

CSC 2510: DevOps

Lab 04 – CLI IV

General Instructions

Using your book and previous lecture material, fill out this assignment sheet. **Use red text to signify your answers.** Use information from your textbook and the provided lectures to answer the questions on this lab. You may utilize online resources to answer these questions if you cite them.

Submission Instructions

To submit, **change the name in the header** and save this document as a PDF. Attach your PDF document and each script to the iLearn dropbox. **To submit your script files either zip them or change the extensions to '.txt' instead of '.sh'.**

Lab Questions

1. (2) Answer/Do the following:
 - a. The `PATH` (Sobell, page 318) keyword variable specifies the directories in the order bash should search them when it searches for a script or program you run from the command line. What is the value of your `PATH` variable?
`/home/vanquisherx615/bin:/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin`
 - b. Append the absolute pathname of the bin directory that is a subdirectory of your home directory to the `PATH` variable. What does this change allow you to do more easily? **It will be easier to run a program or script because search parameter increased by appending additional locations**
2. (2) The `date` (Sobell, page 62) utility displays the date and time. Write and execute a shell script called `mine.sh` that displays the date and time, the name of your home directory, and the value of your `PATH` variable.
3. (2) Write a script called `oddeven.sh` that if the minute from the current time ends in an odd number, it prints `The time is odd` and otherwise prints `The time is even`.
4. (5) Write a script called `loops.sh` that loops through a number of times equal to the *number of the month plus the number of minutes* of the current date/time and prints which iteration was executed and how many are remaining. For example, if the month is January and the time is 2:35pm, the loop will execute $1+35=36$ times. The first line of output would be as follows:
`Iteration 1 out of 36. 35 iterations remaining.`
5. (4) List the 4 types of loops available in bash scripting. **For, While, Until, For Range**