data \G;
***** 1. row *****
      Table: cust_data
      Non_unique: 0
        Key_name: PRIMARY
    Seq_in_index: 1
    Column_name: cust_id
      Collation: A
    Cardinality: 5
        Sub_part: NULL
         Packed: NULL
          Null:
    Index_type: BTREE
      Comment:
    Index_comment:
        Visible: YES
      Expression: NULL
***** 2. row *****
      Table: cust_data
      Non_unique: 1
        Key_name: idx_c_name
    Seq_in_index: 1
    Column_name: cust_name
      Collation: A
    Cardinality: 5
        Sub_part: NULL
         Packed: NULL
          Null: YES
    Index_type: BTREE
      Comment:
    Index_comment:
        Visible: YES
      Expression: NULL
2 rows in set (0.00 sec)

ERROR:
No query specified

[mysql>
```

Find the order number, salesperson name, along with the customer to whom that order belongs to

```
mysql> select salesperson.vendor_name, order_info.order_id, cust_data.cust_name  
[from salesperson,order_info,cust_data where (order_info.vendor_id=salesperson.sp|  
_id and order_info.cust_id=cust_data.cust_id);
```

vendor_name	order_id	cust_name
Annu	784	Nancy
Anna	213	Alex
Amma	121	Billy
Amma	589	Alex
Appa	546	John
Akka	580	Jane

6 rows in set (0.00 sec)