Linux Command Quick Reference

Help on Command.	
`man <cmd>`	Type **`man ls`** to read the manual for the **`ls`** command
Navigate between Directories	
`ls -ltrah <path>`	List contents of the directory <path> including entries starting with `.` in the long listing format with human readable size like 2G rather than 2146858929 and sorted by their modification date, oldest first.
`cd <path>`	Change the current directory to <path>
`pwd`	Show the absolute path of the current directory
Special Directories	
`~`	Home directory
`.`	Current directory
`..`	Parent directory
Modify Directories	
`mkdir -p <path>`	Make a new directory with the path <path>. Missing parent directories along the path will be created.
`cp <file> <dst>`	Copy the file <file> to the destination <dst>. If <dst> is a directory, the new file will be created inside it.
`cp -r <dir1> <dir2>`	Copy directory dir1 and all its contents recursively as/to <dir2>. If <dir2> exists, the new directory will be created inside <dir2>.
`mv <file> <dst>`	Move the file <file> to the destination <dst>. If <dst> is a directory, the file will be moved inside it.
`rm <file>`	Remove files. "?" is any character; "*" is any string of characters.
`rm -rf <dir>`	**USE WITH CAUTION.** Remove all contents of the directory <dir> recursively and forcefully.
Connect/Copy files to remote host	
`ssh <user>@gadi.nci.org.au`	Login to Gadi as the user <user>
`scp <file> <user>@gadi-dm.nci.org.au:<dst>`	Copy local <file> to Gadi into the directory <dst> or as the file <dst>
View/Edit a Text File	
`less <file>`	View <file> with less
`cat <file>`	Print <file> on screen
`vim <file>`	Edit <file> with vim
`emacs <file>`	Edit <file> with emacs
Compress files	
`tar czf file.tar.gz <folder>`	Create the compressed archive <file.tar.gz> with gzip for all contents in the folder <folder> (use `xzf` to extract)

`gzip <file>`	Compresses file and renames it to `file.gz`

Other Useful Commands

`diff -y <file1> <file2>`	Show the differences between <file1> and <file2> side-by-side
`grep -n "str" <file>`	Print lines containing the string str in <file> with the prefix of its line number
`awk -F, '{print $4}' <file>`	Print the 4th column of the file <file> using comma as the field separator
`wc -l <file>`	Count lines in the file <file>
`find <path> -type d -name *1234*`	Search through the directory <path> for directories with name containing the string 1234

File Access Permissions

`chmod g+w <file>`	Add group writable permission to the file <file>
`chgrp -R <prj> <path>`	Set the owner group of the directory <path> and its contents to the project <prj> recursively.
`getfacl <file>`	Get file access control lists of the file <file>

Pipes and Redirection

`ls -l > list.txt`	List the content of the current directory and redirect the output to the file list.txt. If file list.txt exists, overwrite it with the output.
`<cmd> >> <file>`	Append output of the command <cmd> to the file <file>
`<cmd> < <file>`	Get input of the command <cmd> from the file <file>
`<cmd1>	<cmd2>`	Pipe the output of command <cmd1> to the standard input of command <cmd2>

Shortcuts

`Ctrl+C`	Halt the current command
`Ctrl+A`	Move cursor to the beginning of the line
`Ctrl+E`	Move cursor to the end of the line
`Ctrl+K`	Delete from cursor to the end of the line
`Ctrl+Z`	Stop the foreground job and places it in the background as a stopped job
`Ctrl+D`	Log out of current session, similar to **exit**