# Creating a Database and User for MySQL

## 1 Setting up MySql

If you don't have mysql available on your machine, you can download it from Here. Please note down the password for the root user during the installation.

Mysql binary file is located at /usr/local/mysql/bin/ instead of /usr/lo-cal/bin/, so you can run the following command to make it easier to use:

```
$ alias mysql=/usr/local/mysql/bin/mysql
```

Then, run the mysql command line tool as the root user:

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

Create a database called hw03:

```
mysql> create database hw03;
Query OK, 1 row affected (0.00 sec)
```

You should now be able to run the mysql command line tool as root user to use the database that you just created.

\$ USE hw03

# 2 Populate the database

You should now be able to use the command line tool to create tables, execute queries, etc. Notice how I am using capslock for keywords(although it is not case sensitive).

For example:

### 2.1 Create a table

```
mysql> CREATE TABLE R( A INTEGER);
```

## 2.2 Display all table names

You can display tables with the SHOW command:

```
mysql> SHOW TABLES;
```

#### 2.3 Delete tables

You can delete that table with the DROP command:

```
mysql> DROP TABLE R;
```

## 2.4 Inserting row(s) into a table

To insert new rows into an existing table, follow the following command.

```
mysql> INSERT INTO table_name (col1, col2, ...)
     VALUES (value11, value12, ...);
     VALUES (value21, value22, ...);
```

## 2.5 Deleting rows from a table

To delete rows based on certain criteria:

```
mysql> DELETE FROM table_name WHERE condition;
```

If you want to delete the entire table contents

```
mysql> DELETE FROM table_name;
```

### 2.6 Show contents of a table

To display contents of the table:

```
mysql> SELECT * FROM table_name;
```

#### 2.7 EXIT

There is no way to exit a database, you can either use the USE command to switch databases or you can exit mysql using

```
mysql> EXIT
```

## 3 Script

You should also be able to input files containing SQL commands by redirecting them to the input of the MySQL command line tool.

For example, to run the a SQL script named "hw\_03script.sql", use the following command:

```
$ mysql -u root -p hw03 < hw03_script.sql</pre>
```

To capture the output of the script, you can redirect stdout to a file. For example, to create the text output file, use the following command:

```
$ mysql -u root -p hw03 < hw03_script.sql > hw03_spool.txt
```