VI99 for the TI-99 Computer

Brian Fox, Kilworth Ontario, Canada
Version 1.2 September 2022

What is VI99?

VI99 is provided as is with no warranty and may be freely distributed.

The original editor that still comes with the UNIX operating system is called `vi` (**vi**sual editor). VI99 is a **partial** replica of vi written for the TI-99 home computer. The current version of VI99 has an 8K buffer for the text files you want to edit and some vi commands are not available.

The `vi99` editor is a **40 column screen editor** and has two modes of operation:
1. *Command mode* commands which cause action to be taken on the file, and
2. *Insert mode* in which entered text is inserted into the file.

In the command mode, every character typed is a command that does something to the text file being edited; a character typed in the command mode may even cause the `vi` editor to enter the insert mode.

In the insert mode, every character typed is added to the text in the file; pressing the `<Esc>` (*Escape*) key turns off the Insert mode.

While there are a number of `vi` commands, just a handful of these is usually sufficient for `vi` users. This document shows `vi99` commands that work in this version.

The most basic and useful commands are marked with an asterisk (`*` or star) in the tables below. With practice, these commands should become automatic.

NOTE: Both `vi` and VI99 are **case-sensitive**. Be sure not to use a capital letter in place of a lowercase letter; the results will not be what you expect.

No Operating System

Obviously VI99 does not have the UNIX operating system. As a replacement vi99 lives on top of a Forth kernel. Forth gives you a simple command shell. This command shell provides a soft landing if there is an error and some other commands as well.

The VI99 commands work from within the Forth command shell so you can return to VI99 instantly with the VI99 commands you know.

To Get Into and Out Of `vi99`

To Start `vi99 on TI-99`

- Insert the Editor/Assembler Cartridge
- Select Option 5
- At the prompt type DSK?.VI99 where ? Is the drive number where VI99 is located.

You enter the vi99 command shell.

To use `vi99` on a file, type: **`vi filename`**<enter>.

If the file named **`filename`** exists, then the first page (or screen) of the file will be displayed; if the file does not exist, you get a file error and land back in the command shell.

If no **`filename`** is given VI99 starts up with an empty buffer to edit.

*	**`vi filename`**	*edit `filename` starting at line 1*
	`vi`	*Purge the buffer and edit starting at line 1*
	`//` **or EDIT**	*From Forth shell, resume editing current buffer*

To Exit `vi99`

The colon (:) command moves to bottom of screen and waits for another command. The commands below are completed by hitting the `<Enter>` key.

*	**`:x <Enter>`**	*quit `vi`, writing out modified file to file named in original invocation*
	`:wq <Enter>`	*quit `vi` to the command shell. Changes are saved*
	`:q <Enter>`	*quit `vi` to the command shell. Changes are saved*
*	**`:q! <Enter>`**	*quit `vi` to the command shell. Changes are NOT saved*

Return to Home Screen

Type the colon command and type BYE.

*	**:BYE <Enter>**	*Return to the TI-99 startup screen*

Command Mode

Moving the Cursor

Unlike modern editors, to move the cursor, you must use the key commands listed below. On some PC platforms, there are arrow keys but they are not mapped on VI99.

Since `vi` was designed with the Qwerty keyboard (containing no arrow keys) in mind, the arrow keys sometimes produce strange effects in VI99 and should be avoided.

If you go back and forth between a PC editor and a VI99, you may find that this dissimilarity in methods for cursor movement to be the most frustrating difference between the two.

*	`j` *or* `<Enter>`	*move cursor down one line*
*	`k`	*move cursor up one line*
*	`h` *or* `<Backspace>`	*move cursor left one character*
*	`l` *or* `<Space>`	*move cursor right one character*
*	`0` **(zero)**	*move cursor to start of current line (the one with the cursor)*
*	`$`	*move cursor to end of current line*

"COLON" Commands

	`:1G`	*move cursor to first line in file*
	`:### G<Enter>`	*move cursor to line #* ***WARNING*** VI99 interpreter needs space between # and G
	`:$<Enter>`	*move cursor to last line in file*

UHOH! You popped out of VI99

If you enter an unknown command after the colon don't panic. You will just pop into the command shell. To restart VI99 in the current buffer you are editing just type:

//<enter>   -or-   **EDIT<enter>**

Screen Manipulation

The following commands allow the `vi` editor screen (or window) to move up or down several lines and to be refreshed. In the table below, the symbol `^` before a letter means that the `<CTRL>` key must be held down while the letter key is pressed.

*	`^f`	*move forward one screen*
*	`^b`	*move backward one screen*
	`^d`	*move down (forward) one half screen*
	`^u`	*move up (back) one half screen*
	`^l`	*redraws the screen*

Saving Files

These commands permit you to input and output files other than the named file with which you are currently working.

*	`:w<Enter>`	*write current contents to file named in original `vi` call*
*	`:w newfile<Enter>`	*write current contents to a new file named `newfile`*

Insert Mode

Adding, Changing, and Deleting Text

Unlike PC editors, you cannot replace or delete text by highlighting it with the mouse. Instead use the commands in the following tables.

Inserting or Adding Text

The following commands allow you to insert and add text. Each of these commands puts the `vi` editor into insert mode; thus, the `<Esc>` key must be pressed to terminate the entry of text and to put the `vi` editor back into command mode.

*	`i`	*insert text before cursor, until `<Esc>` hit*
	`I`	*insert text at beginning of current line, until `<Esc>` hit*
*	`a`	*append text after cursor, until `<Esc>` hit*
	`A`	*append text to end of current line, until `<Esc>` hit*
*	`o`	*open and put text in a new line below current line, until `<Esc>` hit*

Change Text

The following commands allow you to modify text.

*	**r**	*replace single character under cursor (no `<Esc>` needed)*

Deleting Text

The following commands allow you to delete text.

*	**x**	*delete single character under cursor*
*	**dd**	*delete entire current line*

Cutting and Pasting Text

The following commands allow you to copy and paste text.

*	**yy**	**** DIFFERENT THAN vi **** *copy (yank, cut) one line, the current line, into the **line-stack buffer.** Buffer can hold 200 lines*
	p	*put (paste) a line from the line-stack into the text after the current line. Hold p to paste all the of the buffer into the file. BEEPS when empty*

Command Shell Commands

Think of the command shell like the a rudimentary UNIX shell program. It gives you the ability to run some other programs.

Type **:q** or **:q!** To get to the command shell.

VI

	vi	*Start vi with an empty buffer*
	vi dsk1.myfile	*Start vi with the myfile on DSK1.*

See the disks

	dir dsk1.	*View the contents of dsk1*
	ls dsk1.	*Same as dir*

Miscellaneous

	COLD	*"COLD boot vi99. Restart like it was just loaded.*
	BYE	*exit vi99 and return to TI splash screen*