

A Very Quick Intro To Vi

Open a terminal window on a UNIX machine.

Navigate to the directory where you would like to save your text document (or C program).

Type this command

vi pgm1.c

You should now be running vi.

Perhaps the most important point to understand about Vi is that it has "modes". What that means is that sometimes when you type in Vi, you are typing a command and sometimes you are typing text into your document. How in the world do you (and Vi) know which it is? The answer is it depends on which "mode" you are in. If you are in "insert" mode what you type is considered text for your document. If you are in "command" mode, what you type is interpreted as a command.

When you open Vi you will be in command mode. The cursor tells you where you are at in the file. Initially the file is empty so the cursor is at the beginning of the file. Notice that you will navigate the file using the arrow keys (there are other ways, but we'll keep this very simple). Notice also that you cannot use the mouse.

To begin entering text you type the letter "i". This tells Vi that you are going to "insert" mode. Nothing visible will happen when you type the "i", but the next letter you type will appear in the file. Continue typing as long as you like.

Now, assume you have entered all the text that you want to enter. How do you get out of "insert" mode? This is critical to remember!!!!!! **When you are using Vi, if you can't remember which mode you are in, simply press the "escape" key.** That takes you out of insert mode. If you were not "in" insert mode, it does nothing.

If you wanted, at this point you could repeat the above process and insert more text, but let us assume that we have finished this document and want to save it. To do so you would press the "escape" key to get out of insert mode. Then type a ":". Notice that the colon appears at the bottom line of the Vi document. You can now type a command to write your file to disk. Notice that when we opened Vi we named this document "pgm1.c", so we do not need to use the name again. To save the current version all you need do is type a "w" for write, and then press the "enter" key. Notice that you are still in Vi and could continue editing your document. If, however, you are ready to quit Vi, you do so by again typing ":" and then the letter "q" for quit. Notice that if you have not saved your work, Vi will warn you. (Notice, if you like you can think of this as a third mode, "bottom line" mode?).

If you would like to combine the two operations of saving your file and also quitting, you can do so by typing a ":" followed by "w" and then "q".

:wq

To quit without saving you can type

:q!

The exclamation mark (often pronounced "bang") means "just quit, I know what I'm doing!".

After you have exited Vi, do an "ls" command and look for your new file "pgm1.c". It should be in the local directory. Now look at its contents by doing a "cat" or some other UNIX command.

You can now write C programs using Vi. (not very efficiently, but this is day 1!)

Summary of Vi commands and modes:

Use arrow keys to navigate – **do not** use the mouse

When in command mode:

dd – delete current line (the current line is where the cursor is located)

p – paste (put) the line last copied or deleted (copies where the cursor is located)

yy – copy (yank) the current line to clipboard

D – delete from cursor to end of current line

u – undo last command

x – delete the character at the cursor

i – enter "insert" mode (insert before the cursor)

a – append (insert after cursor)

NOTE: You can insert a number with many commands.

Example:

5dd – delete 5 lines

10x – delete 10 characters

3yy – copy 3 lines to clipboard

To get from "insert mode" back to command mode press "esc"

To save the document:

Press "esc" to insure that you are in command mode.

Type :w (colon followed by a 'w' for "write")

Note:

When you type the ":" the cursor moves to the last line of the terminal. Some call this "bottom line mode".

To exit Vi:

Press "esc" to insure that you are in command mode.

Type :q (colon followed by a 'q' for "quit")

You can combine save and quit:

Press "esc" to insure that you are in command mode.

Type :wq (colon followed by a 'wq' for "write and quit")

To quit without saving:

Press "esc" to insure that you are in command mode.

Type :q! (colon followed by a 'q!' for "quit and don't save")

To show line numbers and some other interesting things:

Type :set number (:set nonumber to turn them off)

set autoindent

set tabstop=4

set smartindent

set showmatch

To navigate in the Vi window: (useful for very long programs)

While in command mode type:

1G - to go to line 1

5G - to go to line 5

G - to go to the last line

While in command mode type:

Ctrl-F - to move forward one window

Ctrl-B - to move backward one window

Ctrl-U - to move up one-half window

Ctrl-D - to move down one-half window