

## G51DBI: GETTING STARTED WITH MYSQL

### INTRODUCTION

MySQL is an extremely popular database management system (DBMS), its main benefit is the fact it is free, meaning non-profit organisations can use it while keeping costs down. In this module we will focus on the main SQL commands that are common to most relational database applications. For the most part, the SQL you learn will be applicable to every other DBMS, allowing you to use SQL in the future regardless of the environment. The topics we will cover should give you a solid foundation for any future development in SQL.

### SETTING UP MYSQL ON THE SCHOOL'S SERVER

1. Start **Cygwin64 Terminal** from the icon on your desktop or from **Start → All Programs → Cygwin → Cygwin64 Terminal**;
2. Enter the following in the console:

```
ssh <Your University Username>@avon.cs.nott.ac.uk
```

where <Your University Username> is your real university username and **avon.cs.nott.ac.uk** is the mysql server address.

3. Answer Yes to the “Are you sure you want to continue connecting (yes/no)?” question and enter your University password.
4. Enter the command: **setup\_mysql**

Answer Yes to the “No default database exists for your username, create it? (y/n):” question.

5. This will create a database having the same name as your username and will generate a password.

**REMEMBER:** The password is randomly generated and will be needed in the next step! If you lose it, you will not be able to recover it, so please be sure to **write it down!!** You may want to change the password after logging to mysql.

6. To login to mysql in the console, type the following:

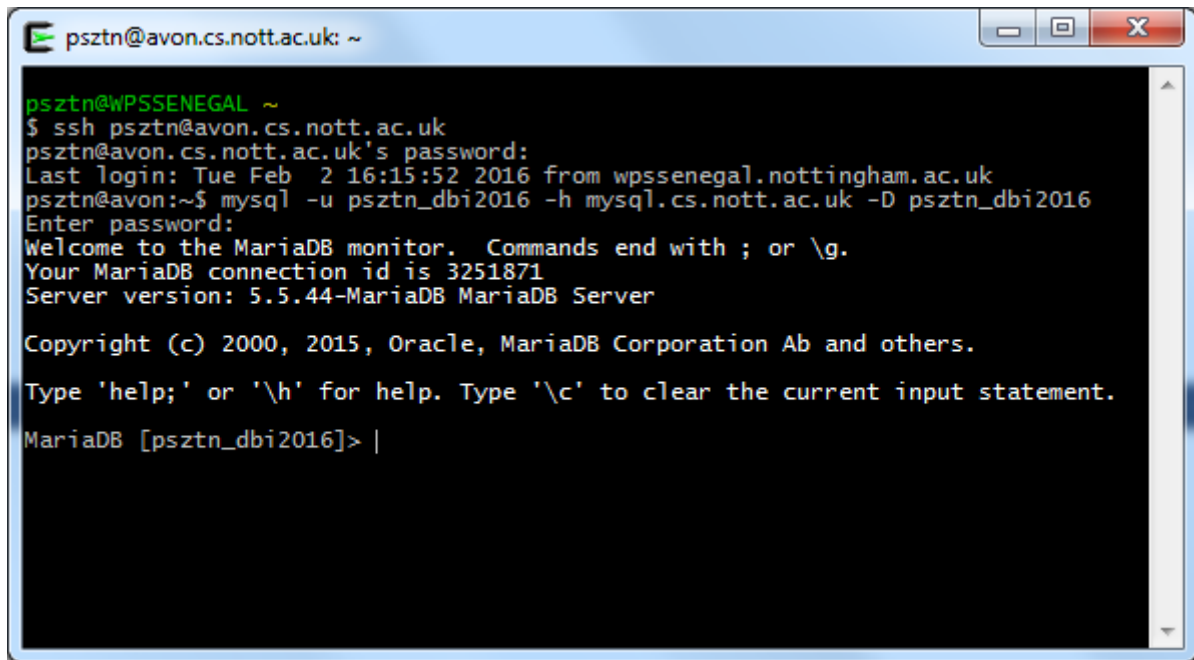
```
mysql -u <Your mysql username> -h mysql.cs.nott.ac.uk -D <Your mysql database>
```

where <Your mysql username> and <Your mysql database> are the mysql username and database generated above.

**Note that,** you can only use **mysql** command if you have already logged into the server at step 2.

7. You will be asked to insert your MySQL password (generated in Step 5). Type it and **DO NOT WORRY if the cursor doesn't move and you don't see the password appearing while you're typing.**

The below shows an example after successfully logging in mysql.

A screenshot of a terminal window with a blue title bar. The title bar text is 'psztn@avon.cs.nott.ac.uk: ~'. The terminal content shows a user logging in via SSH from 'wpssenegal.nottingham.ac.uk' and then connecting to a MySQL database. The MySQL prompt is 'MariaDB [psztn\_db2016]> |'.

```
psztn@wpssenegal ~  
$ ssh psztn@avon.cs.nott.ac.uk  
psztn@avon.cs.nott.ac.uk's password:  
Last login: Tue Feb  2 16:15:52 2016 from wpssenegal.nottingham.ac.uk  
psztn@avon:~$ mysql -u psztn_db2016 -h mysql.cs.nott.ac.uk -D psztn_db2016  
Enter password:  
Welcome to the MariaDB monitor.  Commands end with ; or \g.  
Your MariaDB connection id is 3251871  
Server version: 5.5.44-MariaDB MariaDB Server  
  
Copyright (c) 2000, 2015, Oracle, MariaDB Corporation Ab and others.  
  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
MariaDB [psztn_db2016]> |
```

8. Now change your password to something more memorable by typing:

`set PASSWORD=PASSWORD('newpassword');` and press Enter.

You should get the following message: Query OK, 0 rows affected (0.00 sec)

9. You can now enter SQL commands, such as CREATE, ALTER, UPDATE, DROP, SELECT.

**Remember** that all commands should end with a semicolon.

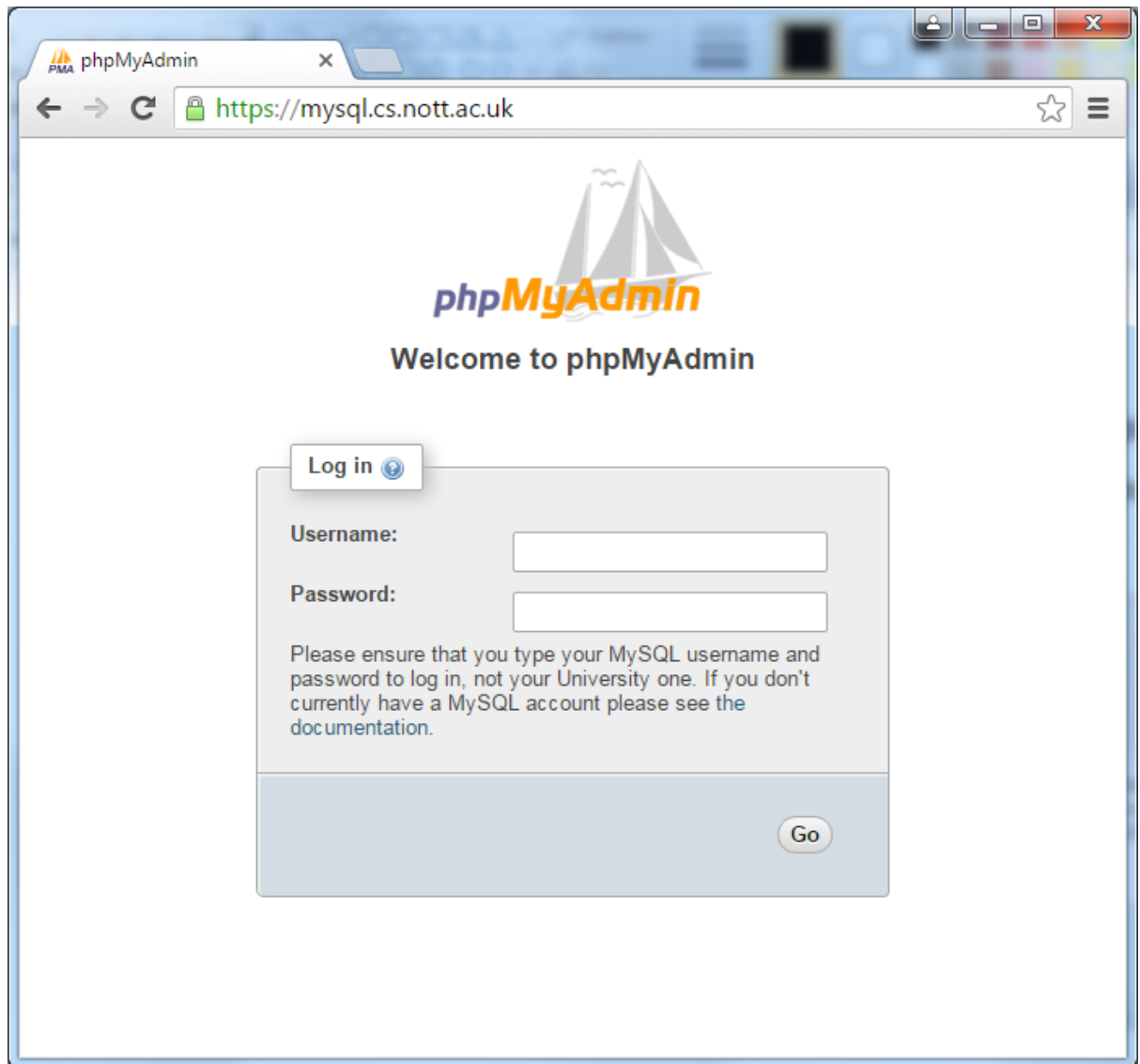
10. To leave mysql type **exit** or **\q**, or **quit**.

## USING MYSQL

Now that you have set up a username and database, you might like to create some tables and play around with some commands. Creating, Updating and Querying tables will be dealt with in detail in later lectures and labs, so don't worry if you don't get far.

## USING phpMyAdmin

As mentioned in the lecture, you have the option to use phpMyAdmin a web-based front end for writing SQL code. Once you're done with installing MYSQL, go to <https://mysql.cs.nott.ac.uk/> and enter your mysql username and the password generated by STEP 6, described above (i.e. not your university username and password).



Once you login, go to SQL tab and type:

use <your database>; and press **Go**

Then you can start creating tables!

