Review Test Submission: ULI101 Final Exam Section 3 Practice

User	Yihsun Lee
Course	Introduction to UNIX/Linux and the Internet
Test	ULI101 Final Exam Section 3 Practice
Started	12/3/20 10:32 AM
Submitted	12/3/20 10:58 AM
Status	Completed
Attempt Score	7.28571 out of 12 points
Time Elapsed	25 minutes out of 30 minutes
Instructions	----------

Unless otherwise specified:

- use no more than one space to separate elements of an expression
- add switches in alphabetical order, unless the switch order changes the behaviour of the expression
- use double quotes (") not single quotes ('), unless the expression requires single quotes
- do not use POSIX classes (e.g [:alpha:]) unless asked to
- use UN*X (short) not GNU (long) switches
- use ^ followed by the uppercase character to represent a control sequence (e.g. ^C)
- redirect STDERR before STDOUT
- assume that user names (userID) can be mixed case, that passwords are stored in /etc/shadow and have either a single character placeholder of mixed case or no placeholder in /etc/passwd
- use standard, not enhanced, versions of the commands unless otherwise specified (e.g. grep(), not egrep())
- when in vi, or using vi mode on the command line:
    - use <ESC> to represent the escape keystroke (all uppercase)
    - use <ENTER> to represent the enter/return keystroke (all uppercase) when this key must be used to complete the sequence and return to another mode

`Correct -> cmd -a -s arg arg | cmd`

Incorrect -> cmd -s -a arg arg | cmd

All references to the source code, line numbers, or app4test refer to the following contents (as displayed in vi with line numbers turned on):

-----BEGIN app4test contents----------

```
 1 #!/usr/bin/bash
 2
 3 usage () {
 4 cat <<TEXT
 5
 6 Usage: $0 [-sqgr] [application]
 7    -s start
 8    -q quit
 9    -g graceful quit
10    -r graceful restart
11
12 TEXT
13
14 }
15
16 if [ ! $# -eq 2 ]; then
17         usage
18         exit
19 fi
20
21 if [[ ! -s ${2} || ! -x ${2} ]] ;then
22         echo "App \"${2}\" does not exist, is empty, or is not executable"
23         exit
24 fi
25
26
27 while getopts s:q:g:r: action
28 do
29   case $action in
30     s)
31         echo "Starting application"
32         echo "/usr/sbin/${OPTARG} start"
33         ;;
34     q)
35         echo "Stopping application"
36         echo "/usr/sbin/${OPTARG} stop"
37         ;;
38     g)
39         echo "Gracefully stopping application"
40         echo "/usr/sbin/${OPTARG} stop graceful"
41         ;;
42     r)
43         echo "Restarting application"
44         echo "/usr/sbin/${OPTARG} stop graceful"
45         echo "/usr/sbin/${OPTARG} start"
46         ;;
47     ?)
48         usage
49         ;;
50   esac
51 done
52
53 # shift $(($OPTIND - 1))
54 # if [[ ! -z $*  ]]; then
55 #         echo "no action is defined for $*"
56 # fi
```

-----END app4test contents----------

Results Displayed: Incorrectly Answered Questions

Question 1

2?

How many switches require an additional argument when they are used?

Question 2

Which line identifies this as a BASH script

1

Question 3

What is the first line to call a custom function call? [use 0 to indicate there is no such line]

17

Question 4

What output is generated by executing the following:

42

```
% y=18
% z=24
% x=$(( $y + $z ))
% echo $x
```

Question 5

What will the following return:
(use a hyphen (-) by itself to indicate the line is blank or there is no more lines of output)

```
% ./app4test
```

[a] -
[b] Usage: ./appControl [-sqgr] [application]
[c] -s start
[d] -q quit
[e] -g graceful quit
[f] -r graceful restart
[g] -

Question 6

22

Which line untaints the user input from the command line? [use 0 to indicate there is no such line]

Question 7

16?21?

Which line tests to see if the application supplied as an argument on the command line is executable? [use 0 to indicate there is no such line]

Question 8

22?

Which line in the function is controlled by the result of a logical / boolean operation? [use 0 to indicate no such line exists]

Question 9

4?

How many of the command line switches can be used at the same time?

Question 10

What command line expression would use the app4test program in $HOME/bin to restart the executable program called myApp. Use relative directories as needed, and use the shell placeholder for your home directory as needed. [note the command prompt is already provided]

```
% cd ~/bin
% [a]
```

Question 11

Which line tests to see that the correct number of command line arguments are used?

16

Thursday, December 3, 2020 10:58:17 AM EST

← OK