

Terminal Cheat Sheet

ACM Club - October 22, 2015

File System Basics

`.` Present directory
`..` One level above the present directory
`/` Beginning of the structure (aka 'root')
`~` User's profile or home directory

Navigation

`pwd` Print working directory
`cd` Change directory
`ls` List files

File Manipulation

`mkdir` Makes a directory
`cp` Copies a file
`mv` Moves/renames a file
`rm` Removes/deletes a file

File Matching

`?` Matches a single character
`*` Matches any number of unknown character
`{a,b,c}` Matches listed cases
`{0..5}` Matches number/letter ranges

Text Reading

`cat` Dumps entire contents to terminal
`less` Pages through contents

Time Savers

`Tab Completion` Only type part of a command
`Arrow up` Reuse previously entered commands
`history` Display previously entered commands
`clear` Clears the terminal of output

Documentation

`<command> --h` Short details
`man <command>` Extended details

Pattern Matching

`regex` Regular expressions - syntax for pattern matching
`grep` Globally search a regular expression and print
`sed` Stream editor - useful for string substitution

Input/Output

`STDIN` Stream of input data
Possible sources: user typing in text, reading of file
`STDOUT` Stream of output data
Possible destinations: terminal screen, another command
`echo` Creates `STDOUT` stream - Just like `'cout >>'` in cpp file

Pipe/Redirection

`|` (pipe symbol) Connect `STDOUT` of one program to `STDIN` of another
`aCommand < aFile` Read in a file
`aCommand < aFile` Write to a file
`aCommand >> aFile` Append to a file
`aCommand < inFile > outFile` Reading and writing combo

gcc/g++

`g++` Compiles cpp code
`-o <executable output name>` Gives executable a proper name