**Assignment 1:** Shell script (Due Feb 13th in class)

Shell scripts are a good way to automate various tasks you find yourself doing frequently.

Your assignment is to create a shell script which automates various tasks an administrator might like to do:

(1) Print the ancestry tree of the currently running process (i.e. your shell script). Print is like a tree. For example -

THE PROCESS ANCESTRY TREE IS:

3465

|

3464

|

2990

|

509

|

1

(2) figure out which users are online (Print only username)

(3) figure out what processes any user is running (Print Process details, not only name or ID)

The script should have a menu which looks similar to above. It should print the requested information to the screen for options #1, #2, and #3. For #3, the program should figure out which users are online, then display a list of who you want to inquire about, and let you select from it(see example run in iLearn Feng\_Assign1.txt)

**Notes:**

For (1), you should use ps and store its output in a file. Then retrieve the current and parent process ID’s. In an iterative loop, you should check if the PID field of any entry matches the parent ID. If so, print the PPID field of that entry, and continue the same search with this PPID now until you reach init().

For (2), basically you need one command.  
For (3), you can use ps and grep.

For the menu itself, reading from the keyboard is read variablename.

When you execute the program, don’t forget to script your session in a file called Assign1\_Lastname. You can use the command script Lastname\_Assign1. This will store your sample run in the file Lastname\_Assign1. After run, don’t forget to exit, which will save and commit this sample file. Submit this file along with your solution.