CS 460/660
MySQL and Python Connector Installation Guide

STEP ONE: DOWNLOADING MYSQL

MYSQL can be downloaded from the following site:

http://dev.mysql.com/downloads/mysql/

On this webpage you can select your platform. When you download MySQL Oracle will prompt you to create an account. You can either create a free account or skip the account creation.

For Mac OS X:

- It is easiest to download the DMG which is the last download link on the page.

For Linux:

- The best way to do this is to download the apt repository from the terminal by opening a terminal and entering '`sudo apt-get install mysql-server`' (without quotations). This will download and install mysql. When prompted, choose a good password for MySQL.

For Windows:

- There will be a download button just underneath the MySQL Installer 5.7 graphic. This download will be the simplest to use.

STEP TWO: (MAC OS X AND WINDOWS) INSTALLING MYSQL

Once you have the package downloaded, you must install it into your system.

IMPORTANT NOTE FOR MAC OS X: At the end of the installation process there will be a popup that provides you with a temporary password. YOU MUST SAVE THE PASSWORD SOMEWHERE

For Mac OS X:

- Open the DMG and install MySQL. Remember to save the temporary password. If you are not able to install the package because it is from an unidentified developer, go into your system preferences->Security & Privacy->General, click the lock to make changes, and then allow apps downloaded from anywhere. You can always revert this change after this installation.

For Windows:

- The installer will guide you through the installation steps, as well as the steps to create your username and password. The installer will also give you an option to install connectors. Install the python connector.

STEP THREE: DOWNLOADING AND INSTALLING PYTHON MYSQL DRIVER

The MySQL Python driver can be downloaded from the following link:

http://dev.mysql.com/downloads/connector/python/

Once you have downloaded the package, install it

For Mac OS X:

- Select the Mac OS X platform and download the DMG. Select the 10.9 version, unless you have a very outdated version of OS X. If you check your operating system version and it is 10.9 or above, select 10.9. Once the DMG is downloaded, install it.

For Linux:

- Select your linux distribution, download the package and install it.

For Windows:

- The installer should have prompted you to install the python connector. If not, download and install it.

STEP FOUR: (MAC OS X) TURNING ON SERVER

Go into system preferences, and select MySQL. It should be located in the last row of the preferences. Once there, Start the server by clicking the 'Start MySQL Server' button. It will prompt you for your password. Once clicked, it will indicated it is running with a green 'running'

STEP FIVE: (MAC OS X) SETTING PATH

Open a terminal and type the command '`export PATH=${PATH}:/usr/local/mysql/bin`' (without the quotations) and then press enter. This will allow the MySQL program to be found.

STEP SIX: CONNECTING TO MYSQL

For Mac OS X:

- In the terminal type '`mysql –u root –h 127.0.0.1 –p`' (without the quotations) and then press enter. This runs the mysql program specifying -u (user) as the root (you), -h (host) as your local computer (127.0.0.1 is a hostname that refers to your local computer), and -p which means you need to enter a password.

- Next, enter the temporary password you were given. No characters will show up as you are typing your password. Press enter when you have typed it. Because the passwords are quite long and intricate, it may take you a couple of tries to enter the password.

For Linux:

-In the terminal type '`mysql –u root –h 127.0.0.1 –p`' (without the quotations) and then press enter. This runs the mysql program specifying -u (user) as the root (you), -h (host) as your local computer (127.0.0.1 is a hostname that refers to your local computer), and -p which means you need to enter a password.

- Enter your password. No characters will show up as you enter your password.

For Windows:

- Search for the MySQL command prompt executable and run it.

Once you have successfully connected, there will be a welcome message and you will see mysql> next to the command line cursor which indicates you are successfully running MySQL.

STEP SEVEN: (FOR MAC OS X) CHANGING YOUR PASSWORD

The first thing you will have to do to use MySQL is set a new password. The command to do this is:

```
SET PASSWORD FOR 'root'@'localhost' = PASSWORD('MyNewPass');
```

Replace `MyNewPass` with the new password that you want to create. When you press enter, there should be a message that says '`Query OK, 0 rows affected, 1 warning (0.01 sec)`'(without the quotations).

STEP EIGHT: DOWNLOADING DATA

To test out MySQL, install the Sakila database located at:

https://dev.mysql.com/doc/index-other.html

Download the zip of the Sakila database and unzip the file. Inside there should be three files. `sakila-schema.sql`, `sakila-data.sql`, and `sakila.mwb`.

STEP NINE: LOADING THE SAKILA DATABASE

We now need to load the database into MySQL. We need to load, in order, the schema and the data. From the MySQL command prompt type:

`SOURCE path/to/sakila-schema.sql;`

replace the path/to/ with the location of the sakila-db folder. For many of you, the sakila-db folder will be in your downloads so the command will look like:

`SOURCE ~/Downloads/sakila-db/sakila-schema.sql` (for mac)

`SOURCE C:\Path\to\Downloads\sakila-db\sakila-schema.sql` (for windows)

After entering the schema, do the same for the data:

`SOURCE path/to/sakila-data.sql;`

For many of you, the will look like:

`SOURCE ~/Downloads/sakila-db/sakila-data.sql` (for mac)

`SOURCE C:\Path\to\Downloads\sakila-db\sakila-data.sql` (for windows)

STEP TEN: USING THE SAKILA DATABASE

In order to use the Sakila database the following command must be entered:

`use sakila;`

Anytime you exit the MySQL program and log back in, you must specify the database you want to use.

Once this has been entered the database will be successfully loaded. To test it you can type '`show tables;`' (without the quotations) and a list of tables should show up with things like actor, address, category, film, etc.

To test if the data has been loaded, you can type an example query such as '`select * from film;`' (without the quotations). This should output a bunch of data.

If this is all working, you have successfully installed MySQL and loaded a sample database into it!

STEP ELEVEN: USING PYTHON

To test if the python connection is working, download the lab0.py script and try running it in python 2.7. If it works and a list of IDs and movies appear, you are all set!

IMPORTANT NOTE: You must change the password in the script to the password that you set for your database

ANACONDA USERS:

- If you are using anaconda, open a terminal and type '`conda install -c anaconda mysql-connector-python=2.0.4`' (without the quotations). This will install the mysql connector for anaconda.

If there are still issues, or you are not using python 2.7, the best way to check if this is working is to install a new version of python (python 2.7), open the IDLE associated with the new version of python, open the lab0.py in the idle, and run it. If a list of numbers and movies appear, you're all set!

If there are any further questions, or if something is not working, feel free to email me at einstein@bu.edu!