

# Linux Command Summary

## Introduction

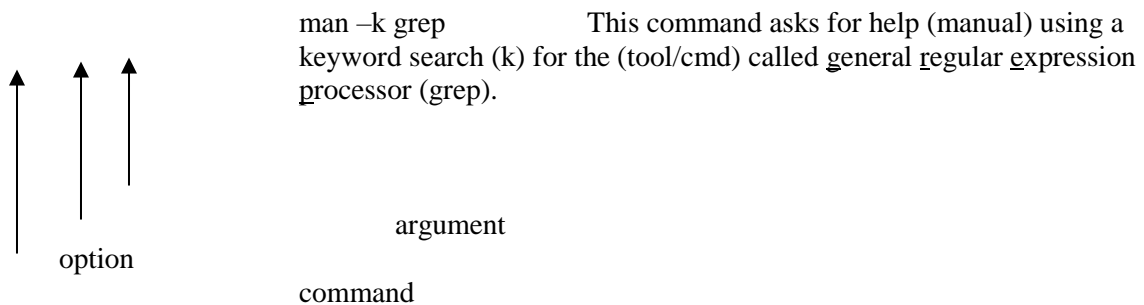
This is designed to be a **cheap** and **dirty** summary of useful Linux text-based commands. Although for the most part it is accurate, it is also simplified – remember “half truths” can be dangerous.

## Philosophy

Standard Linux is a character-oriented environment. Files tend to contain characters and many utilities work with character information. This provides an advantage in being able to see and understand information.

## Format

In general, commands are short. Options (called switches) are indicated by a minus sign followed by the appropriate letter/symbol. Arguments follow options. For example:



<u>Command</u>	<u>Meaning</u>	<u>Comments</u>
ls	list files	This is like a dir command (and ls may be aliased to dir in the <b>.cshrc</b> or <b>.bashrc</b> files). Note that there are many options available (most common → ls -al).
pwd	current directory	This prints your current position in the file system hierarchy. This hierarchy starts with root (/) and continues (i.e., /home/cs/student/csxxxxnn). Yes, the separator is a “/” as opposed to “\” used in Windows.
cd	change directory	This allows you to move around in the file hierarchy (cd ../instr). Note cd with no argument will return you to your home directory.
cat	concatenate	This command allows you to type the contents of a file. The purpose of this command was to combine character files (cat test.txt my.txt) but it also shows the file contents (cat myfile.java).
ps	process status	This command allows you to look at the processes under your control. It will show various information depending on the options but includes the process identification (PID) plus codes indicating status information.

<b><u>Command</u></b>	<b><u>Meaning</u></b>	<b><u>Comments</u></b>
nano	Text editor	This is a small, easy to use command-line text editor that is included on most Linux distributions.
javac	Java compiler	This compiles the java source code (.java file) into byte code (.class file) if there are no errors.
java	Java interpreter	This executes the java byte code (.class file) to produce answers or error messages.
mkdir	make directory	This will create a new directory. (mkdir myfiles)
rmdir	remove directory	This deletes a directory if that directory is empty. (rmdir myfiles)
rm	delete file	The file named as the argument to this command will be deleted. (rm junk.txt)
cp	copy file	This command will make a duplicate of the file (i.e., to copy test to junk: cp test.txt junk.txt).
mv	move file	mv moves a file or renames it. (mv test.txt lab1.txt)
logout	log off	This will log you off the system.