# Homework #2

## File Commands

**Due:**

Monday June 7th by 11:59PM

Write a command to satisfy the requirements below. You can also choose to use several commands with a "pipe." As with the previous assignment display an echo above the output of the command (i.e. `echo 1a`).

1. Copy the *students2.dat* file from my public csc252 (~earl/public/csc252) directory. Use this file for the following commands. (*NOTE:* You don't have to include the command to copy this file in your script, but make sure it is in your directory when submitting). The file is organized by: First Name, Last Name, Major, GPA, E-Mail, & Phone Number:
   - Display the contents of the file sorted by last name. Column 1 is the first name and column 2 is last name.
   - Display lines, *with line numbers*, of records of **only** Computer Science majors.
   - Display lines, *with line numbers*, for students whose first or last name is Davis.
   - Display all ECE majors sorted in descending order by GPA.
   - Display all lines but show only the last name and GPA, sorted by an ascending GPA.
2. Search your home directory and display pathnames of all C++ program files (.cpp). Terminate your command with `2>/dev/null` to ignore any error messages.
3. Remove the file *newFile.hard* if it exists. Create a hard link to students2.dat named *newFile.hard*. Display a long listing of that new link file and compare it's attributes with that of student2.dat. How would you confirm that students2.dat and *newFile.hard* are two names of the same file. Put your answer as a comment in your bash script.
4. Remove the file *newFile.soft* if it exists. Create a soft link to students2.dat and name the link file *newFile.soft*. Display a long listing of the new link file and compare it's attributes with that of students2.dat. How would you confirm that student2.dat and *newFile.soft* are different files? Put your answer as a comment in your bash script.
5. Display the inode/filename pairs for *ALL* the files in `~earl/public/csc135`, sorted by inode number.

*You should only use the utility commands we've talked about so far in the semester. Submissions that use awk & sed will receive a zero.*

## Submission

These commands should be placed within a bash script. Remember to include the sha-bang line (`#!/bin/bash`) at the top of your script and be sure to make your bash script executable!

The directory for this assignment should be named *hw2_FirstLast* (i.e. hw2_PatrickEarl)

Use `~earl/bin/submit.bash` to submit your assignment.

## Grading

- Assignment is worth 25 Points