FILE COMMANDS

- ls – directory listing
- ls -al – formatted listing with hidden files
- cd dir – change directory to dir
- cd – change to home
- pwd – show current directory
- mkdir dir – create a directory dir
- rm file – delete file
- rm -r dir – delete directory dir
- rm -f file – force remove file
- rm -rf dir – force remove directory dir *
- cp file1 file2 – copy file1 to file2
- cp -r dir1 dir2 – copy dir1 to dir2; create dir2 if it doesn't exist
- mv file1 file2 – rename or move file1 to file2 if file2 is an existing directory, moves file1 into directory file2
- ln -s file link – create symbolic link link to file
- touch file – create or update file
- cat > file – places standard input into file
- more file – output the contents of file
- head file – output the first 10 lines of file
- tail file – output the last 10 lines of file
- tail -f file – output the contents of file as it grows, starting with the last 10 lines

SEARCHING

- grep pattern files – search for pattern in files
- grep -r pattern dir – search recursively for pattern in dir
- command | grep pattern – search for pattern in the output of command
- locate file – find all instances of file

Cli
commands

PROCESS MANAGEMENT

- ps – display your currently active processes
- top – display all running processes
- kill pid – kill process id pid
- killall proc – kill all processes named proc (use with extreme caution)
- bg – lists stopped or background jobs; resume a stopped job in the background
- fg – brings the most recent job to foreground
- fg n – brings job n to the foreground

SHORTCUTS

- Ctrl+C – halts the current command
- Ctrl+Z – stops the current command, resume with fg in the foreground or bg in the background
- Ctrl+D – log out of current session, similar to exit
- Ctrl+W – erases one word in the current line
- Ctrl+U – erases the whole line
- Ctrl+R – type to bring up a recent command
- !! – repeats the last command
- exit – log out of current session

SYSTEM INFO

- date – show the current date and time
- cal – show this month's calendar
- uptime – show current uptime
- w – display who is online
- whoami – who you are logged in as
- finger user – display information about user
- uname -a – show kernel information
- cat /proc/cpuinfo – cpu information
- cat /proc/meminfo – memory information
- man command – show the manual for command
- df – show disk usage
- du – show directory space usage
- free – show memory and swap usage
- whereis app – show possible locations of app
- which app – show which app will be run by default

COMPRESSION

- tar cf file.tar files – create a tar named file.tar containing files
- tar xf file.tar – extract the files from file.tar
- tar czf file.tar.gz files – create a tar with Gzip compression
- tar xzf file.tar.gz – extract a tar using Gzip
- tar cjf file.tar.bz2 – create a tar with Bzip2 compression
- tar xjf file.tar.bz2 – extract a tar using Bzip2
- gzip file – compresses file and renames it to file.gz
- gzip -d file.gz – decompresses file.gz back to file

NETWORK

- ping host – ping host and output results
- whois domain – get whois information for domain
- dig domain – get DNS information for domain
- dig -x host – reverse lookup host
- wget file – download file
- wget -c file – continue a stopped download

INSTALLATION

- Install from source:
  ./configure
  make
  make install

- dpkg -i pkg.deb – install a package (Debian)
- rpm -Uvh pkg.rpm – install a package (RPM)

FILE PERMISSIONS

- chmod octal file – change the permissions of file to octal, which can be found separately for user,

  group, and world by adding:
  - 4 – read (r)
  - 2 – write (w)
  - 1 – execute (x)

  Examples:

  chmod 777 – read, write, execute for all
  chmod 755 – rwx for owner, rx for group and world
  For more options, see man chmod.