

Working with MySQL

Loading and Saving Databases

To load a database file, open a command prompt, and change (using the `cd` command) to the directory that the file is stored in. Then run the following command (replacing *username*¹ and *filename* with the appropriate names).

Note: This should be run in your regular Windows/Mac command prompt, **not** the MySQL prompt.

```
mysql -u username -p < filename.db
```

To save a database from MySQL to a file, open a command prompt and type the following (replacing *username*, *databasename* and *filename* with the appropriate names):

```
mysqldump -u username -B -p databasename > filename.db
```

The MySQL Command Prompt

Log in to MySQL using the following command:

```
mysql -u username -p
```

This will now prompt you to enter commands and queries. Some useful things to note are:

- MySQL will display a prompt that indicates that you can enter commands. The default prompt is "**mysql>**". Different prompts are shown depending on the circumstances. These are:
 - **mysql>** Waiting for a new command
 - **->** Waiting for the next line of a multi-line command
 - **'>** You have previously opened a single quote that you haven't yet closed.
 - **">** You have previously opened a double quote that you haven't yet closed.
 - **`>** You have previously opened a backtick quote that you haven't yet closed.
 - **/*>** You previously began a comment (using `/*`) but haven't yet closed it.

¹ If you installed MySQL using the instructions from Moodle, your user name is "root". This would not be a good idea for a real database, because the "root" user should only be used for administration. Because we are only testing our databases, it is OK to use for this class.

- MySQL will not run your command until you end with a semicolon. (There are a couple of exceptions to this, though it's simpler to provide the semicolon every time rather than trying to remember which commands allow you to skip it).
- In general, if you hit the "return" key, MySQL treats it in the same way as a space.
- If you've made an error and you want to start typing a new command, add "\c" to your command (without the quotes) and press return. This cancels the command you've just been typing. This is most useful if you've already gone onto the next line of a multi-line command and realise you've made a mistake on a previous line.
- You can press the 'up' and 'down' arrow keys to go to your previous command history. Useful if you want to use the same query again, or run a similar one.
- Your cursor does not need to be at the end of the line when you press 'enter' to run a query.

Quitting

You can quit the MySQL prompt in two ways:

- Running the "**exit;**" command in the **mysql>** prompt.
- Typing **Ctrl+D** in the **mysql>** prompt.