CSE 303, Spring 2008, Assignment 1A
Due: Monday, April 7 at 2pm

In this first assignment you will gain experience using the Linux bash shell and input line editing commands.

1. (Commands) First run the command `script problem1` to capture your console session and store it in a file `problem1`. Then run at least 50 *different* commands using at least 12 different programs. Then run the `exit` command.

   - Only commands that succeed (do not print an error) count.
   - For this problem, two commands are *different* if they use different programs and/or different options, but *not* just different filenames. (Examples: `ls` and `ls -a` are different but `ls foo` and `ls bar` are the same.)

   Your solution may, of course, contain a few false starts and extraneous commands, but the file you turn in should have relatively little of this (i.e., the person reading your output shouldn't have to guess what is intended to be part of the solution your are submitting).

   Hint: look in the *Unix Pocket Guide* for ideas.

2. (Command-line editing) Suppose you type `how now brown cow` on the bash command-line, leaving the cursor to the right of the final "`w`". Your job is to turn the command line into `don't have a cow now` in a small number of keystrokes where you *may not* retype any words that appear in both phrases, or use the delete or backspace keys to individually delete letters in words that need to be removed. You will need to type in new words, but you must use keystrokes involving holding down either the Meta (often Alt or Esc) or Ctrl keys to rearrange or delete words. Use emacs to create a text file called `problem2` that describes your solution, including the state of the command-line after each step.

   Note: This question is silly, but it should help you learn useful things.

3. (Commands and output) Use each of the following commands such that "xyzzy" (without the quotes and nothing more) is printed on standard out, and nothing is printed on standard error. You can precede your commands with other commands (e.g., to create a file) and/or pass options to your commands.

   ```
   echo, cat, ls, grep, !!
   ```

   Hint: The last one is tricky. Put a script that does nothing in a file with a particular name.

   In a text file called `problem3` describe your solution, including each command you use and a *very brief* explanation of it.

Assessment: Your solutions will be evaluated on how well they follow the instructions and produce the desired results.

Turn-in Instructions Use the turn-in drop box link on the main course web page to turn in the three files that make up your solution to this assignment The drop box will allow you to turn in your homework up to two days late, if you choose to use one or two of your late days, but you are *strongly* advised to save your late days for later in the quarter when they may be much more useful.