

## SOME TIPS ABOUT MySQL:

- commands end with semicolon;
- it's not case-sensitive;
- convention: MySQL keywords are given in upper case;
- names specified by user are given in lower case;
- fields of the type string (varchar) have values given inside single quotation marks;
- dates should be given between single quotation marks and obey the pattern: YYYY-mm-dd;
- to record the current date, we use: CURDATE() ;
- by default, MySQL runs in autocommit on mode. This means that when we modify the table, MySQL stores the changes in the hard drive permanently;
- MySQL does not offer embedded mode.

## INSTALLATION FOR LINUX

**SOURCE:** <https://help.ubuntu.com/10.04/serverguide/mysql.html>

**// it install MySQL from terminal**

```
sudo apt-get install mysql-server
```

**// it verifies if MySQL is running**

```
sudo netstat -tap | grep mysql
```

## CONSTRUCTION AND CONFIGURATION OF A DATABASE IN MySQL (in Linux)

**// it verifies version of MySQL**

```
$ mysql -V
```

**// it starts MySQL**

```
$ mysql -u root
```

**OR (if password is required) , use:**

```
$ mysql -u root -p
```

**// it creates a database**

```
mysql> create database progweb;
```

**// it allows access to a user and password from localhost**

```
mysql> grant usage on *.* to progwebuser@localhost identified by 'progwebpasswd';
```

**// it grants all privileges to the user**

```
mysql> grant all privileges on progweb.* to progwebuser@localhost;
```

**// it shows all existing databases**

```
mysql> show databases;
```

**// it selects a database to be used**

```
mysql> use progweb;
```

**// it creates a table**

```
mysql> create table students (  
-> id BIGINT NOT NULL AUTO_INCREMENT,  
-> name VARCHAR(255),  
-> email VARCHAR(255),  
-> address VARCHAR(255),  
-> primary key (id)  
-> );
```

**// it shows the tables in a database**

```
mysql> show tables from progweb;
```

**// it describes the table and its properties**

```
mysql> describe students;
```

**// it shows MySQL status (running or stopped)**

```
$ service mysql status
```

**// it quits MySQL**

```
$ service mysql stop
```

**// it starts MySQL**

```
$ service mysql start
```

## OTHER COMMANDS

**// it erases the table permanently**

```
mysql> drop table students;
```

**// it adds columns to the table students**

```
mysql> alter table students add (create_clause1, create_clause2, ...);
```

**// it removes "column\_name" from table students**

```
mysql> alter table students drop column_name;
```

## CRUD COMMANDS

### INSERTION

```
mysql> INSERT INTO students (name,email,address) VALUES ('Jack','jack@gmail.com','5001,  
Sherbrooke St');
```

### REMOVAL

```
mysql> DELETE FROM students WHERE id=1;
```

### UPDATE

```
mysql> UPDATE students SET email='jack@gmail.com', address='7234, Jean-Talon St' WHERE id=2;
```

### SEARCH

```
mysql> SELECT name, email FROM students WHERE id=2;
```

**LISTING**

```
mysql> SELECT name, email FROM students;
```

Other commands: [http://www.bios.niu.edu/johns/bioinform/mysql\\_commands.htm](http://www.bios.niu.edu/johns/bioinform/mysql_commands.htm)