Class Work 6

Working with Processes in Ubuntu OS

* Access and login on the remote Ubuntu machine following the instructions provided in “*How to login on the NCI Ubuntu PC*” document available on the Operating Systems Moodle page.
* Open up a terminal window (command line interface). From the Panel menu available at the top of Ubuntu windows, click on **Applications** option and then select **System Tools** and then **MATE Terminal**. A new window for the Terminal application is opened. The prompter will indicate your home directory.
* A command execution in the Terminal Window (e.g. ls ) represents a small application (process)

Create some files and folders to work on them.

Make sure that you are located in your home directory in the Terminal window. Use *cd* command to navigate to your home directory if required.

Use the **mkdir** command to create a folder in your home folder called ***tutorial6***.

Change directory (using **cd** command) to the *tutorial6* folder. Use the text editor application (available under the Dash Home menu option), type in some text into a file and save it as ***tut6file.txt*** in the *tutorial6* folder.

The **cp** command copies files. Use the command **cp tut6file.txt tut6filebackup.txt** to create a backup of *tut6file* by copying it to a file called *tut6filebackup*.

**1. What the command cat tut6filebackup.txt does?**

Pipes

Many UNIX commands write by default to standard output (the monitor) and get input from standard input (the keyboard).

The pipe symbol ‘|’ is used to connect the output from one command to the input of another.

Make sure that you are located in your home directory (NOT under tutorial6 folder) when you practice the next commands

Type **ls** to see all the files and folders from your home folder.

**2.** Type **ls|sort**. **What each command, ls and sort, does?** **What the combined command (ls|sort) does?**

Finding strings

The **grep** command searches for specified words or patterns in a given string or in a file with lines of text.

**3.** Combine the **ls** and **grep** commands using the pipe to find all the files and folders starting with letter ‘t’ from your home folder and output them on the screen.

Hint: **grep ^e** will find ‘e’ at the beginning of a line of text. **What command did you type in?**

Processes

**4.** Try the command **ps. What the command does? What was the output?**

Lists all the processes that are currently running. Some details ( e.g. Process ID) are provided about each process.

**5.** Type the command **gedit veggielist.txt**  Close the text editor application window.

Type in again now the command **gedit veggielist.txt &**

**What the & symbol means?**

HINT: Loot at the shell command prompter. Do you have control over the prompter? Can you type in more commands?

**6.** Then, run **ps** to get the PID of the gedit process that is running. Use the PID for the gedit process session to kill it. **How did you use the kill command?**