

# CSCI 3215 (Advanced UNIX Command-Line Tools), Fall 2020

## Homework 9

**Credit:** 10 points.

### 1 Reading

(None really, but you should have read or at least skimmed all assigned reading.)

### 2 Problems

Answer the following questions. You may write out your answers by hand and scan them, or you may use a word processor or other program, but please submit a PDF or plain text via e-mail to my TMail address. (No links to shared files on Google Drive please.) Please use a subject line that mentions the course and the assignment (e.g., “csci 3215 hw 9” or “UNIX hw 9”).

1. (10 points) Write at least a page of prose about this course, answering the following questions. First some compare/contrast/philosophize questions:

- Suppose a friend with no computer experience outside the Windows/GUI environment asks you why anyone would still want to use a command-line environment in the year 2020. What would you tell him/her? (You don’t have to pretend to be a CLI convert if you’re not; just try to come up with reasons why anyone would be.)
- The “traditional UNIX” environment emphasizes small single-purpose programs and standardized mechanisms for connecting them (pipes, I/O redirection, text files). Most current mainstream software in contrast seems to focus on large “all-in-one” programs that do many things and often-proprietary binary file formats. (Proponents of graphical environments, however, sometimes point out that they also provide mechanisms for connecting different applications — copy/paste using a system clipboard, for example.)  
What advantages and disadvantages do you think each approach has? Consider user-friendliness from the perspective of both novice and expert users, program reliability, and anything else that seems interesting or relevant.

And then some “taking a poll” questions:

- What did you find most interesting or valuable about this course? Do you feel that your horizons were broadened a bit? Did you learn anything that you think will become part of the “bag of tricks” you use fairly often? Was there anything that you thought we could just as well have skipped?
- Did you find the readings interesting and/or useful? Would you have preferred to have a textbook?
- Were the homeworks helpful in cementing your understanding of what we discussed in class?
- Is there anything else you want to say about the course (other than what you might say in your evaluation)?

### 3 Pledge

Include the Honor Code pledge or just the word “pledged”, plus *at least one of the following* about collaboration and help (as many as apply).<sup>1</sup> Text *in italics* is explanatory or something for you to fill in. For programming assignments, this should go in the body of the e-mail or in a plain-text file `pledge.txt` (no word-processor files please).

- This assignment is entirely my own work. (*Here, “entirely my own work” means that it’s your own work except for anything you got from the assignment itself — some programming assignments include “starter code”, for example — or from the course Web site. In particular, for programming assignments you can copy freely from anything on the “sample programs page”.*)
- I worked with *names of other students* on this assignment.
- I got help with this assignment from *source of help — ACM tutoring, another student in the course, the instructor, etc.* (*Here, “help” means significant help, beyond a little assistance with tools or compiler errors.*)
- I got help from *outside source — a book other than the textbook (give title and author), a Web site (give its URL), etc..* (*Here too, you only need to mention significant help — you don’t need to tell me that you looked up an error message on the Web, but if you found an algorithm or a code sketch, tell me about that.*)
- I provided help to *names of students* on this assignment. (*And here too, you only need to tell me about significant help.*)

### 4 Essay

Include a brief essay (a sentence or two is fine, though you can write as much as you like) telling me what if anything you think you learned from the assignment, and what if anything you found found interesting, difficult, or otherwise noteworthy. For programming assignments, it should go in the body of the e-mail or in a plain-text file `essay.txt` (no word-processor files please).

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<sup>1</sup> Credit where credit is due: I based the wording of this list on a posting to a SIGCSE mailing list. SIGCSE is the ACM’s Special Interest Group on CS Education.