

## CS367 Lab 2 (Parts B&C)

Begin with the lab02 directory you used for part A. As per the last lab submit a hardcopy of your answers; clearly number all answers and remove any output or extraneous commands.

**Part B.** Begin by opening the file **dg.cpp** (in the **lab02** directory) in **vi** (*hint*: I would advise spending some time experimenting with a copy of the file in **vi** before attempting the actual commands below). Make sure you are at the top of the file to begin. Now do the following, in the order specified. Make sure you are in command mode before each instruction (i.e., after input mode operations press **escape**).

Record all the keystrokes that you type to complete each instruction below (you don't need to record when you use the **escape** or **return** keys).

1. Search forwards for the first instance of "**Kevin Sahr**".
2. Move to the end of the line using a single character.
3. Append "**and Your Name**" (using your actual name) to the end of the line (*hint*: how will you need to enter insert mode?)
4. Copy ("yank") the current line.
5. Search forwards for "**double**" occurring at the beginning of a line.
6. Paste the line you copied in (4).
7. Move forward eight words using a single command (*hint*: what is the command to move forward one word? How do you do a command *n* times?).
8. Delete 3 words using a single command (*hint*: see the hint for the last command).
9. Search forward for "**assume we**".
10. Change the two words "**assume we**" to "**you**" using a single input mode command (*not* search-and-replace).
11. Undo the last command.
12. Replace all capital **C**'s that occur at the end of a line with a lower case **c**.
13. Replace any **f** or **g** followed by any single character, followed by a **'** with an **X**.
14. Go to line 100.
15. Delete 10 lines using a single command.
16. Repeat your last command using a single character.
17. The movement command to go to the end of a file is "**G**". Use this new knowledge to delete from your current position to the end of the file.
18. Save and quit the file.

**Part C.** For each question, write a *single* **bash** command line (possibly consisting of multiple filters in a pipeline), using only commands and flags we discussed in class. If your command line generates output, your command should display *only* the lines requested in the question. Do not make any assumptions about the contents of files or directories; your commands should be generic enough to work with any file or directory (as applicable).

1. Output all lines in **lab2.txt** that contain any of the letters **d, e, f, or g**.
2. Output all lines in **log**, replacing all instances of “**index.html**” with “**HOME PAGE**”.
3. Output all lines in **santa.txt**, replacing all instances of “**America**” with “**USA**”.
4. Output all lines in **lab2.txt** that contain any of the letters **d, e, f, or g**, replacing every **e** in the output lines with an **X**.
5. Output all lines in **lab2.txt** that do *not* contain any of the letters **d, e, f, or g**.
6. Output the number of lines in **lab2.txt** that contain a **c**, followed by any two characters, followed by another **c**.
7. Output all lines in the file **lab2.txt** that have an **a, b, or c** at the beginning of the line, replacing the first character in each line of output with **//** (two forward slashes).
8. Output a long format listing of the files in **/usr/include** that have a modification date of “**Aug 12**”. You can assume that “**Aug 12**” only occurs as a modification date (e.g., there are no files named “**Aug 12**”).
9. Repeat step 8, but replace all occurrences of “**Aug 12**” in the step 8 output with “**OLD**”.
10. Display the output lines from **who** (with no flags) for your username. Do not assume you are the only person logged in (even if that is currently the case).
11. Give a long format listing of all files in the current directory whose filename ends in “**.txt**”, but with the “**.txt**” extension removed from the names (e.g., for **lab2.txt** print only **lab2**). Do *not* use pathname expansion.