

Unit 07_010 — Overview

1. What is `vi`?
2. The `sed` filter is similar to the _____ filter we used before the midterm.
3. The `awk` filter is similar to the _____ filter we used before the midterm.

Unit 07_020 — `vi`

You can probably skip the first 12 minutes of the video. It is about the history. Feel free to watch that if you want to know about the history.

4. In `vi`, How do you go into insert mode? How do you tell if you are in Insert mode?
5. What is `vim`?
6. Write the command for each of the following tasks in `vi`:
 1. Enter insert mode:
 2. Exit from insert mode:
 3. Quit (assuming there were no changes):
 4. Write changes to the file:
 5. Write changes to the file and quit (in a single command):
 6. Quit and discard changes:
 7. Search:
 8. Move to the next instance of the search item:
7. What is the name of the configuration for `vim`? _____
8. What commands would you put in `.vimrc` that would turn on line numbers, turn on syntax highlighting, and set the `tabstop` to 4?

Unit 07_030 — `sed` and `awk`

9. What are some differences between `sed` and `tr`?

10. What are the four fields in a sed substitution? _____, _____, _____, _____
11. What do the "i" and "g" options do in sed? (These are the same as used in many regular expression situations, so they are worth remembering.)
12. Write the sed substitution to change 'MWSU' to 'Mo West.' All occurrences on the line should be changed.
13. Write the sed command to delete all lines containing one or more digits as the first non-blank character of the line.
14. What are some differences between `awk` and `cut` ?

Unit 07_040 — More Redirection

15. What does the `tee` command do?
16. What does the `here` command do?
17. The concept of the "here doc" has made its way into most computer languages. Search online or in a textbook and find out how the "here" command is in the language of your choice. Java, Python, and JavaScript are all possible choices for your research. Word of warning: Java didn't include multi-line strings until version 13. When they did it, they did it right, but it took a while. In the space below demonstrate a here block or multi-line string in the language of your choice.
Language: _____
18. Earlier in the semester I asked why the code `cd .` was useless. The command `cd $(pwd)` looks far more impressive than `cd .` Explain how both commands do the same thing. (Command substitution is extremely important, and we will beat it to death later. But for now just use this silly example to get a feeling for how it works.)

Unit 07_060 — Permissions

Section 060 is about permissions which we have already covered. Review https://github.com/noynaert/csc274handouts/blob/master/Unit_07_Permissions_and_Scripting/Unit_07_060_Permissions.md if you have any questions.

Unit 07_070 — Permissions

19. What is the PATH?
20. What folder in the user's home directory is traditionally used to hold the user's personal shell scripts?
21. What is a shabang? How is it used?
22. What does the `which` command do?
23. Do you have any questions?

Note: There are several other videos in the folders. Those step through the homework exercises if you want their help.

