

# Vi - the standard UNIX Editor

## Modes in vi

There are three basic modes of vi:

### Command mode

This is the default when you enter vi. In command mode, most letters, or short sequences of letters, that you type will be interpreted as commands, *without explicitly pressing Enter*. If you press **Esc** when you're in command mode, your terminal will beep at you. This is a very good way to tell when you're in command mode.

### Insert mode

In insert mode, whatever you type is inserted in the file at the cursor position. Type **a** (lowercase letter a, for *append*) to enter insert mode from command mode; press **Esc** to end insert mode, and return to command mode.

### Line mode

Use line mode to enter line oriented commands. In command mode, type a colon (:). Your cursor moves to the bottom of the screen, by a colon prompt. Type a line mode command, then press **Enter**. Any sensible command from the UNIX line editor ex will work, and a few are good to know about. These commands are indicated in this handout by a colon in front of the command. Each time you use a line mode command, you must type a colon to enter line mode, then type the command by the colon prompt at the bottom of the screen, then press **Enter** when you finish typing the command. (The search commands starting with / and ? work similarly.)

## Starting vi and Saving Files

<i>Starting vi:</i>	
<b>vi filename</b>	start editing <i>filename</i> , create it if necessary
<i>Saving the file you're working on and/or leaving vi:</i>	
<b>:wq</b>	write the file to disk and quit
<b>:q!</b>	quit without saving any changes
<b>:w! newfile</b>	write all lines from the entire current file into the file ' <i>newfile</i> ', overwriting any existing <i>newfile</i>
<b>:n,m w!</b>	write the lines from <i>n</i> to <i>m</i> , inclusive, into the file <i>newfile</i> , overwriting

<i>newfile</i>	any existing <i>newfile</i>
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## Moving the Cursor

Many commands take number prefixes; for example **5w** moves to the right by 5 words.

<i>Type:</i>	<i>To Move To:</i>
<b>h</b>	one space to the left (also try left arrow)
<b>j</b>	one line down (also try down arrow)
<b>k</b>	one line up (also try up arrow)
<b>l</b>	one space to the right (also try right arrow)
<b>\$</b>	end of current line
<b>^</b>	beginning of current line
<b>Enter</b>	beginning first word on the next line
<b>G</b>	end of file
<b>:n</b>	line <i>n</i>
<b>w</b>	beginning of next word
<b>e</b>	end of next word
<b>b</b>	beginning of previous word
<b>Ctrl-b</b>	one page up
<b>Ctrl-f</b>	one page down
<b>%</b>	the matching (, ), [, ], {, or } (Press % with your cursor on one of these characters to move your cursor its mate.)

## Searching for Text

Type:	To:
<i>/string</i>	search down for <i>string</i>
<i>?string</i>	search up for <i>string</i>
<b>n</b>	repeat last search from present position

## Inserting Text

Type:	To:
a	append starting right of cursor
A	append at the end of the current line
i	insert starting left of cursor
I	insert at beginning of the current line
o	open line below cursor, then enter insert mode
O	open line above cursor, then enter insert mode
:r newfile	add the contents of the file <i>newfile</i> starting below the current line

## Deleting Text

Type:	To:
<b>x</b>	delete single character; <b>5x</b> deletes 5 characters
<b>dw</b>	delete word; <b>5dw</b> deletes 5 words
<b>dd</b>	delete line; <b>5dd</b> deletes ... well you get the idea!
<b>cw</b>	delete word, leaves you in insert mode (i.e. change word)
<b>cc</b>	change line -- delete line and start insert mode

<b>s</b>	change character -- delete character and start insert mode
<b>D</b>	delete from cursor to end of line
<b>C</b>	change from cursor to end of line -- delete and start insert mode
<b>u</b>	undo last change
<b>U</b>	undo all changes to current line
<b>J</b>	join current line with line that follows (press <b>Enter</b> in insert mode to split line)

## Cutting and Pasting

<i>Type:</i>	<i>To:</i>
<b>xp</b>	transpose two characters (two commands, x followed by p)
<b>yy</b>	yank (i.e. copy) one line into a general buffer ( <b>5yy</b> to yank 5 lines)
<b>"ayy</b>	yank into the buffer named <i>a</i>
<b>P</b>	put the general buffer back before the current line
<b>"aP</b>	put from buffer <i>a</i> before current line
<b>p</b>	put the general buffer back after the current line
<b>"ap</b>	put from buffer <i>a</i> after the current line