



# LINUX COMMAND LINE CHEAT-SHEET

## LS COMMAND

list the contents of the current working directory.

Command : ls

Options:

- a : show all (Including hidden)
- R : recursive list
- r : reverse order
- t : sort by last modified
- S : sort by file size
- l : long listing format
- 1 : one file per line
- m : comma separated output

## FILE PERMISSIONS

Determine who can access files and directories on a system

Commands: chmod octal file

- 4 – read (r)
- 2 – write (w)
- 1 – execute (x)

Order : user/group/others

chmod 777 file : rwx  
permission for everyone

chmod 755 file : rw for user ,rx  
for group and others

chown usr:grp file : change the  
file owner to user and group to  
group

## IO REDIRECTION

Redirecting input / output

Command :

cmd < file : input of cmd from file

cmd1 < cmd2 : output of cmd2 as  
file input to cmd1

cmd > file : standard output  
(stdout) of cmd as input to file

cmd : display standardoutput of  
cmd

cmd >> file : append stdout to file

cmd2 > file : error output (stderr)  
of cmd to file

cmd > &2 : stdout to same place as  
stderr

cmd 2 > &1 : stderr to same place  
as stdout

cmd &> file : every output of cmd  
to file

## BASH COMMANDS

Automate software  
development tasks.

Commands:

uname -a : show system  
and kernel

head -n1/etc/issue : show  
distribution

mount : show mounted file  
systems

date : show system date

uptime : show uptime

whoami : show your username

man command : show manual  
for command

## NETWORKING

Commands related to networks

Commands :

ping host : ping host

whois domain : get whois for  
domain

dig domain : get DNS for  
domain

dig -x host : reverse lookup  
host

wget file : download file

wget -c file : continue stopped  
download

wget -rurl : recursively  
download files from url

curl url : outputs the webpage  
from url

curl -o.meg.html url : writes  
the page to meg.html

ssh user@host : connect to  
host as user

ssh -p port user@host :  
connect using port

ssh -i path-to-pem-file  
ubuntu@ip-address : used to  
connect amazon ec2

-i : identity file

## BASH VARIABLES

Temporary storage for string or  
number.

Commands:

env : show environment  
variables

echo \$NAME : output value of  
\$NAME variable

\$PATH : executable search  
path

\$HOME : home directory

\$SHELL : current shell

## PIPES

Takes the standard output of  
one process and passes it as  
standard input into another  
process

Commands:

cmd1 | cmd2 : stdout of cmd1  
to cmd2

cmd1 | &cmd2 : stderr to cmd2

## DIRECTORY

Commands for working with  
directories

Commands:

pwd : show current working  
directory

mkdir dir : make directory dir

cd dir : change directory to dir

cd .. : go up a directory

ls : list files

## SEARCH FILES

Commands to search for files

Commands :

grep pattern files : search for pattern in files

grep -i : case in-sensitive search

grep -r : recursive search

grep -v : inverted search

grep -o : show matched part of the file only

find /dir/ -user name : find files owned by name in dir

find /dir/ -name name\* : find files starting with name in dir

find /dir/ -mmin num : find files modified less than num minutes ago in dir

whereis command : find binary / source / manual for command

locate file : find file (quick search of system index)

## FILE OPERATIONS

Commands for working with files

Command :

touch file1 : create file1

cat file1 file2 : concatenate files and output

less file1 : view and paginate file1(one page per time)

file file1 : get type of file1

cp file1 file2 : copy file1 to file2

mv file1 file2 : move file1 to file2

rm file1 : delete/remove file1

head file1 : shows first 10 lines of file1

tail file1 : show last 10 lines of file1

tail -f file1 : output last lines of file1 as it changes

## PROCESS

Viewing and managing processes

Commands:

ps : show snapshot of processes

top : show real time processes

kill pid : kill process with id pid

pkill name : kill process with name "name"

killall name : kill all processes start with name