Linux Command Summary

Jeongmin Lee

File Commands

1. `ls`   Directory listing
2. `ls -al`   Formatted listing with hidden files
3. `ls -lt`   Sort formatted listing by time modification
4. `cd dir`   Change directory to `dir`
5. `cd`   Change to home directory
6. `pwd`   Show current working directory
7. `mkdir dir`   Create directory `dir`
8. `cat > file`   Place standard input into file
9. `more file`   Output contents of file
10. `head file`   Output the first 10 lines
11. `tail file`   Output the last 10 lines
12. `tail -f file`   Output file as it grows
13. `touch file`   Create or update file
14. `rm file`   Delete file
15. `rm -r dir`   Delete directory
16. `rm -f file`   Force remove file
17. `rm -rf dir`   Force remove directory
18. `cp file1 file2`   Copy file1 to file2
19. `cp -r dir1 dir2`   Copy directory recursively

Process Management

1. `ps`   Display current processes
2. `top`   Display all running processes
3. `kill pid`   Kill process with given PID
4. `killall proc`   Kill all processes named `proc`
5. `pkill pattern`   Kill processes matching pattern
6. `bg`   List/resume background jobs
7. `fg`   Bring most recent job to foreground
8. `fg n`   Bring job `n` to foreground

System Information

1. `date`   Show current date/time
2. `cal`   Show calendar
3. `uptime`   Show system uptime
4. `w`   Show who is logged in
5. `whoami`   Show current user
6. `finger user`   User information
7. `uname -a`   Kernel information
8. `cat /proc/cpuinfo`   CPU info
9. `cat /proc/meminfo`   Memory info
10. `man command`   Manual page
11. `df`   Disk usage
12. `du`   Directory space usage
13. `free`   Memory and swap usage
14. `whereis app`   Show possible locations of app
15. `which app`   Show default application path

Searching

1. `grep pattern file`   Search for pattern in file
2. `grep -r pattern dir`   Recursive search
3. `command grep pattern|`   Search pattern in command output
4. `locate file`   Find all instances of file
5. `find . -name filename`   Search files in current directory
6. `pgrep pattern`   Search for processes by pattern

File Permission

`chmod octal file`   Change file permission.
Octal values:
- 4 = read (r)
- 2 = write (w)
- 1 = execute (x)

Compression

1. `tar cf file.tar file`   Create tar
2. `tar xf file.tar`   Extract tar
3. `tar czf file.tar.gz files`   Create tar with gzip
4. `tar xzf file.tar.gz`   Extract tar with gzip
5. `tar cjf file.tar.bz2`   Create tar with bzip2
6. `tar xjf file.tar.bz2`   Extract tar with bzip2
7. `gzip file`   Compress file
8. `gzip -d file.gz`   Decompress file

Networking

1. `ping host`   Ping host
2. `whois domain`   Whois info
3. `dig domain`   DNS info
4. `dig -x host`   Reverse DNS lookup
5. `wget file`   Download file
6. `wget -c file`   Resume download

Shortcuts

1. `Ctrl+c`   Halt command
2. `Ctrl+z`   Stop command (resume with fg/bg)
3. `Ctrl+d`   Logout current session
4. `Ctrl+w`   Erase one word
5. `Ctrl+u`   Erase whole line
6. `Ctrl+r`   Search recent command
7. `!!`   Repeat last command
8. `exit`   Logout current session