

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:

Line #: 1

Error: 1/bin/bash: No such file or directory

Correction: this error was indicating me to line one which was `/* Check Error Script */`. So to resolve this error I added `"#"` in the beginning of the `"/"` so that it gets commented out.

Line #: 18

Error: `ls` mail `$1@student.gsu.edu` <Result

Correction: delete the command `"ls"` so that the mail utility works properly.

Line #: 24

Error: warning: here-document at line 9 delimited by end-of-file (wanted 'END')

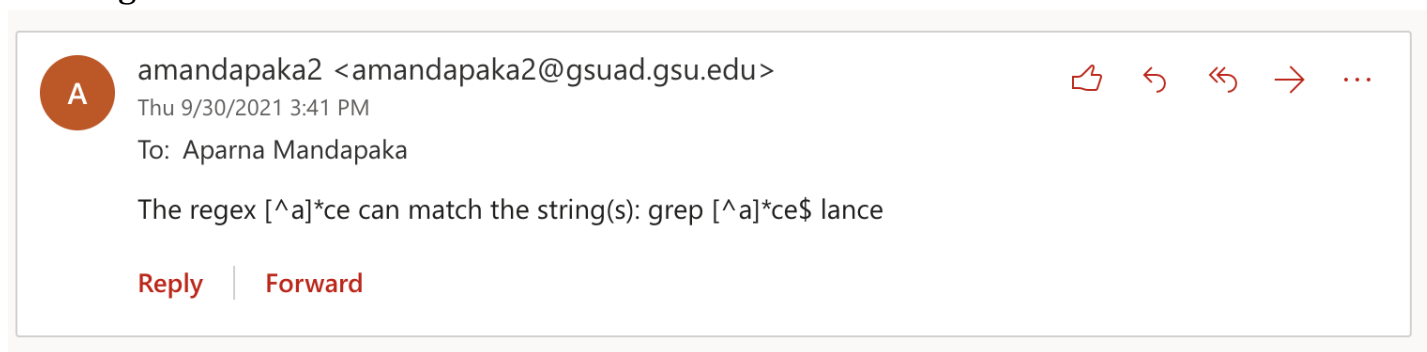
Correction: This error was pointing towards the command `"-ENDHERE"`. I deleted the `"-"` and `"HERE"` to help in ending the contents of the result file.

Line #: 24

Error: echo "The regex `[^a]*ce` can match the string(s):" > Result grep `'^[^a]*ce$'` <<END>>

Correction: to resolve this error I deleted the first leading `"^"` sign, so that it helps catch anything that contains `"ce"` at the end

Here is the screenshot attached of the email received once the program runs after clearing the errors.



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

```
/* 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 mailbox
# $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!"
```

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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** to 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:

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>)

