Bash Homework 1

CS 6014 Introduction to Computation as a Research Tool

February 2013 Due: 20 Feb. 2013

<u>Information for Submission Requirements</u>:

- Upload your bash script as an attached file;
- Paste output from a sample run of the script into the textbox in Collab.

Background:

For this assignment, you will need to understand the following bash topics which are covered in the slides in Collab, listed under Resources > Unix and Bash > Bash Scripting:

- How to create a bash script
- How to make a bash script executable
- How to execute a bash script

There are a few Unix commands that you may find to be both useful and fun. For example,

- date
- finger
- fortune
- hostname
- ps
- who
- whoami

Try out each of these commands on fir. Also, try some of the options (e.g., hostname -s or ps -u \$USER). If you need further information on any of these commands, you can use the on-line manual pages (e.g., man hostname) or the --help option (e.g., ps -help).

Task:

Using your vast knowledge of bash scripting, Unix commands, and environmental or shell variables, write a bash script that produces output comparable to the following, but for whatever user runs it (which can be you). Note: You will need to include the punctuation and the lines of asterisks shown in this example. But, the user ID and the list of processes will be different for you.

```
***********
Hello jmh5ad! Today is Thu Feb 14 10:48:25 EST 2013.
You are logged in as jmh5ad.
The machine you are using is fir-s.
***********
Your processes are
 PID TTY
            TIME CMD
 304?
         00:00:04 nxagent
 340?
         00:00:01 nxnode
         00:00:00 gnome-session
 353?
         00:00:00 dbus-launch
 397?
 398?
         00:00:00 dbus-daemon
 431?
         00:00:00 gconfd-2
 438?
         00:00:00 gnome-keyring-d
 441?
         00:00:00 gnome-settings-
 446?
         00:00:00 gvfsd
 451?
         00:00:00 metacity
         00:00:00 gnome-panel
 457?
         00:00:00 nautilus
 460?
 462?
         00:00:00 bonobo-activati
 472?
         00:00:00 gnome-power-man
         00:00:00 gnome-volume-co
 476?
 483?
         00:00:00 wnck-applet
 489?
         00:00:00 gvfs-gdu-volume
         00:00:00 gvfsd-trash
 513?
 516?
         00:00:00 gnome-screensav
 518?
         00:00:00 clock-applet
 545?
         00:00:02 gnome-terminal
 546?
         00:00:00 gnome-pty-helpe
2359?
         00:00:00 sshd
2360 pts/103 00:00:00 bash
20494 pts/148 00:00:00 myScript
20498 pts/148 00:00:00 ps
32736?
          00:00:00 sshd
32738?
          00:00:00 nxnode
Here is a fortune for you:
The people rule.
```

Note: You are on your honor to do your own work on this assignment.