

CSCI 3323 (Principles of Operating Systems), Fall 2022

Homework 2a

Credit: 5 points.

1 Reading

Be sure you have read, or at least skimmed, Chapters 7 through 9 of the textbook.

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 turn in a PDF or plain text file. (No links to shared files on Google Drive please, and no word-processor files.) Turn it in by putting it in your course “TurnIn” folder on Google Drive. Please be sure to include your name somewhere in the file, so when I print it for grading I know whose work it is. (With the pledge is fine.)

1. (5 points) The textbook mentions in passing the very old UNIX command `nice`. You can find out a little from its `man` page, but more information can be had from its `info` page¹, viewable with the command:

```
info coreutils 'nice invocation'
```

It seems to have something to do with letting users change priorities for their processes. How does a user run a process with higher priority? with lower priority? or does it depend in part on the user? What does the O/S do with what the user says in this command, or does that also depend on — something?

(I’m looking for something fairly high-level here, in keeping with the number of points. If you’re not sure you’ve told me enough, feel free to ask!)

3 Essay and pledge

Include with your assignment the following information.

For programming assignments, please put it a separate file. (I strongly prefer plain text, but if you insist you can put it in a PDF — just no word-processor documents or Google Drive links please.) For written assignments, please put it in your main document.

3.1 Pledge

This should 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). Text *in italics* is explanatory or something for you to fill in; you don’t need to repeat it!

- I did not get outside help *aside from course materials, including starter code, readings, sample programs, the instructor.*

¹ Yes, two competing source of on-line documentation, `man` and `info`. “Don’t ask”? Historical reasons, almost surely.

- 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, 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.)

3.2 Essay

This should be 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 interesting, difficult, or otherwise noteworthy.