

COMMANDS

After the file (if given) is read in, input is read from stdin. Each line of stdin contains one command which is interpreted to apply to the list in various ways. The editor must be able to switch to the first and last line in the list in $O(1)$ time. A reference is kept to the current line, which starts out as the last line read from the file.

Note that there are no spaces between the command letter and any other information in the command. Input lines that are empty or entirely whitespace are ignored.

anything

A comment line, the command is ignored.

\$ The current line is set to the last line in the list. The new current line is then displayed.

* All the lines in the list are displayed. The current line becomes the last line in the list.

. The current line is displayed.

0 The current line is set to the first line in the list. The new current line is displayed.

< The current line is set to the previous line. The new current line is displayed.

> The current line is set to the next line. The new current line is displayed.

a *text* The new text is inserted as a new line after the current line. The new line just inserted becomes the current line, which is displayed.

d The current line is deleted. The next line becomes the current line.

i *text* The new text is inserted as a new line before the current line. The new line just inserted becomes the current line, which is displayed.

r *filename*

The contents of *filename* are read and all the lines are inserted after the current line. The current line becomes the last line inserted. An error is printed if the file cannot be read. If the operation succeeds, the number of new inserted lines is displayed.

w *filename*

All of the lines are written to *filename*. On success the number of lines written is displayed. An error message is displayed if the file cannot be created or written.

(eof) Quit the program (recognized when stdin reaches end-of-file).

EXIT STATUS

The following exit status codes are returned:

0 No errors were detected.

1 Invalid commands, invalid options, or file access errors were detected.