

CSE 216: Recitation 1

PART A:

The following table provides common commands used at the DOS prompt in Windows and their counterparts in Linux. Note that these commands usually have a number of options. To learn more about each command, read its associated man page (for example, type `man ls` at the shell prompt to read about the `ls` command).

Taken from: http://www.yolinux.com/TUTORIALS/unix_for_dos_users.html

Command Comparison:

DOS Command	UNIX or Bash Command	Action
DIR	ls -l (or use ls -lF)(-a all files) (df -k Space remaining on filesystem)	List directory contents
DIR *.* /o-d DIR *.* /v /os DIR /s DIR /aa	ls -tr ls -ls ls -R ls -a	List directory contents by reverse time of modification/creation. List files and size List directory/sub-directory contents recursively. List hidden files.
TREE	ls -R	List directory recursively
CD	cd	Change directory
MKDIR MD	mkdir	Make a new directory
ASSIGN	ln	Create a file or directory link
RMDIR RD	rmdir	Remove a directory
CHDIR	pwd	Display directory location
DEL ERASE	rm -iv	Remove a file
RMDIR /S (NT) DELTREE (Win 95...)	rm -R	Remove all directories and files below given directory
COPY	cp -piv	Copy a file
XCOPY	cp -R	Copy all file of directory recursively
RENAME or MOVE	mv -iv	Rename/move a file
TYPE	cat	Dump contents of a file to users screen
MORE	more	Pipe output a single page at a time
HELP or COMMAND /?	man	Online manuals
CLS	clear ctrl-l	Clear screen
EXIT EXIT0	exit exit 0	Exit a shell

FIND FINDSTR	grep	Look for a word in files given in command line
COMP	diff	Compare two files and show differences. Also see comm, cmp, mgdiff and tkdiff.
FC	diff	Compare two files and show differences. Also see comm, cmp, mgdiff and tkdiff.
SET	set and env	List all environment variables
SET <i>variable=value</i> echo % <i>variable</i> %	set export <i>variable=value</i> echo \$ <i>variable</i>	Set environment variables Show environment variables
ECHO <i>text</i>	echo <i>text</i>	Echo text to screen
SET <i>variable</i>	setenv (for C shell) or export <i>VAR=val</i> (for Korn shell. Also <i>VAR=val</i>)	Set environment variables
PATH PATH %PATH%;C:\DIR	echo \$PATH PATH=\$PATH:/dir	Display search path for executables. Set PATH environment variable.
PROMPT \$p\$g	export PS1="\h(\u)\W> '	Set user command prompt.
DATE or TIME	date	Show date. (also set date - DOS only)
DOSKEY /h	history	List command history
DOSKEY <i>NAME=command</i>	alias <i>NAME=command</i>	Set command alias
BREAK ON	trap	Trap ctrl-break / Trap signals.
SORT	sort	Sort data alphabetically/numerically
EDLIN	ed	Line mode editor
EDIT <i>filename.txt</i>	pico, gnp, vi, xedit, xemacs, dtpad	Edit a file. The Linux editor which looks most like DOS edit is probably Pico. (Not a recommendation!)
BACKUP files A:\	tar -cvf /dev/fd0 files mdir, mcopy doswrite -a file (AIX only)	Save files to external drive.
RESTORE A:\ files	tar -xvf /dev/fd0 files mdir, mcopy dosread -a file (AIX only)	Read files from external drive.
ATTRIB [+r -r] [+a -a] [+s -s] [path\file] /s	chmod	Change file permissions. DOS: +:set to -:remove r:Read only a:Archive s:System /s:recursively
ATTRIB +h or -h	mv <i>file .file</i>	Change file to a hidden file - rename file with prefix "."
PRINT	lpr	Print a file

CALL COMMAND /C (DOS), CMD (NT)	source <i>script</i> (cshrc) . <i>script</i> (bash) sh <i>script</i>	Execute script from within batch shell.
MEM	free top	Show free memory on system
TASKLIST (WIN2K, XP)	ps -aux top	List executable name, process ID number and memory usage of active processes
MSD	lsdev	Show system info (Command borrowed from AIX)
SCANDISK DEFRAG C:	fsck debugfs	Check and repair hard drive file system
CHDISK	du -s	Disk usage.
FDISK	fdisk	Tool to partition a hard drive.
SUBST V: C:\directory\path	mount	Mount a drive letter to a folder/directory on your hard drive.
FORMAT	mke2fs See: fdformat and mformat for floppies	Format drive file system. For floppy drive use see YoLinux Tutorial Using DOS Floppies with Linux
VER	uname -a echo \$SHELL cat /etc/issue	Operating system/shell version
pkzip	tar and zip	Compress and uncompress files/directories. Use tar to create compilation of a directory before compressing. Linux also has compress, gzip
HOSTNAME	hostname	Print host name of computer
PING	ping	Send packets to a network host
TRACERT	tracert	Show routes and router hops to given network destination.
IPCONFIG (NT) WINIPCFG (Win 95...)	ifconfig or ip addr show	Display/configure network interface
NBTSTAT (Netbios info: -n, -c) NBTSTAT -A <i>IP-address</i>	nslookup <i>host-name</i> host <i>host-name</i>	Print DNS info for host.
NBTSTAT -a hostname	nmblookup -A hostname	lookup NetBIOS names.
ROUTE PRINT	route -n	Print routing table.
NET HELP START	chkconfig --list grep on	List services.
NET START <i>service-name</i> NET STOP <i>service-name</i>	service <i>service-name</i> start service <i>service-name</i> stop	Start/stop service/daemon.
NET SHARES	df	Show mounted shares/filesystems.

NET SEND <node-name> <message>(NT)	smbclient -M <i>MS-Windows-host-name</i> talk	Send pop-up to a MS/Windows PC Send message to another Unix/Linux user. See YoLinux tutorial
WIN	startx	Start X-Windows.
REBOOT	shutdown -r now	Reboot system.

See more examples: https://access.redhat.com/documentation/en-US/Red_Hat_Enterprise_Linux/4/html/Step_by_Step_Guide/ap-doslinux.html

PART B:

1. Download the following repository files from Github repository:

<https://github.com/RameshMF/object-oriented-design/blob/master/README.md>

2. Open the following projects in Netbeans:

OOPS concepts

Design principles

Go through the source code. It will be explained in the subsequent recitation.