CSC3320 System Level Programming

Lab Assignment 6 - Part 1 - In-Lab

Purpose: Learn how to correct a shell script and write more complicated shell scripts.

Part 1:

In order to finish the tasks in this lab, you must connect to snowball server to copy my checkError.sh

```
$cp /home/yye10/public/checkError.sh checkError.sh
```

In Lab 5, you may have tried the shell script **checkError.sh** in part 3. However, there are **four** errors on **four** different lines in that shell script. Please correct all the four errors by writing down the line number, the error and the correction as below:

Line #: **Error:** **Correction:**

Note: please use cat -n to check the line numbers.

```
$#/bin/bash

/*  Check Error Script */

echo "Try to find out some errors!!!"

# Seach for the words which can be matched by regex [^a]*ce
# And save the output to file "Result"
echo "The regex [^a]*ce can match the string(s):" > Result
grep '^[^a]*ce$' << END >> Result lance

ace
brace
decide
piece
-ENDHERE

# Check the existence of file "Result"
# Send the content in "Result" to your emailbox
# $1 is replaced by your campusID
ls    mail $1@student.gsu.edu < Result

# $1 is  replaced by your campusID
echo  "The result has been sent to ${1}@student.gsu.edu"
echo    "Congratulations! You have corrected all the errors!"
```

Hints:

- *Following is a sample of the output once all the errors are corrected* `$ ./checkError.sh ylong4`

```
Try to find out some errors!!!
checkError.sh Result
The result has been sent to ylong4@student.gsu.edu

Congratulations! You have corrected all the errors!
```

- *You would also receive an email sent from your snowball account once all the errors are corrected.*
- *You may need to use **CTRL-C t**o terminate the execution of the command, especially for the script file with errors.*

Part 2:

Write a single shell script **hello.sh** which can finish the list of tasks as below:

1. Greet user. E.g. **Welcome to computer science society.**
2. Contain a comment section with your name, and email address.
3. Print the date.
4. Print the number of directories in **/home .**
5. Print the value of variables PATH, USER and SHELL.
6. Print your disk usage (**df**).
7. Print **Please, could you loan me $25.00?**
8. Print **if x = 2, x * x = 4 , x / 2 = 1**
9. List all the **.sh** files with **c** at the beginning of the file name in current working directory.
10. Tell the user **Good bye** and the current hour (see manual page of **date** command refer to the webpage at http://www.thegeekstuff.com/2013/05/date-command-examples)

Include the content of **hello.sh** in your answer sheet. Besides, please also upload **hello.sh** as a separated file.

Upload your answer sheet to the folder named "Lab 6_P1" of the dropbox in the iCollege system. Name your file in the format of Lab6_P1_FirstnameLastname.pdf/doc

Hints:

- *When printing out strings using **echo**, to escape the special meaning of the meta character, please use back slash \ before the meta-character.*
- *To share files between remote server and the host machine, we can use **FileZilla - A FREE FTP**. The link to download this application is https://filezilla project.org/download.php*