CS160B ASMT01

Assignment One (100 points)

Introduction

In this assignment you will write a shell script to output certain information *about the current user and the current system*. The output of this shell script should be formatted in an easy-to-read format in complete sentences. *You must use variables, command and arithmetic substitution appropriately to accomplish this. You may not use temporary files nor if statements.*
Note: This assignment must be done on hills.

Description
This shell script, **aboutme**, must output the following information. This information relies on two standard shell variables, **LOGNAME**, and **PATH**. *If either of these variables does not have a value when your shell script starts, it should abort with a message indicating the problem.* Otherwise, it must output:
• A welcome message indicating your name. If you have entered a name using **chfn**, that name will be output. Otherwise, your login name will be output. (Use **${VAR:-value}** to help with this.)
• The host you are logged in on.
• The date and time you last logged in, not including this time. (Try **last -2 $LOGNAME** (If this is the first time you have logged in to this system, it is acceptable for the output to indicate the last login is the current login session.))
• How many local (non-environment) and environment variables you have defined. (This requires arithmetic.)
• The directories in your search path, in the order they are searched, one-per-line.
• The current 1-minute load average.
• How long the system has been up.
• The filesystem you are currently on (it's *mount point*), the percentage of free space it has currently, and the number of MiB (take the number of KiB and divide by 1024) it currently has free. Of course, this last piece of information will change if you change directory to another filesystem. (Hint: the command **df "$PWD"** will give you information about the current filesystem. Try it.)

A script session **asmt01.script** containing sample output of my version of this shell script may be found in the **asmt01** directory. This is just one version. Feel free to design your own output!

Transfer a copy of your *documented* shell script, named **aboutme**, and a script session named **asmt01.script** with the following:
• a copy of your line from the **/etc/passwd** file
• the value of your **$PATH** variable
• the output of the **uptime** command
• the output of the **last -2 $LOGNAME** command.
• the output of the **df** command.
• one run of **aboutme** by you. This gives information about *you*. (When I log in and run your shell script, it will give me information about *me*.)
• one run of **aboutme** after setting the value of **LOGNAME** to empty.

Read the sample output closely before you write and test your shell script!

Transfer your shell script and your script session using the procedure outlined in *Assignment Guidelines*.
Make sure the name of the shell script is **aboutme** *and the script session is* **asmt01.script**