

# A & D's Unix & Perl Quick Reference

## Login

Command	Description
<i>passwd</i>	Set your login password
<i>logout</i>	terminate login session

## Getting help

Command	Description	Example
<i>man</i> command	Display <i>manual</i> entry for command"	man fortune
<i>apropos</i> word	List manual entries related to "word"	apropos sex

## Files

Command	Description	Example
<i>cat</i>	Concatenate and display files	cat myfile cat file1 file2 > bothfiles
<i>chmod</i>	modify access permissions to a file	chmod 755 myfile
<i>cp</i>	copy files	cp file1 copy-of-file1 cp file1 subdir/copiedfile
<i>diff</i>	compare two files and list the differences	diff file1 file2
<i>grep</i>	search for a string inside files	grep word file grep "two words" file
<i>head</i>	print the first lines of a file	head somefile
<i>more</i>	display contents of files page by page	more mylongfile
<i>mv</i>	move or rename a file	mv oldfile newname mv oldfile subdir/newfile
<i>rm</i>	remove or delete a file	rm trashfile
<i>tail</i>	display last lines of a file	tail longfile
<i>gzip</i>	compress a file to file.gz	gzip file
<i>gunzip</i>	decompress a file	gunzip file.gz
<i>tar</i>	produce an archive (file.tar) of a set of files; unarchive directories and files	tar cvf file.tar files tar xvf file.tar

## Directories

Command	Description	Example
<i>cd</i>	changes current directory	cd subdir cd ..
<i>ls</i>	list contents of a directory	ls directory
<i>ls -al</i>	list full contents	ls -al directory
<i>ls -lt</i>	List full contents by date last modified	ls -lt directory
<i>ln -s</i>	create a shortcut to a file or directory	ln -s
<i>mkdir</i>	create a directory	mkdir subdir
<i>pwd</i>	print current working directory	pwd
<i>rmdir</i>	remove a directory	rm -i subir/* ; rmdir subd r
<i>df -k</i>	show free space on disks	df -k
<i>quota -v</i>	show disk space available to me (user)	quota -v

## I/O redirection

Command	Description	Example
>	send output to a file	ls -l > directory.listing
<	get input from a file	sort -k9 < directory.listing
	use output of first command as input for the second	ls -l   sort -k9   less

## Process control

Command	Description	Example
^Z	suspend the current job	^z
^C	stop current job	^c
<i>bg</i>	put a stopped process in the background	bg

<i>fg</i>	move a background process to the foreground	fg %1
<i>jobs</i>	list background processes	Jobs
<i>kill</i>	stop a running process	kill %1 kill -9 1234
<i>ps</i>	list my running processes and their status	ps -u username
<i>top</i>	show a list of running processes (all users)	top

## Miscellanea

Command	Description	Example
<i>date</i>	show current date/time	date
<i>find</i>	search the directory tree for a file	find . -name 'lostfile' -print
<i>history</i>	display last commands used	History
<i>talk</i>	Interactively communicate with another user	talk someone@host.domain.net
<i>w / who</i>	show information about logged in users	Who
<i>whoami</i>	show current user name	Whoami

## tcsch tricks

Command	Description	Example
<i>up/down arrows</i>	browse through the last commands	^     v
<i>right/left arrows</i>	Move in the command line	< - ->
<i>tab key</i>	complete word or command	->
^D	Show alternatives for word or command completion	^d
<i>Alias</i>	list/define alternate names for commands	alias alias nuke "rm -ri"

## Extras

Command	Description	Example
<i>about</i> word	list manuals of commands related to "word"	about celibacy
<i>del</i>	remove a file after asking for confirmation	del oldfile
<i>dir</i>	show an "annotated" directory listing	dir subdir
<i>less</i>	display a file one screen at a time	less mylongfile
<i>ren</i>	rename a file asking before overwriting anything	ren oldfile subdir/newfile
<i>type</i>	show a file one screen at a time	type longfile

## Mega Useful Stuff

Command	Description
<i>grep -c '&gt;' file.fasta</i>	count no of sequences in a FASTA file
<i>sort -n +X file</i>	sort 'file' numerically on field X
<i>grep -c 'Query=' blast.out</i>	count hits in a BLAST output file
<i>lynx URL</i>	open a text based web-browser to URL
<i>diff file1 file2</i>	show differences between file1 and file2
<i>touch</i>	create a test file
<i>history</i>	show list of recent commands
<i>finger</i>	show information on other users
<i>wc</i>	count lines words and characters in a file
<i>Talk</i>	Interactively talk to another logged in user

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## FTP commands

Command	Description	Example
<i>ftp</i> <b>somehost</b>	Open an ftp transfer to <b>somehost</b>	ftp snap.mcb.harvard.edu
<i>ls</i>	list files on remote host directory	ls directory
<i>ls -al</i>	list full contents on remote host	ls -al directory
<i>bin</i>	Set transfer type to binary	bin
<i>get</i>	Transfer file from the remote host To the local machine	get file
<i>mget</i>	transfer files from the remote host	mget *.pdf
<i>Put</i>	transfer file to the remote host	put file
<i>Mput</i>	transfer files to the remote host	mput *.pdf

## Unix and Perl character codes

Code	Matches
\a	Alarm (beep)
\n	Newline
\r	Carriage return
\t	Tab
\f	Formfeed
\e	Escape
\d	A digit, same as [0-9]
\D	A nondigit
\w	A word character (alphanumeric), same as [a-zA-Z_0-9]
\W	A nonword character
\s	A whitespace character, same as [\t\n\r\f]
\S	A non-whitespace character
^	Anchor at start of line
\$	Anchor at end of line