

```
guest@server:~$which mysql
/usr/bin/mysql
guest@server:~$mysql
ERROR 1045: Access denied for user: 'guest@localhost' (Using password: NO)
guest@server:~$
guest@server:~$
guest@server:~$which mysqladmin
/usr/bin/mysqladmin
guest@server:~$mysqladmin -u root password 'palmanova'
mysqladmin: connect to server at 'localhost' failed
error: 'Access denied for user: 'root@localhost' (Using password: NO)
guest@server:~$mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 3 to server version: 4.0.23a
```

Type 'help;' or '\h' for help. Type '\c' to clear the buffer.

```
mysql> show databases
-> ;
+-----+
| Database |
+-----+
| mysql    |
| test     |
+-----+
2 rows in set (0.02 sec)
```

```
mysql> use mysql
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> show tables
-> ;
+-----+
| Tables_in_mysql |
+-----+
| columns_priv    |
| db              |
| func            |
| host            |
| tables_priv     |
| user            |
+-----+
```

6 rows in set (0.00 sec)

```
mysql> select * from user;
```

Host	User	Password	Select_priv	Insert_priv	Update_priv	Delete_priv	Create_priv	Drop_priv	Reload_priv	Shutdown_priv	Process_priv	File_priv	Grant_priv	References_priv	Index_priv	Alter_priv	Show_db_priv	Super_priv	Create_tmp_table_priv	Lock_tables_priv	Execute_priv	Repl_slave_priv	Repl_client_priv	ssl_type	ssl_cipher	x509_issuer	x509_subject	max_questions	max_updates	max_connections
localhost	root	0500473539aa9c10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
localhost	root	0500473539aa9c10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

2 rows in set (0.00 sec)

```
mysql> grant usage on *.* to test-user@localhost;
```



```

+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

```

```

mysql>
mysql> update user set select_priv='Y', insert_priv='Y', update_priv='Y'
    -> , delete_priv='Y', create_priv='Y', drop_priv='Y'
    -> where user='test_user';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

```

```

mysql> update user set password=password('test_pass') where
user='test_user';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

```

```

mysql> select * from user;
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
| Host      | User      | Password          | Select_priv | Insert_priv |
Update_priv | Delete_priv | Create_priv | Drop_priv | Reload_priv |
Shutdown_priv | Process_priv | File_priv | Grant_priv | References_priv |
Index_priv | Alter_priv | Show_db_priv | Super_priv | Create_tmp_table_priv |
Lock_tables_priv | Execute_priv | Repl_slave_priv | Repl_client_priv |
ssl_type | ssl_cipher | x509_issuer | x509_subject | max_questions |
max_updates | max_connections |
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
| localhost | root      | 0500473539aa9c10 | Y          | Y          |
Y          | Y          | Y          | Y          | Y          |
Y          | Y          | Y          | Y          | Y          |

```

```

| Y          | Y          |          | Y          |          | Y          |
| Y          |          |          |          |          |          |
0 |          | 0 |          |          | 0 |          |          |
| pclab      | root       | 0500473539aa9c10 | Y          |          | Y          |
| Y          | Y          | Y          | Y          | Y          | Y          |
| Y          | Y          | Y          | Y          | Y          | Y          |
| Y          | Y          |          | Y          | Y          | Y          |
| Y          |          |          |          |          |          |
0 |          | 0 |          |          | 0 |          |          |
| localhost  | test_user  | 678870104631074c | Y          |          | Y          |
| Y          | Y          | Y          | N          | N          | N          |
| N          | N          | N          | N          | N          | N          |
| N          | N          |          | N          | N          | N          |
| N          |          |          |          |          |          |
0 |          | 0 |          |          | 0 |          |          |
+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

```

```

mysql> flush privileges;
Query OK, 0 rows affected (0.00 sec)

```

```

mysql> exit
Bye
guest@server:~$mysql -u test_user -p
Enter password:

```

Welcome to the MySQL monitor. Commands end with ; or \g.  
Your MySQL connection id is 4 to server version: 4.0.23a

Type 'help;' or '\h' for help. Type '\c' to clear the buffer.

```

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

```

```

mysql> show databases;
+-----+
| Database |
+-----+
| italy_db |
| mysql    |
| test     |

```

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

```
mysql> use italy_db;
```

```
Database changed
```

```
mysql> show tablesÚ
```

```
-> ;
```

```
ERROR 1064: 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 'tablesÚ' at line 1
```

```
mysql> show tables;
```

```
Empty set (0.00 sec)
```

```
mysql> create table stations (
```

```
-> id INTEGER NOT NULL AUTO_INCREMENT,
```

```
-> name VARCHAR(5),
```

```
-> lat FLOAT,
```

```
-> lon FLOAT,
```

```
-> elev FLOAT,
```

```
-> depth FLOAT,
```

```
-> num_channels SMALLINT,
```

```
-> operator_id INTEGER,
```

```
-> starttime DATETIME,
```

```
-> endtime DATETIME
```

```
-> );
```

```
ERROR 1075: Incorrect table definition; There can only be one auto column and it must be defined as a key
```

```
mysql> create table stations (
```

```
-> id INTEGER NOT NULL AUTO_INCREMENT,
```

```
-> name VARCHAR(5),
```

```
-> lat FLOAT,
```

```
-> lon FLOAT,
```

```
-> elev FLOAT,
```

```
-> depth FLOAT,
```

```
-> num_channels SMALLINT,
```

```
-> operator_id INTEGER,
```

```
-> starttime DATETIME,
```

```
-> endtime DATETIME,
```

```
-> PRIMARY KEY (id)
```

```
-> );
```

```
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> describe stations;
```

```
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
```

```

| id          | int(11) | | PRI | NULL | auto_
| name       | varchar(5) | YES | | NULL |
| lat        | float   | YES | | NULL |
| lon        | float   | YES | | NULL |
| elev       | float   | YES | | NULL |
| depth      | float   | YES | | NULL |
| num_channels | smallint(6) | YES | | NULL |
| operator_id | int(11) | YES | | NULL |
| starttime  | datetime | YES | | NULL |
| endtime    | datetime | YES | | NULL |

```

10 rows in set (0.00 sec)

```

mysql> edit
reading /tmp/sqlyUI00b
Partial last line

```

```
-> ;
```

```

-----+-----+-----+-----+-----+-----
| Field          | Type          | Null | Key | Default | Extra
|
+-----+-----+-----+-----+-----+-----
| id            | int(11)       |      | PRI | NULL    | auto_
increment |
| name         | varchar(5)    | YES  |     | NULL    |
|
| lat          | float         | YES  |     | NULL    |
|
| lon          | float         | YES  |     | NULL    |
|
| elev         | float         | YES  |     | NULL    |
| depth       | float         | YES  |     | NULL    |
| num_channels | smallint(6)   | YES  |     | NULL    |
| operator_id  | int(11)       | YES  |     | NULL    |
| starttime    | datetime      | YES  |     | NULL    |
| endtime      | datetime      | YES  |     | NULL    |

```

10 rows in set (0.00 sec)

```

mysql>
mysql> !ls
-> Ú
-> ,
-> ;

```

ERROR 1064: 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> !ls;

ERROR 1064: 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 'system('ls')' at line 1

mysql> system('ls');

ERROR 1064: 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 'system ls' at line 1

mysql> system ls

Desktop Mail calib palma.zip pítsa.cfg

mysql> edit

reading /tmp/sqlrNutyP

Partial last line

-> ;

Empty set (0.00 sec)

mysql> edit`

->

-> ;

ERROR 1064: 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 'edit`' at line 1

mysql> edit

reading /tmp/sqlwfpIy9

-> ;

ERROR 1064: 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 'select \* from stations' at line 1

mysql> edit

reading /tmp/sqlleMjrN

-> ;

Empty set (0.00 sec)

mysql>

mysql>

mysql> describe stations;

Field	Type	Null	Key	Default	Extra
id	int(11)		PRI	NULL	auto_increment

name	varchar(5)	YES		NULL	
lat	float	YES		NULL	
lon	float	YES		NULL	
elev	float	YES		NULL	
depth	float	YES		NULL	
num_channels	smallint(6)	YES		NULL	
operator_id	int(11)	YES		NULL	
starttime	datetime	YES		NULL	
endtime	datetime	YES		NULL	

+-----+-----+-----+-----+-----+-----+  
10 rows in set (0.00 sec)

```
mysql> create table channels (
-> id INTEGER NOT NULL AUTO_INCREMENT,
-> name VARCHAR(3),
-> station_id INTEGER,
-> instrument_id INTEGER,
->
-> lat FLOAT,
-> lon FLOAT,
-> starttime DATETIME,
-> endtime DATETIME,
-> PRIMARY KEY (id)
-> );
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> show tables;
```

Tables_in_italy_db
channels
stations

+-----+  
2 rows in set (0.00 sec)

```
mysql> describe channels;
```

Field	Type	Null	Key	Default	Extra
id	int(11)		PRI	NULL	auto_increment
name	char(3)	YES		NULL	
station_id	int(11)	YES		NULL	
instrument_id	int(11)	YES		NULL	
lat	float	YES		NULL	
lon	float	YES		NULL	
starttime	datetime	YES		NULL	

```

| endtime          | datetime | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)

```

```
mysql> describe stations;
```

```

+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| id             | int(11)       |      | PRI | NULL     | auto_increment |
| name           | varchar(5)    | YES  |     | NULL     |                |
| lat            | float         | YES  |     | NULL     |                |
| lon            | float         | YES  |     | NULL     |                |
| elev           | float         | YES  |     | NULL     |                |
| depth          | float         | YES  |     | NULL     |                |
| num_channels   | smallint(6)   | YES  |     | NULL     |                |
| operator_id    | int(11)       | YES  |     | NULL     |                |
| starttime      | datetime      | YES  |     | NULL     |                |
| endtime        | datetime      | YES  |     | NULL     |                |
+-----+-----+-----+-----+-----+-----+
10 rows in set (0.00 sec)

```

```

mysql> insert into stations (name,lat,lon,elev,depth,starttime,endtime)
->
-> values ('ABC',30.0,160.0,1880,0,'1996-02-14 00:00:00',
-> '2002-12-10 10:00:00');
Query OK, 1 row affected (0.00 sec)

```

```
mysql> select * from stations;
```

```

+-----+-----+-----+-----+-----+-----+-----+
| id | name | lat | lon | elev | depth | num_channels | operator_id |
| starttime          | endtime          |
+-----+-----+-----+-----+-----+-----+-----+
| 1 | ABC | 30 | 160 | 1880 | 0 | NULL | NULL |
| 1996-02-14 00:00:00 | 2002-12-10 10:00:00 |
+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

```

```
mysql> describe channels;
```

```

+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| id             | int(11)       |      | PRI | NULL     | auto_increment |
| name           | char(3)       | YES  |     | NULL     |                |

```

```

| station_id | int(11) | YES | | NULL | |
| instrument_id | int(11) | YES | | NULL | |
| lat | float | YES | | NULL | |
| lon | float | YES | | NULL | |
| starttime | datetime | YES | | NULL | |
| endtime | datetime | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)

```

```

mysql> insert into channels (name,station_id,lat,lon,starttime,endtime)
-> values ('BHE',1,30.1,160.5,'1996-02-14 00:00:10','2002-12-10 10:00:
00')
-> ;
Query OK, 1 row affected (0.00 sec)

```

```

mysql> insert into channels (name,station_id,lat,lon,starttime,endtime)
-> values ('BHN',1,30.1,160.5,'1996-02-14 00:00:10','2002-12-10 10:00:
00');
Query OK, 1 row affected (0.00 sec)

```

```

mysql> insert into channels (name,station_id,lat,lon,starttime,endtime)
-> values ('BHZ',1,30.1,160.5,'1996-02-14 00:00:10','2002-12-10 10:00:
00');
Query OK, 1 row affected (0.00 sec)

```

```

mysql> select * from channels;
+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+
| id | name | station_id | instrument_id | lat | lon | starttime
| endtime |
+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+
| 1 | BHE | 1 | NULL | 30.1 | 160.5 | 1996-02-14 00:00:
10 | 2002-12-10 10:00:00 |
| 2 | BHN | 1 | NULL | 30.1 | 160.5 | 1996-02-14 00:00:
10 | 2002-12-10 10:00:00 |
| 3 | BHZ | 1 | NULL | 30.1 | 160.5 | 1996-02-14 00:00:
10 | 2002-12-10 10:00:00 |
+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

```

```

mysql> select * from stations,channels where stations.id =
channels.station_id;
+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+

```

```

+-----+-----+-----+-----+-----+-----+-----+-----+
+
| id | name | lat | lon | elev | depth | num_channels | operator_id |
starttime          | endtime          | id | name | station_id |
instrument_id | lat | lon | starttime          | endtime          |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+
+
| 1 | ABC | 30 | 160 | 1880 | 0 | NULL | NULL |
1996-02-14 00:00:00 | 2002-12-10 10:00:00 | 1 | BHE | 1 |
NULL | 30.1 | 160.5 | 1996-02-14 00:00:10 | 2002-12-10 10:00:00 |
| 1 | ABC | 30 | 160 | 1880 | 0 | NULL | NULL |
1996-02-14 00:00:00 | 2002-12-10 10:00:00 | 2 | BHN | 1 |
NULL | 30.1 | 160.5 | 1996-02-14 00:00:10 | 2002-12-10 10:00:00 |
| 1 | ABC | 30 | 160 | 1880 | 0 | NULL | NULL |
1996-02-14 00:00:00 | 2002-12-10 10:00:00 | 3 | BHZ | 1 |
NULL | 30.1 | 160.5 | 1996-02-14 00:00:10 | 2002-12-10 10:00:00 |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+
+
3 rows in set (0.01 sec)

```

```

mysql> select s.name,c.name,c.lat,c.lon from stations s,channels c
-> where s.id = c.station_id;

```

```

+-----+-----+-----+-----+
| name | name | lat | lon |
+-----+-----+-----+-----+
| ABC  | BHE  | 30.1 | 160.5 |
| ABC  | BHN  | 30.1 | 160.5 |
| ABC  | BHZ  | 30.1 | 160.5 |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)

```

```

mysql> select c.lat,c.lon from stations s,channels c
-> where s.id = c.station_id;

```

ERROR 1109: Unknown table 'c' in field list

```

mysql> select c.lat,c.lon from stations s,channels c
-> where s.id = c.station_id;

```

```

+-----+-----+
| lat | lon |
+-----+-----+
| 30.1 | 160.5 |
| 30.1 | 160.5 |
| 30.1 | 160.5 |

```

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

```
mysql> select distinct c.lat,c.lon from stations s,channels c where s.id =
c.station_id;
```

```
+-----+-----+
| lat | lon |
+-----+-----+
| 30.1 | 160.5 |
+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> select distinct s.name,c.name,c.lat,c.lon from stations s,channels
c
-> where s.id = c.station_id;
```

```
+-----+-----+-----+-----+
| name | name | lat | lon |
+-----+-----+-----+-----+
| ABC | BHE | 30.1 | 160.5 |
| ABC | BHN | 30.1 | 160.5 |
| ABC | BHZ | 30.1 | 160.5 |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> describe stations:
-> ;
```

ERROR 1064: 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> describe stations;
```

```
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| id             | int(11)       |      | PRI | NULL    | auto_increment |
| name          | varchar(5)    | YES  |     | NULL    |                |
| lat           | float         | YES  |     | NULL    |                |
| lon           | float         | YES  |     | NULL    |                |
| elev          | float         | YES  |     | NULL    |                |
| depth         | float         | YES  |     | NULL    |                |
| num_channels  | smallint(6)   | YES  |     | NULL    |                |
| operator_id   | int(11)       | YES  |     | NULL    |                |
| starttime     | datetime      | YES  |     | NULL    |                |
| endtime       | datetime      | YES  |     | NULL    |                |
+-----+-----+-----+-----+-----+-----+
10 rows in set (0.00 sec)
```

```
mysql> insert into stations (name,lat,lon,elev,depth,starttime,endtime)
-> values ('ANMO',10,100,1000,0,'2000-01-01 00:00:00',
-> '2599-12-31 23:59:59');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from stations;
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+-----+-----+
| id | name | lat | lon | elev | depth | num_channels | operator_id |
starttime          |          |          |          |          |          |          |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | ABC | 30 | 160 | 1880 | 0 | NULL | NULL |
1996-02-14 00:00:00 | 2002-12-10 10:00:00 |
| 2 | ANMO | 10 | 100 | 1000 | 0 | NULL |
00:00:00 | 2599-12-31 23:59:59 |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql> select s.name,c.name,c.lat,c.lon from stations s,cha
-> where s.id = c.station_id;
+-----+-----+-----+-----+
| name | name | lat | lon |
+-----+-----+-----+-----+
| ABC | BHE | 30.1 | 160.5 |
| ABC | BHN | 30.1 | 160.5 |
| ABC | BHZ | 30.1 | 160.5 |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql>
mysql> create table instruments (id INTEGER NOT NULL AUTO_INCREMENT,name
VARCHAR(32),sampling_freq FLOAT,num_stages SMALLINT,PRIMARY KEY(id));
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> describe instruments
-> Ú
-> ;
Empty set (0.00 sec)
```

```
mysql> describe instruments;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| id             | int(11)      |      | PRI | NULL    | auto_increment |
```

```

| name          | varchar(32) | YES | | NULL | |
| sampling_freq | float       | YES | | NULL | |
| num_stages    | smallint(6) | YES | | NULL | |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

```

```

mysql> insert into instruments (name,sampling_freq,num_stages)
-> value ('STS-1_broadband',20,5);
ERROR 1064: 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
'value ('STS-1_broadband',20,5)' at line 2
mysql> insert into instruments (name,sampling_freq,num_stages)
-> values ('STS-1_broadband',20,5);
Query OK, 1 row affected (0.00 sec)

```

```

mysql> select * from instruments
-> Ú
-> ;
+----+-----+-----+-----+-----+
| id | name          | sampling_freq | num_stages |
+----+-----+-----+-----+-----+
| 1  | STS-1_broadband |          20 |          5 |
+----+-----+-----+-----+-----+
1 row in set (0.00 sec)

```

```

mysql>
mysql> see
-> ;
ERROR 1064: 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
'see' at line 1
mysql> select * from channels;

```

```

+----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+
| id | name | station_id | instrument_id | lat | lon | starttime
| endtime |
+----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+
| 1 | BHE | 1 | NULL | 30.1 | 160.5 | 1996-02-14 00:00:
10 | 2002-12-10 10:00:00 |
| 2 | BHN | 1 | NULL | 30.1 | 160.5 | 1996-02-14 00:00:
10 | 2002-12-10 10:00:00 |
| 3 | BHZ | 1 | NULL | 30.1 | 160.5 | 1996-02-14 00:00:
10 | 2002-12-10 10:00:00 |
+----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+

```

3 rows in set (0.00 sec)

mysql> update channels set instrument\_id=1 where station\_id=1;

Query OK, 3 rows affected (0.00 sec)

Rows matched: 3 Changed: 3 Warnings: 0

mysql> select \* from channels;

```
+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+
| id | name | station_id | instrument_id | lat | lon | starttime
| endtime |
+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+
| 1 | BHE | 1 | 1 | 30.1 | 160.5 | 1996-02-14 00:00:
10 | 2002-12-10 10:00:00 |
| 2 | BHN | 1 | 1 | 30.1 | 160.5 | 1996-02-14 00:00:
10 | 2002-12-10 10:00:00 |
| 3 | BHZ | 1 | 1 | 30.1 | 160.5 | 1996-02-14 00:00:
10 | 2002-12-10 10:00:00 |
+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

mysql> select s.name,c.name,i.name,i.sampling\_freq from  
-> stations s, channels c, instruments i  
-> where s.id=c.station\_id and c.instrument\_id=i.id;

```
+-----+-----+-----+-----+
| name | name | name | sampling_freq |
+-----+-----+-----+-----+
| ABC | BHE | STS-1_broadband | 20 |
| ABC | BHN | STS-1_broadband | 20 |
| ABC | BHZ | STS-1_broadband | 20 |
+-----+-----+-----+-----+
```

3 rows in set (0.00 sec)

mysql> select \* from stations;

```
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+
| id | name | lat | lon | elev | depth | num_channels | operator_id |
starttime | endtime |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+
| 1 | ABC | 30 | 160 | 1880 | 0 | NULL | NULL |
1996-02-14 00:00:00 | 2002-12-10 10:00:00 |
| 2 | ANMO | 10 | 100 | 1000 | 0 | NULL | NULL |
2000-01-01 00:00:00 | 2599-12-31 23:59:59 |
+-----+-----+-----+-----+
```

```
+----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql> update stations set num_channels=3 where num_channels=null;
Query OK, 0 rows affected (0.00 sec)
Rows matched: 0 Changed: 0 Warnings: 0
```

```
mysql> update stations set num_channels=3 where num_channels is null,
-> ,
-> ;
ERROR 1064: 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> update stations set num_channels=3 where num_channels is null:
-> ;
ERROR 1064: 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> update stations set num_channels=3 where num_channels is null;
Query OK, 2 rows affected (0.00 sec)
Rows matched: 2 Changed: 2 Warnings: 0
```

```
mysql> select * from stations;
```

```
+----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+
| id | name | lat | lon | elev | depth | num_channels | operator_id |
starttime          | endtime          |
+----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | ABC | 30 | 160 | 1880 | 0 | 3 | NULL |
1996-02-14 00:00:00 | 2002-12-10 10:00:00 |
| 2 | ANMO | 10 | 100 | 1000 | 0 | 3 | NULL |
2000-01-01 00:00:00 | 2599-12-31 23:59:59 |
+----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql>
```