# **Ex Quick Reference**

#### Entering/leaving ex

% ex name	edit name, start at end
% ex +n name	at line <i>n</i>
<b>% ex −t</b> tag	start at <i>tag</i>
% ex −r	list saved files
% ex −r name	recover file name
% ex name	edit first; rest via <b>:n</b>
% ex –R name	read only mode
: x	exit, saving changes
: q!	exit, discarding changes
statos	

#### Ex states

Command	Normal and initial state. Input
	prompted for by :. Your kill character
	cancels partial command.
Insert	Entered by a i and c. Arbitrary text
	then terminates with line having only .
	character on it or abnormally with
	interrupt.
Open/visual	Entered by open or vi, terminates with
	<b>Q</b> or ^\.

#### **Ex commands**

abbrev	ab	next	n	unabbrev	una
append	a	number	nu	undo	u
args	ar	open	0	unmap	unm
change	с	preserve	pre	version	ve
copy	со	print	р	visual	vi
delete	d	put	pu	write	w
edit	e	quit	q	xit	х
file	f	read	re	yank	ya
global	g	recover	rec	window	Z
insert	i	rewind	rew	escape	!
join	j	set	se	lshift	<
list	1	shell	sh	print next	CR
map		source	so	resubst	&
mark	ma	stop	st	rshift	>
move	m	substitute	s	scroll	^D

#### Ex command addresses

n	line <i>n</i>	<i>lpat</i>	next with pat
	current	?pat	previous with pat
\$	last	<b>x-</b> n	<i>n</i> before <i>x</i>
+	next	<i>x</i> , <i>y</i>	x through $y$
-	previous	́х	marked with x
+n	<i>n</i> forward	**	previous context
%	1,\$		

# Specifying terminal type

% setenv TERM type	csh and all version 6
<pre>\$ TERM=type; export TERM</pre>	sh in Version 7
See also tset(1)	

## Some terminal types

2621	43	adm31	dw1	h19
2645	733	adm3a	dw2	i100
300s	745	c100	gt40	mime
33	act4	dm1520	gt42	owl
37	act5	dm2500	h1500	t1061
4014	adm3	dm3025	h1510	vt52

## Initializing options

EXINIT	place set's here in environment var.
set x	enable option
set nox	disable option
<b>set</b> <i>x</i> = <i>val</i>	give value val
set	show changed options
set all	show all options
set <i>x</i> ?	show value of option x

## Useful options

autoindent	ai	supply indent
autowrite	aw	write before changing files
ignorecase	ic	in scanning
lisp		() { } are s-exp's
list		print <sup>1</sup> for tab, \$ at end
magic		. [ * special in patterns
number	nu	number lines
paragraphs	para	macro names which start
redraw		simulate smart terminal
scroll		command mode lines
sections	sect	macro names
shiftwidth	SW	for < >, and input <b>^D</b>
showmatch	sm	to ) and } as typed
slowopen	slow	choke updates during insert
window		visual mode lines
wrapscan	ws	around end of buffer?
wrapmargin	wm	automatic line splitting

# Scanning pattern formation

$\uparrow$	beginning of line
\$	end of line
•	any character
<	beginning of word
>	end of word
[str]	any char in str
$[\uparrow str]$	not in <i>str</i>
[x-y]	$\dots$ between x and y
*	any number of preceding

# Vi Quick Reference

#### Entering/leaving vi

% vi name	edit name at top
<b>% vi</b> +n name	at line <i>n</i>
% <b>vi</b> + name	at end
% vi –r	list saved files
<b>% vi −r</b> name	recover file name
% vi name	edit first; rest via :n
<b>% vi −t</b> tag	start at <i>tag</i>
% vi +/pat name	search for <i>pat</i>
% view name	read only mode
ZZ	exit from vi, saving changes
^Z	stop vi for later resumption

## The display

Last line	Error messages, echoing input to : /? and !,
	feedback about i/o and large changes.
@ lines	On screen only, not in file.
~ lines	Lines past end of file.
^x	Control characters, ^? is delete.
tabs	Expand to spaces, cursor at last.

## Vi states

Command	Normal and initial state. Others return
	here. ESC (escape) cancels partial com-
	mand.
Insert	Entered by a i A I o O c C s S R. Arbitrary
	text then terminates with ESC character, or
	abnormally with interrupt.
Last line	Reading input for : / ? or !; terminate with
	ESC or CR to execute, interrupt to cancel.

#### **Counts before vi commands**

line/column number	z G
scroll amount	^D ^U
replicate insert	a i A I
repeat effect	most rest

## Simple commands

dw	delete a word
de	leaving punctuation
dd	delete a line
3dd	3 lines
i <i>text</i> ESC	insert text abc
<b>cw</b> <i>new</i> ESC	change word to <i>new</i>
easESC	pluralize word
хр	transpose characters

## Interrupting, cancelling

ESC	end insert or incomplete cmd
^?	(delete or rubout) interrupts
^L	reprint screen if ^? scrambles it

## File manipulation

:w	write back changes
:wq	write and quit
;q	quit
:q!	quit, discard changes
:e name	edit file name
:e!	reedit, discard changes
<b>:e</b> + <i>name</i>	edit, starting at end
<b>:e</b> + <i>n</i>	edit starting at line n
:e #	edit alternate file
^↑	synonym for <b>:e</b> #
<b>:w</b> name	write file name
:w! name	overwrite file name
:sh	run shell, then return
:!cmd	run cmd, then return
:n	edit next file in arglist
:n args	specify new arglist
:f	show current file and line
^G	synonym for <b>:f</b>
<b>:ta</b> tag	to tag file entry tag
^]	:ta, following word is tag

## Positioning within file

<b>^F</b>	forward screenfull
^B	backward screenfull
^D	scroll down half screen
<b>U</b>	scroll up half screen
G	goto line (end default)
lpat 🛛	next line matching pat
?pat	prev line matching pat
n	repeat last / or ?
Ν	reverse last / or ?
/pat/+n	n'th line after pat
?pat?-n	n'th line before pat
]]	next section/function
[[	previous section/function
%	find matching () { or }

#### Adjusting the screen

<b>`L</b>	clear and redraw
^R	retype, eliminate @ lines
zCR	redraw, current at window top
<b>Z</b> –	at bottom
Ζ.	at center
pat  <b>z</b> –	<i>pat</i> line at bottom
<b>Z</b> n .	use <i>n</i> line window
Ъ.	scroll window down 1 line
^Y	scroll window up 1 line

#### Marking and returning

previous context
at first non-white in line
mark position with letter <i>x</i>
to mark <i>x</i>
at first non-white in line

## Line positioning

Н	home window line
L	last window line
Μ	middle window line
+	next line, at first non-white
-	previous line, at first non-white
CR	return, same as +
$\downarrow$ or <b>j</b>	next line, same column
$\uparrow$ or <b>k</b>	previous line, same column

#### **Character positioning**

$\uparrow$	first non white
0	beginning of line
\$	end of line
$\mathbf{h} \ \mathrm{or}  ightarrow$	forward
$l \text{ or } \leftarrow$	backwards
Ĥ	same as $\leftarrow$
space	same as $\rightarrow$
<b>f</b> x	find x forward
Fx	f backward
<b>t</b> x	upto x forward
Tx	back upto x
;	repeat last <b>f F t</b> or <b>T</b>
,	inverse of;
	to specified column
%	find matching ( { ) or }

# Words, sentences, paragraphs

w	word forward
b	back word
е	end of word
)	to next sentence
}	to next paragraph
(	back sentence
{	back paragraph
W	blank delimited word
В	back W
Е	to end of <b>W</b>

#### **Commands for LISP**

)	Forward s-expression
}	but don't stop at atoms
(	Back s-expression
{	but don't stop at atoms

#### **Corrections during insert**

Ή	erase last character
<b>`W</b>	erases last word
erase	your erase, same as <b>^H</b>
kill	your kill, erase input this line
١	escapes <b>^H</b> , your erase and kill
ESC	ends insertion, back to command
^?	interrupt, terminates insert
^D	backtab over autoindent
1^ <b>D</b>	kill autoindent, save for next
0^D	but at margin next also
<b>`V</b>	quote non-printing character

#### Insert and replace

a	append after cursor
i	insert before
Α	append at end of line
Ι	insert before first non-blank
0	open line below
0	open above
<b>r</b> x	replace single char with x
R	replace characters

#### **Operators (double to affect lines)**

d	delete
с	change
<	left shift
>	right shift
!	filter through command
=	indent for LISP
У	yank lines to buffer

#### **Miscellaneous operations**

С	change rest of line
D	delete rest of line
S	substitute chars
S	substitute lines
J	join lines
X	delete characters
Х	before cursor
Y	yank lines
onk and put	

## Yank and put

р	put back lines
Р	put before
''x <b>p</b>	put from buffer x
''x <b>y</b>	yank to buffer x
''x <b>d</b>	delete into buffer x

#### Undo, redo, retrieve

u	undo last change
U	restore current line
•	repeat last change
''d <b>p</b>	retrieve d'th last delete