CIS 140, Project 3

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Task One

Here is a basic tutorial on the Vi text editor. Remember that Vi is case sensitive.

To open up a file using the Vi editor, type “vi filename”, filename being the name of the file you’d like to open. If the file you entered does not exist, a file will be created with that name. To quit the editor without saving, you need to enter command mode. To enter command mode, type “:”. You can see that anything you type is now at the bottom of the screen, showing that you are in command mode. To exit the file as long as there have been no changes, type “q”. To quit without saving, type “:q!” ( q = quit, and ! = ignore changes). To save, type “:w” (w = write). You can save and quit all at once by typing “:wq” (write + quit), or you can type “:x” which will do the same thing.

There are three modes in the Vi editor, and we have already used one. There is normal mode, command mode, and insert mode. When you first open a file, you are in normal mode. This is where you will navigate you file, search for certain characters, delete multiple lines of text, switch to the other two modes, and complete many other tasks. Command mode is-- you guessed it-- where you type commands. The last is insert mode where you will type (insert) text or code into the file.

To search forward for a string of characters in vi, type “/SomeText”, SomeText being what you would like to search for. Note that the forward-slash, which is the find command, brings you into command mode. To go forward to the next instance of the text, type n. To go to the previous instance, type N.

To move the cursor, you must be in normal mode. If you are in command mode or insert mode, simply press Esc to return to normal mode. To move around one character or line at a time, like with arrow keys, use h, j, k and l. Do not use the arrow keys, as it is not the way Vi was intended to be used, and you will be faster once you are used to using hjkl. H moves you left, J moves you down, K moves you up, and L moves you right. If you type a number before one of these letters, you move that many times in the selected direction. For example, if you press “10j”, then you will move down 10 lines. Pressing b will bring you to the beginning of the word your cursor is on, while e will bring you to the end of the word. “0” (zero) will bring you to the beginning of the line and “$” will bring you to the end of the line. “1G” will bring you to the beginning of the file and “G” will bring you to the last line of the file. If you would like to quickly move to a specific line, type the line number and then G (example: “34G”).

There are multiple ways to enter insert mode from normal mode to edit text. Press “i” to insert before the cursor. From there, you can type text or delete with the backspace button. Remember to press Esc to return to normal mode. To insert text after cursor, press “a” (a = append). To open a new line below your cursor and insert text, press “o”. To open a line and enter insert mode above your cursor, type “O”. Go to normal mode to practice deleting text. Press “x” to delete the character on the right, and “X” to delete the character on the left. Pressing “D” will delete to the end of the line, and “dd” will delete the entire current line. You can also use numbers before any of these commands to do them multiple times. For example, “45dd” will delete 45 lines, beginning with the line your cursor is on. If you would like to undo your deletion, press “u” to undo your last change, or “U” to undo all of you changes to the line.

Vi’s verson of copy is called Yank. To yank the current line, press “yy”. Navigate to the character before where you would like to place the text, and press “p” (as in paste). You could press “yw” to yank the word, “y0” to yank to the beginning of the line, or “y$” to yank to the end.

You can insert command output in a vi text file by going into insert mode, and entering commands. For example, there is a command called “diff” which will check the differences between two text files. In a vi file named “checkdiff” (or whatever you’d like it to be called), if you enter the following: “diff file1 file2”, then when you execute the file, the differences between the two files will be sent to standard output.

When vi is opened it will automatically check for a file called “.exrc” for settings and options to add to the editor. A user can add commands to this “.exrc” file to change how vi works. A useful command to add to this file is “set showmode”. The mode which you are currently in will now be displayed when you’re using vi. You can also add comments in your exrc file to remind you of each command’s purpose. To add a comment, begin a line with one double-quote sign, and then type your comment. This line will not be read by the vi editor. One more useful command is “set number”. This will turn on line numbering, and you can now see which line of your file you are currently looking at when in the vi editor.