## **CSCI 350—Operating Systems**

## Assignment 3: due Friday, October 14, 2016

- 1. Modify the *tlpi-dist/files/t\_stat.c* program in the following two ways:
  - First, modify the *displayStatInfo* function so that it displays both the *uid* and *user name* and both the *gid* and *group name*. You should probably split this into two lines of output.
  - Second, modify the *main* function so that the program can provide info for a list of files. This change means that argc may be greater than two (or one if argv[1] is "-l"), and that the program should call displayStatInfo for each of the remaining arguments.
- 2. Modify the *tlpi-dist/dirs\_links/list\_files.c* program so that it has a -a command line option. If the -a option is not present, the program does not list any hidden files (files whose names beging with the character '.'); if the -a option is present, it lists all files, including the two standard files "." and "..". This assignment requires two changes. In the *main* function you need to change the argument checking so it allows for the new option; use a static global variable or a second parameter for the *listFiles* function to communciate whether the option is chosen. (Flag it as a usage error if any option is given other than the -a option.) In the *listFiles* function, you'll need to change the part that skips the "." and ".." files so that it either lists all files or all but the dot files.