# UWCS Linux 101 Cheatsheet

## Notable DCS Programs

The programs listed here are formatted using <Program name> (`<shell program name>`). The shell program name will run the program when typed into the shell, where applicable.

- Browsers: Chrome (`chrome`), Firefox (`firefox`), Konqueror (`konqueror`)
- Text editors: Kate (`kate`), Gedit (`gedit`), Vim (`vim`), Emacs (`emacs`), Nano (`nano`)
- Terminals: Terminal, Konsole
- File Explorers: Dolphin (`dolphin`), Nautilus/Files (`nautilus`)
- PDF Viewers: Okular (`okular`), Evince/Document Viewer (`evince`)
- Program Compilers/Interpreters: GCC (`gcc`), Java Compiler (`javac`), Java (`java`), Python 2 (`python`), Python 3 (`python3`), Ruby (`ruby`)

## Handy Commands and Arguments

**N.B.:** All single-letter command arguments are composable: -a and -l can be composed into -al.

### help — Builtin function help
Usage: `help` — Useful when `man <command>` and `<command> --help` don't work

### pwd — Print working directory
Usage: `pwd`

### ls — List directory contents:
Usage: `ls [arguments] <path>`
- -a — Include directories/files whose names begin with a dot (.)
- -d — Directories are listed as plain files
- -l — List in long (detailed) format
- -R — Recursively list the subdirectories encountered

### rm — Remove directory entries:
Usage: `rm [arguments] <path>`
- -d — Attempt to remove directories as other types of files
- -f — Attempt to remove files without confirmation (remove them forcefully)
- -r, -R — Recursively attempt to remove each subdirectory and file in the given path

### mkdir — Make directories:
Usage: `mkdir [arguments] <path>`
- -p — Create intermediate/parent directories as required (if this isn't used, the full path must exist)

## cp — Copy files

Usage: `cp [arguments] <source_file> <target_file>`

• -R — Copies a directory and its entire subtree of files and folders

## ssh — Remote login client

Usage: `ssh [arguments] <user@hostname>`

## clear — Clear the shell

Usage: `clear`

# Handy Keyboard Shortcuts

Clear the shell: `Ctrl+L`

Exit the current shell program: `Ctrl+C, Ctrl+D, q` (This depends on the program in use)