Module 4 Lab Instructions

Part I: vimtutor

1. At the command prompt, type in: `sudo apt install vim`
2. Enter your password and confirm the download and installation of vim and any dependencies.
3. At the command prompt, type in: `vimtutor`
4. Read and follow the instructions until you reach the end of the file.
   a. Did you complete all steps?
      i. ENTER YOUR ANSWER ON THE PROVIDED ANSWER SHEET

Part II: vim editor

In this hands-on project, you create and edit text files using the vi editor.

1. At the command prompt, type: `cd` and press `Enter` to ensure you are in your user's home directory. You can also type in `pwd` to verify.
2. At the command prompt, type `vi sample1` and press `Enter` to open the vi editor and create a new text file called sample1. Notice that this name appears at the bottom of the screen along with the indication that it is a new file.
3. Type `My letter` and press `Enter`.
   a. Why was nothing displayed on the screen?
      i. ENTER YOUR ANSWER ON THE PROVIDED ANSWER SHEET
4. To switch from command mode to insert mode to allow the typing of text, press `i`. Notice that the word Insert appears at the bottom of the screen. Next, type `My letter` and notice that this text is displayed on the screen.
   a. What types of tasks can be accomplished in insert mode?
      i. ENTER YOUR ANSWER ON THE PROVIDED ANSWER SHEET
5. Press `Esc`.
   a. Did the cursor move?
      i. ENTER YOUR ANSWER ON THE PROVIDED ANSWER SHEET
   b. What mode are you in now?
      i. ENTER YOUR ANSWER ON THE PROVIDED ANSWER SHEET
6. Press ← two times until the cursor is under the last t in letter. Press the `x` key.
   a. What happened?
      i. ENTER YOUR ANSWER ON THE PROVIDED ANSWER SHEET
7. Next, type `i` to enter insert mode, then type the letter `h`.
   a. Did the letter "h" get inserted before or after the cursor?
      i. ENTER YOUR ANSWER ON THE PROVIDED ANSWER SHEET
8. Press `Esc` to switch back to command mode and then move your cursor to the end of the line. Next, type the letter "`o`" to open a line underneath the current line and enter insert mode.

9. Type the following (on one line, don't hit enter during this process):

> `It might look like I am doing nothing, but at the`
> `cellular level I can assure you that I am quite busy.`
> `All to a typical cell it may seem like they are doing`
> `all the work!`

10. Notice that the line wraps to the next line partway through the sentence. Though displayed over two lines on the screen, this sentence is treated as one continuous line of text in vi.

11. Press **Esc** to return to command mode, and then press ↑.
    a. Where does the cursor move?
       i. ==ENTER YOUR ANSWER ON THE PROVIDED ANSWER SHEET==

12. Use the cursor keys to navigate to the letter "l" at the beginning of the word "level," and then press the **i** key to enter insert mode. Press the **Enter** key while in insert mode. Next, press **Esc** to return to command mode, and then press ↑.
    a. Where does the cursor move?
       i. ==ENTER YOUR ANSWER ON THE PROVIDED ANSWER SHEET==

13. Type **dd** three times to delete all lines in the file.

14. Type **i** to enter insert mode.
    a. And then type:

> `Hi there, I hope this day finds you well.`

    b. And press **Enter**. Press **Enter** again. Type:

> `Unfortunately we were not able to make it to your dining`

    c. And press **Enter**. Type:

> `room this year while vacationing in Algonquin Park – I`

    d. And press **Enter**. Type:

> `especially wished to see the model of the Highland Inn`

    e. And press **Enter**. Type:

> `and the train station in the dining room.`

    f. And press **Enter**. Press **Enter** again. Type:

> `I have been reading on the history of Algonquin Park but`

    g. and press **Enter**. Type:

> **no where could I find a description of where the Highland**

h. and press **Enter**. Type:

> **Inn was originally located on Cache lake.**

i. And press **Enter**. Press **Enter** again. Type:

> **If it is no trouble, could you kindly let me know such that**

j. and press **Enter**. Type:

> **I need not wait until next year when I visit your lodge?**

k. And press **Enter**. Press **Enter** again. Type:

> **Regards,**

l. and press **Enter**. Type:

> **Mackenzie Elizabeth**

m. and press **Enter**.

15. Press **Esc** to switch to command mode. Next press the **Shift** and **;** keys simultaneously to open the : prompt at the bottom of the screen. At this prompt, type **w** and press **Enter** to save the changes you have made to the file.
    a. What is displayed at the bottom of the file when you are finished?
        i. ENTER YOUR ANSWER ON THE PROVIDED ANSWER SHEET
16. Press the **Shift** and **;** keys simultaneously to open the : prompt at the bottom of the screen again, type **q**, and then press **Enter** to exit the vi editor.
17. At the command prompt, type **ls** and press **Enter** to view the contents of your current directory. Notice that there is now a file called sample1 listed.
18. Next, type **file sample1** and press **Enter**.
    a. What type of file is sample1?
        i. ENTER YOUR ANSWER ON THE PROVIDED ANSWER SHEET
19. At the command prompt, type **cat sample1** and press **Enter**.
20. At the command prompt, type **vi sample1** and press **Enter** to open the letter again in the vi editor.
    a. What is displayed at the bottom of the screen?
        i. ENTER YOUR ANSWER ON THE PROVIDED ANSWER SHEET
    b. How does this compare with Step 15?
        i. ENTER YOUR ANSWER ON THE PROVIDED ANSWER SHEET
21. Use the cursor keys to navigate to the bottom of the document (you may already be there). Press the **Shift** and **;** keys simultaneously to open the : prompt at the bottom of the screen again, type **!date** and press **Enter**. The current system date and time

appear at the bottom of the screen. As indicated, press **Enter** to return to the document.

22. Press the **Shift** and **;** keys simultaneously again to open the : prompt at the bottom of the screen again, type **r !date** and press **Enter**.
    a. What happened and why?
        i.
23. Use the cursor keys to position your cursor on the line in the document that displays the current date and time, and type **yy** to copy it to the buffer in memory. Next, use the arrow keys to position your cursor on the first line in the document, and type **P** (capitalized) to paste the contents of the memory buffer above your current line.
    a. Does the original line remain at the bottom of the document?
        i.
24. Use the cursor keys to position your cursor on the line at the end of the document that displays the current date and time, and type **dd** to delete it.
25. Use the cursor keys to position your cursor on the t in the word "there" on the second line of the file that reads Hi there, I hope this day finds you well., and press **dw** to delete the word. Next, type **i** to enter insert mode, type the word **Bob**, and then press **Esc** to switch back to command mode.
26. Press the **Shift** and **;** keys simultaneously to open the : prompt at the bottom of the screen again, type **w sample2** and press **Enter**.
    a. What happened and why?
        i.
27. Press **i** to enter insert mode, and type the word **test**. Next, press **Esc** to switch to command mode. Press the **Shift** and **;** keys simultaneously to open the : prompt at the bottom of the screen again, type **q**, and press **Enter** to quit the vi editor.
    a. Were you able quit? Why not?
        i.
28. Press the **Shift** and **;** keys simultaneously to open the : prompt at the bottom of the screen again, type **q!**, and press **Enter** to quit the vi editor and discard any changes since the last save.
29. At the command prompt, type **ls** and press **Enter** to view the contents of your current directory. Notice that there is now a file called sample2, which was created in Step 28.
30. At the command prompt, type **vi sample2** and press **Enter** to open the letter again in the vi editor.
31. Press the **Shift** and **;** keys simultaneously to open the : prompt at the bottom of the screen, type **s/Bob/Barb/g**, and press **Enter** to change all occurrences of "Bob" to "Barb" on the current line.
32. Press the **Shift** and **;** keys simultaneously to open the **:** prompt at the bottom of the screen again, type **1,$ s/to/TO/g**, and press **Enter** to change all occurrences of the word "to" to "TO" for the entire file.
33. Press the **u** key to undo the last function performed.
    a. What happened and why?
        i.
34. Press the **Shift** and **;** keys simultaneously to open the **:** prompt at the bottom of the screen again, type **wq**, and press **Enter** to save your document and quit the vi editor.

35. At the command prompt, type `vi sample3` and press `Enter` to open a new file called sample3 in the vi editor. Type `i` to enter insert mode. Next, type `P.S. How were the flies this year?` Press the `Esc` key when finished.

36. Press the `Shift` and `;` keys simultaneously to open the : prompt at the bottom of the screen again, type `wq`, and press `Enter` to save your document and quit the vi editor.

37. At the command prompt, type `vi sample1`, press `Enter` to open the file sample1 again, and use the cursor keys to position your cursor on the line that reads "Mackenzie Elizabeth."

38. Press the `Shift` and `;` keys simultaneously to open the : prompt at the bottom of the screen again, type `r sample3`, and press `Enter` to insert the contents of the file sample3 below your current line.

39. Press the `Shift` and `;` keys simultaneously to open the : prompt at the bottom of the screen, type `s/flies/flies and bears/g` and press `Enter`.
    a. What happened and why?
        i. <mark>ENTER YOUR ANSWER ON THE PROVIDED ANSWER SHEET</mark>

40. Press the `Shift` and `;` keys simultaneously to open the : prompt at the bottom of the screen again, type `set number`, and press `Enter` to turn on line numbering.

41. Press the `Shift` and `;` keys simultaneously to open the **:** prompt at the bottom of the screen again, type `set nonumber`, and press `Enter` to turn off line numbering.

42. Press the `Shift` and `;` keys simultaneously to open the **:** prompt at the bottom of the screen again, type `set all`, and press `Enter` to view all vi parameters. Press `Enter` to advance through the list, and press `q` when finished to return to the vi editor.

43. Press the `Shift` and `;` keys simultaneously to open the **:** prompt at the bottom of the screen again, type `wq`, and press `Enter` to save your document and quit the vi editor.

44. Type `exit` and press `Enter` to log out of your shell.

45. Record the answers to the questions in the provided answer sheet and submit.