**Course:** **CIS 68B1-02w**
**Homework:** **#7**
**Due:** **8am, Monday, February 25th**

# Instructions

Complete the problems assigned below and turn in your answers by the due time above. To receive full credit, you must show both the relevant command(s) and output. If a question asks about what a command does, or what the output would be, give both the command and the output. Demonstrate that you actually performed the command, and didn't just guess.

Requirements - All of your shell programs henceforth must:

a. use the shell template
b. check for valid arguments
c. output sensible *usage* or syntax messages
d. be appropriately commented
e. exit with an appropriate exit status

## Homework Problems

1. Modify your rename program from last week to use the **getopts** command instead of parsing the arguments manually.
2. Modify your trash program (trm, etc.) to handle the following additional requirements:
    a. Correctly handle path names. Currently, if the arguments contain paths (i.e. ../foo or $HOME/hw6/dir1) you will still place your files in the trash in the current working directory. But files should be placed in the local trash in the directory where they live, not in the current working directory (i.e. ../foo should be placed in ../.trash/foo and $HOME/hw6/dir1 should be placed in $HOME/hw6/.trash/dir1). Thus, all trashed files will remain within the same directory tree. This will allow you to restore files to their correct locations as well.
    b. Implement a **–i** option to interactively ask for confirmation before overwriting any files.
    c. Implement a **–f** option to force overwriting any files without question – this overrides **–i** above.
    d. Use **getopts** to process options