# Command Line Basics – Practical Sheet

## Get Set Up

Load up a terminal by going to Applications > Accessories > Terminal, maximise this screen. Now your ready to begin typing in commands, try using the `ls` command to list the contents of the current directory. Remember to ask the teacher if you have any problems.

## Find Programs

Using apropos, find the following programs:

- 1. A program to report free disk space.
- A program to print a file to the screen.
  A program to report networking ip-address.
- 4. A program to search for installable programs.

#### Learn from the Manual

Using man or help, find out how to achieve the following tasks:

- 1. Report free memory in megabytes (default is KB).
- 2. Search the supplied file for the phrase "Banana" using grep.
- 3. Change ownership of the file using chown to fab.
- 4. Count the number of times lines occur using uniq.

## Moving Data Around

Using pipes and chevrons as shown in the overview, achieve the following tasks:

- 1. Sort then unique the supplied file, saving the results to result.txt using sort and uniq commands.
- 2. Concatenate file1 and file1 together and then append to file3.

#### Other Users

Using sudo, run the following systems maintenance tasks:

- 1. Uninstall the program 'inkscape' using `apt-get remove`
- 2. Reinstall inkscape using `apt-get install`
- 3. Copy a file for the user `fab` onto their Desktop.

#### Looking at Interpretation

Using Environment variables, find the following:

- 1. Find out what the \$SHELL variable contains using the echo command.
- 2. Copy file1.txt to your user's home directory using the variables \$HOME
- 3. Show file expansion using the echo command and supplied text files (\*.txt).

## Extra Work (Homework)

To get experience the last part of this practical will be to write a simple bash script. The script must:

- 1. Report the time/date to a file
- 2. List a directory, renaming each file from \*.txt to \*.text
- 3. Convert all gif images to png images using the `convert` program

Save this script, make it executable and then hand it in.