

CSCI 1120 (Low-Level Computing), Spring 2017

Homework 1

Credit: 5 points.

1 Reading

(None.)

2 Honor Code Statement

Please include with each part of the assignment the Honor Code pledge or just the word “pledged”, plus one or more of the following about collaboration and help (as many as apply).¹ Text *in italics* is explanatory or something for you to fill in. For written assignments, it should go right after your name and the assignment number; for programming assignments, it should go in comments at the start of your program(s).

- 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.*)

3 Programming Problems

(For this assignment, you won’t actually be programming, but you will be doing something on a computer, and submitting your answers in the way you’ll submit your programs in later assignments.)

Do the following problems. You will end up with at least one text file. Submit this file or files by sending mail to bmassing@cs.trinity.edu with each file as an attachment. Please use a subject line that mentions the course and the assignment (e.g., “csci 1120 hw 1” or “LL hw 1”).

¹Credit 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.

1. (5 points) (Not really a programming problem, but one that requires you to use a computer.) For this problem your mission is to learn a little more about traditional UNIX text editors `vi` and/or `emacs`. Do one or both of the following (full credit for doing one, extra credit if you do both). (*Note* that I assign this problem in several of my courses, so if you have already done it for another course, please go beyond what you did for the other course.)

- Do something to improve your ability to use `vi` (or, more properly, `vim`, since that's what we have installed). Options include:
 - Start the interactive tutorial by opening a terminal window and typing `vimtutor`. Work through at least the first lesson, more if you have time.
 - Think about your past use of `vi` and identify something you find particularly annoying (e.g., not knowing how to cut and paste). Then try to find a way to reduce the annoyance. You may find something helpful in the tutorial, or in the online help (which you start from within `vi` by typing `:help` and pressing the Enter key), or you may prefer to use your favorite search engine.

Use what you've learned to write, in a text file, a paragraph or two reporting on what you learned and what you still wish you knew about this editor.

- Learn something about `emacs`. If you've never used it, start it by typing `emacs -nw` in a terminal window. This should give you a page of instructions. Press control-h and then t to start an interactive tutorial. Work through as much of this tutorial as you need to in order to create and save a text file. (Starting the program by just typing `emacs` starts a graphical version of the program, which you may prefer for use in our labs, but which isn't as useful if you're working remotely.) If you already know something about `emacs`, either work through some of the tutorial, or do the second option for `vi` above (identify an annoyance and try to figure out a way to reduce it), but for `emacs`. Use what you've learned to write, in a text file, a paragraph or two reporting on what you learned and what you still wish you knew about this editor.

Turn in the resulting text file(s).