

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:
1	Determinant for which shell to use is typed in incorrectly.	#!/bin/bash
2	Comment is written incorrectly	# (start comment with that)
12	<<END and >>Result are in the wrong order	Correct order is >> Result <<END
18	There is a – in front of END when its not supposed to be there.	Remove the – and only put END
24	Is is in front of the mail command when its not supposed to be there.	Remove Is from the command

```
[kgallardowepster1@gsuad.gsu.edu@snowball ~]$ ./checkError.sh kgallardowepster1
Try to find some errors!!!
The result has been sent to kgallardowepster1@student.gsu.edu
Congratulations! You have corrected all the errors!
[kgallardowepster1@gsuad.gsu.edu@snowball ~]$
```



kgallardowepster1
<kgallardowepster1@gsuad.gsu.edu>



Thu 9/30/2021 7:43 PM

To: Kevin Gallardo Wepster

The regex `[^a]*ce` can match the string(s):
piece

[Reply](#) | [Forward](#)

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

```
$#/bin/bash

/*  Check Error Script */

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

# Search 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
acs 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-commandexamples>)

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://filezillaproject.org/download.php>

kgallardowepster1@gsuad.gsu.edu@snowball:~

[kgallardowepster1@gsuad.gsu.edu@snowball ~]\$./hello.sh

Welcome to computer science society.

Today is : Thu Sep 30 22:31:29 EDT 2021

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HOME= /usr/local/bin:/usr/bin:/usr/local/sbin:/usr/sbin:/home/kgallardowepster1/.local/bin:/home/kgallardowepster1/bin

USER=kgallardowepster1@gsuad.gsu.edu

SHELL=/bin/bash

Disk usage is: Filesystem		1K-blocks	Used	Available	Use%	Mounted on
devtmpfs	3992456	0	3992456	0%		/dev
tmpfs	4004476	8	4004468	1%		/dev/shm
tmpfs	4004476	420248	3584228	11%		/run
tmpfs	4004476	0	4004476	0%		/sys/fs/cgroup
/dev/mapper/centos-root	36678148	3548320	33129828	10%		/
/dev/sdb1	131979268	52481280	72770772	42%		/home
/dev/sdal	1038336	193352	844984	19%		/boot
tmpfs	800896	0	800896	0%		/run/user/1331014231
tmpfs	800896	0	800896	0%		/run/user/332794540
tmpfs	800896	0	800896	0%		/run/user/332637388
tmpfs	800896	0	800896	0%		/run/user/332625070
tmpfs	800896	0	800896	0%		/run/user/332742644
tmpfs	800896	0	800896	0%		/run/user/332691068
tmpfs	800896	0	800896	0%		/run/user/332789895
tmpfs	800896	0	800896	0%		/run/user/1580538242
tmpfs	800896	0	800896	0%		/run/user/1580479440
tmpfs	800896	0	800896	0%		/run/user/1580588965
tmpfs	800896	0	800896	0%		/run/user/332729326
tmpfs	800896	0	800896	0%		/run/user/332751054
tmpfs	800896	0	800896	0%		/run/user/332746961
tmpfs	800896	0	800896	0%		/run/user/332733207
tmpfs	800896	0	800896	0%		/run/user/332704049
tmpfs	800896	0	800896	0%		/run/user/332676935
tmpfs	800896	0	800896	0%		/run/user/1331034186
tmpfs	800896	0	800896	0%		/run/user/332745427
tmpfs	800896	0	800896	0%		/run/user/1580447811
tmpfs	800896	0	800896	0%		/run/user/332792073
tmpfs	800896	0	800896	0%		/run/user/332621198
tmpfs	800896	0	800896	0%		/run/user/332636665
tmpfs	800896	0	800896	0%		/run/user/332778613
tmpfs	800896	0	800896	0%		/run/user/332712944
tmpfs	800896	0	800896	0%		/run/user/1331008281
tmpfs	800896	0	800896	0%		/run/user/332610608

PLease, could you loan me \$25.00?

if x=2, x8x = 4, x/2=1

checkError.sh

Good bye!!! The current hour is = 22

[kgallardowepster1@gsuad.gsu.edu@snowball ~]\$

kgallardowepster1@gsuad.gsu.edu@snowball:~

```
#!/bin/sh
```

```
echo "Welcome to computer science society."
```

```
echo -n "Today is : "  
date
```

```
echo */ | wc -w
```

```
echo "HOME= "$PATH
```

```
echo 'USER='$USER
```

```
echo 'SHELL='$SHELL
```

```
echo -n "Disk usage is: "  
df
```

```
echo "PLease could you loan me \"$25.00?"
```

```
echo "if x=2 x8x = 4 x/2=1"
```

```
echo -n  
ls c*.sh
```

```
echo -n "Good bye!!! The current hour is = "  
date +%H
```

```
~  
~  
~
```

: