

# Text Editors

## Lab 1: vim navigation

Using an editor like **vim** in **Linux** will become very important; it is rare that you won't be editing files.

1. Type `vim samplefile` This should be a new file; if you already have a file named, use a different name for your file.
2. You now have a mostly blank screen with your cursor on the top line. You are initially in command mode.
3. Type the **'a'** key to append and put you into insert mode.
4. Type the sentence  
`The quick brown fox jumped over the lazy dog.`

If you make a mistake in typing, remember that you can backspace to fix it.

5. Type the **ESC** key. Your cursor should be on the period at the end of the sentence. You are back in command mode at this point.
6. Type the **a** key again. Type the enter key. You should be on a new line under the one you just typed.
7. Type the sentence  
`Nobody expects the Spanish Inquisition!`  
Type an enter key after the **!** character.
8. At the beginning of the third line, type the sentence  
`This is the third line.`
9. Now let's just move around in this file. Your cursor should be positioned over the period at the end of the third line you just typed. Type the **h** key three times. Type the **k** key once. Which letter is your cursor over? Which word are you in?
10. Type four **h** keys. Type the **j** key. Now which letter is under your cursor? Which word are you in?

11. Now type two **k** keys followed by three **l** keys. Which letter is your cursor over? In which word?
  12. Now type eight **w** keys. What do you notice? Which letter is your cursor over? Which word is your cursor over?
  13. Type a **k** key followed by the **\$** key. Now type two **b** keys. Which letter is your cursor over and in which word?
  14. Are you getting the feel for moving around character-by-character, line-by-line and word-by-word – forward and backward?
- Now type the **0** (zero) key followed by two **w** keys and three **l** keys. Which letter is your cursor over and in which word are you?
15. Now type three **e** keys. Which letter is your cursor over and in which word?
  16. Save the file using the `:w` command. You will use this file in the next exercise. Finally quit **vim** by typing the `:q` command. You could combine these commands by typing `:wq` if you want.
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## Lab 2: vim editing

Being comfortable moving around within a file is important, but actually editing the text in the file is the whole point of using an editor.

1. Start with the file you created from the first exercise. Use **vim** to edit that file. For example, `vim samplefile`.
2. Search for the word **the**. To do this, type the **/** character and then the characters you are searching for – in this case the word **the** (/the) and then the **enter** key. Your cursor should have jumped to the word **the** in the first line between the words **over** and **lazy**.
3. Let's search for the next occurrence of **the**. Type the **'n'** key. Your cursor should have jumped to **the** between **expects** and **Spanish** on the second line.
4. Let's change this word from **the** to **a**. With your cursor positioned over the **t** in the word **the**, type **cw** to change the word. Did you notice that the word **the** disappeared? You are now in insert mode, so simply type the word **a** at this point. If you wanted to type more characters here, you can. For example, you could have changed the word **the** to **a bright and shiny** if you wanted to. When you are finished with changing the word **the** to the word **a**, type the **ESC** key to exit from insert mode back to command mode.
5. Type the **L** (shift+l) key to move to the last line on the screen. For this short file, that also happens to be the last line. Type **dd**. What happened?

6. Type the **H** (shift+h) key to move to the first line on the screen. Again, for this short file, that also happens to be the first line of the file. Type **"1P** (that's double-quote, 1 and P). What happened?

7. Move your cursor to the word **third** using any method you prefer. Remember, you can do this several ways. You can move one character at a time, skip a word at a time, or search for the word. Use the **cw** command to change the word **third** to the word **first**. Remember to type the ESC key when you are finished typing the word **first** in order to exit insert mode.

8. Type the **L** key to move down to the last line on the screen. Let's yank this into a named buffer. Let's use the named buffer **c**. So, to yank this whole line into the **c** named buffer, we can type **"cY**. Is the line still there?

9. Type the **H** key to move to the top line on the screen. Let's put the contents of the **c** named buffer after our first line. Type **"cp** to put the contents of the **c** named buffer after the current line.

10. Let's try that substitute command to change all occurrences of a word to something else. For emphasis, let's change all the words **the** to all caps, as in **THE**. To do this, we type the command **:%s/the/THE/g**. Do you notice the changes?

11. On second thought, those **THE** all in capital letters feel like I'm yelling at you. Let's undo that last change. How? Type the **u** key! Did you notice that both occurrences of the change were undone by this one command? The **u** key will undo the last change even if that change affected several places in the file.

12. Finally, let's better format this file by running it through the **fmt** command. Type **%!fmt**. How's it look?

13. Exit **vim**. You can either save your changes by writing the file and then quitting (**:wq**), or quit without saving(**:q!**) .

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