Research School of Computer Science, The Australian National University
COMP7240 - Introduction to Database Concepts
Summer, 2017

Lab 1, Pre-intensive Week 1

Set Up Your Lab Environment

This lab will help you set up your lab environment on your own computer. It also provides exercises to get you started with working in your lab environment, which is important to prepare you for working on exercises in the later labs.

1 Log In

(1). *Log into your account on the partch server from your own computer.*

In this course, we will use the open source relational DBMS PostgreSQL. We have installed a PostgreSQL database management system on a server called `partch`, which is maintained by IT support at the ANU College of Engineering & Computer Science (CECS). In order to practice the lab exercises of this course, you need to access the server `partch` from your own computer. To do this, you need to set up the remote interaction in your computer following the 'Lab 1' video tutorials. The videos can be found through the links below.

- If you use a Mac/Linux computer, you may set up remote interaction following the video tutorial: `https://youtu.be/VnH26T8aQ2M`

- If you use a Windows computer, you may set up remote interaction following the video tutorial: `https://youtu.be/dwSUMVdY67M`

- If you use a Windows 10 computer and prefer to install the Bash Linus subsystem, you may refer to the video tutorial: `https://youtu.be/ZPD0KT7qvCA`

Summary for the impatient: *Create a directory for this lab under your personal directory (i.e.* `week01`*). Download* `history.txt` *from the course's Wattle site (in the folder* `Lab 1: Set Up Your Lab Environment`*) into your computer, and then copy it to the directory* `week01` *under your personal directory on* `partch`*.*

Note: In this course, you will need some simple Linux commands to manage your directories and files on `partch`. Therefore, if you're not familiar with Linux, you need to go through the following exercises.

2 Manage Directories and Files

(2). *Use the `pwd` command to print the current working directory on the screen.*

Printing the current working directory: Enter the command `pwd` in a terminal window. The `pwd` is used to print the current working directory on the screen. When you first log in, the current directory is your *personal directory.*

(3). *Use the `mkdir` command to create a new directory.*

Making new directories: The `mkdir` command is is used to create a new directory under the current working directory. You can create a new directory named `week01` by typing `mkdir week01`.

(4). *Use the `ls` command to list directories and files.*

Directory listing: Enter the command `ls` in a terminal window. The `ls` command is used to list the files and sub-directories in the current directory. When you first log in, the current directory is your *personal directory.* You should see the `week01` directory you just created.

(5). *Use the `cd` command to change the directory*

Changing the directory: You can move around using Unix command `cd`. Try each of the following commands:

- Enter the command `cd week01` to change into your `week01` directory.

- Type `pwd` to check what the current directory is.

- Enter the command `cd ~`

- Use the `pwd` command to find out where you have gone. Note that the command `cd ~` will always change the current directory to your *personal directory* as you first log in.

Your working directory is always the one containing the files you are working on at that time.

3   Copy Files to `partch`

(6). *Download* `history.txt` *from the course's Wattle site (in the folder* `Lab 1:  Set Up Your Lab Environment`*) into your computer, and then copy it to the subdirectory* `week01` *under your personal directory on* `partch`*.*

If you have any questions, make sure that you have watched the video tutorials on the Wattle course site (in the folder `Lab 1:  Set Up Your Lab Environment`). If you have further questions, you may post your questions on the Class Discussion Forum or talk to our tutors via the Chat Room on Wattle.

(7). *Use the* `rm` *command to delete a directory or a file.*

Delete directories or files: The `rm` command is is used to delete a directory or a file. Try each of the following commands:

- Enter the command `mkdir test` to make a new directory `test`.

- Enter the command `ls` to check if you can find the folder `test`.

- Type `rm -r test` to delete the directory `test`. Note that `rm -r test` command will remove the folder `test` and all its contents.

- Type `rm ~/week01/history.txt` to delete the file `history.txt`