

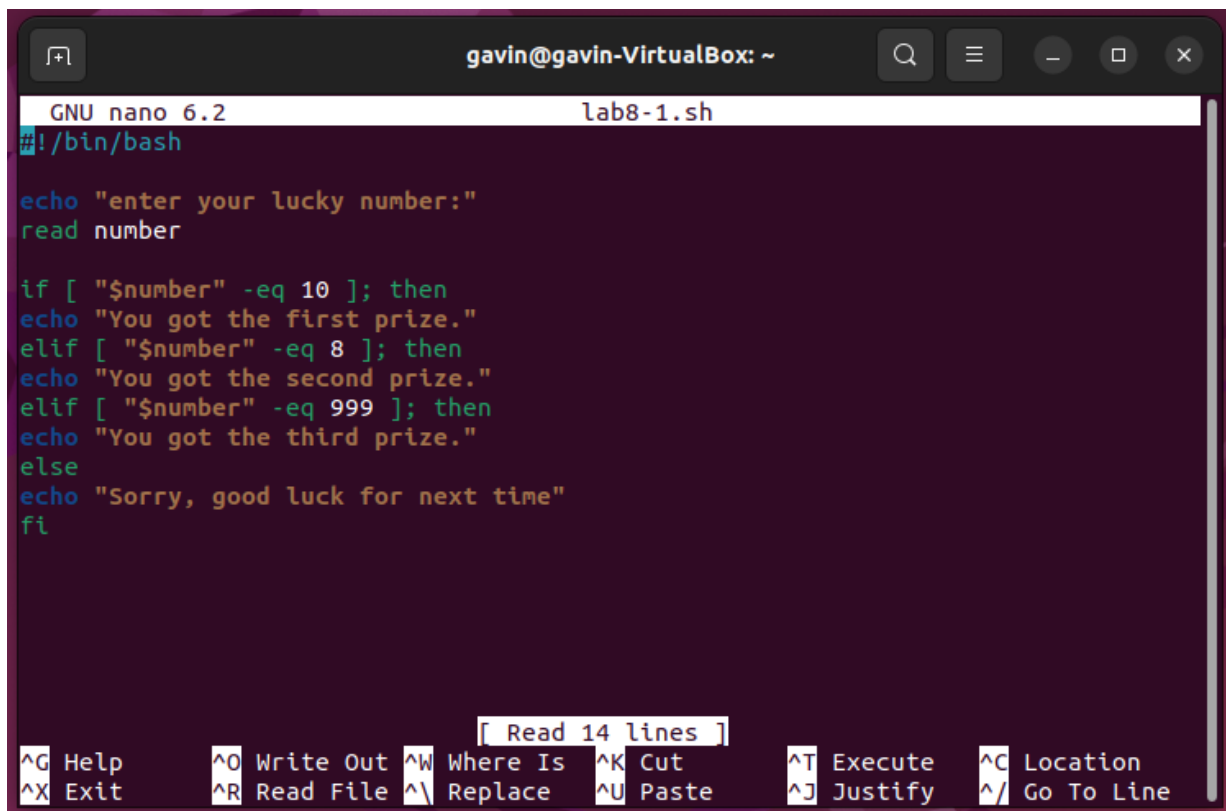
## CYSE 270: Linux System for Cybersecurity

### Lab 8 – Shell Scripting

**Task-A:** Write a shell script **lab8-1.sh** using vi/nano using if-elif-else condition, to complete the following steps:

1. Prompt the user to input his/her lucky number.
2. If the input number is equal to 10, then print the message “You got the first prize.”
3. If the input number is equal to 8, then print the message – “You got the second prize.”
4. If the input number is equal to 999, then print the message – “You got the third prize.”
5. If None of the above conditions are true, then print the message – “Sorry, good Luck for next time.”

*\*\* picture for steps 1 – 5 \*\**

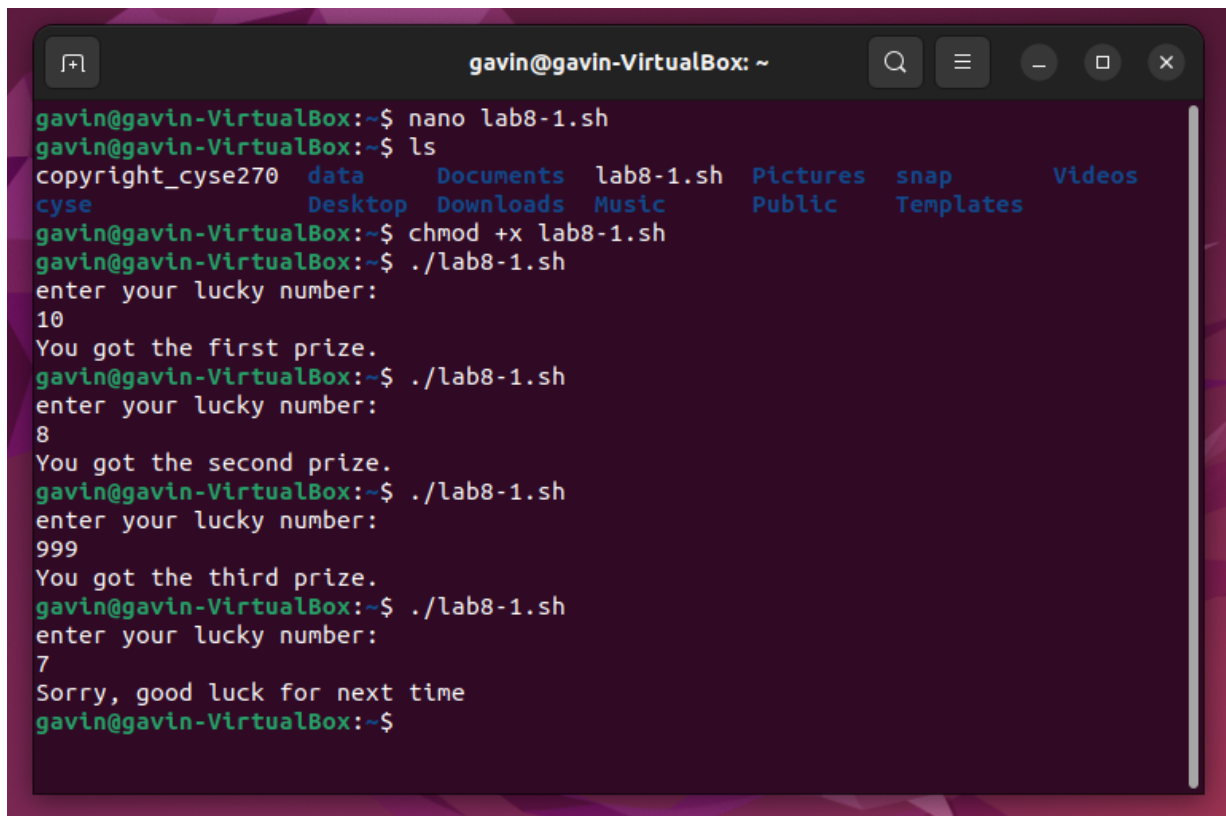


```
gavin@gavin-VirtualBox: ~
GNU nano 6.2 lab8-1.sh
#!/bin/bash

echo "enter your lucky number:"
read number

if [ "$number" -eq 10 ]; then
echo "You got the first prize."
elif [ "$number" -eq 8 ]; then
echo "You got the second prize."
elif [ "$number" -eq 999 ]; then
echo "You got the third prize."
else
echo "Sorry, good luck for next time"
fi

[ Read 14 lines ]
^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify   ^_ Go To Line
```



```
gavin@gavin-VirtualBox: ~  
gavin@gavin-VirtualBox:~$ nano lab8-1.sh  
gavin@gavin-VirtualBox:~$ ls  
copyright_cyse270  data      Documents  lab8-1.sh  Pictures  snap      Videos  
cyse              Desktop  Downloads  Music      Public    Templates  
gavin@gavin-VirtualBox:~$ chmod +x lab8-1.sh  
gavin@gavin-VirtualBox:~$ ./lab8-1.sh  
enter your lucky number:  
10  
You got the first prize.  
gavin@gavin-VirtualBox:~$ ./lab8-1.sh  
enter your lucky number:  
8  
You got the second prize.  
gavin@gavin-VirtualBox:~$ ./lab8-1.sh  
enter your lucky number:  
999  
You got the third prize.  
gavin@gavin-VirtualBox:~$ ./lab8-1.sh  
enter your lucky number:  
7  
Sorry, good luck for next time  
gavin@gavin-VirtualBox:~$
```

**Task-B:** Write a shell script **lab8-2.sh** using vi/nano to validate your input by using **egrep** command.

1. Prompt the user to provide the input which should consists of characters and numbers both, and check if the following requirements are satisfied:
2. Only lower-case letter [a-z] **and** numeric character [0-9] are allowed.
3. The length must be between 4 to 8 digits

**\*\* picture for steps 1 – 3 \*\***



```
gavin@gavin-VirtualBox: ~
GNU nano 6.2 lab8-2.sh *
#!/bin/bash

echo "Provide an input (lowercase [a-z] and numbers [0-9], length must be between 4-8 characters):"
read input

if echo "$input" | egrep -q '^[a-z0-9]{4,8}$'; then
echo "Valid input."
else
echo "Invalid input."
fi
```

^G Help ^O Write Out ^W Where Is ^K Cut ^T Execute ^C Location M-U Undo  
^X Exit ^R Read File ^\ Replace ^U Paste ^J Justify ^\_ Go To Line M-E Redo

Test your script with the following examples:

1. Your input with one **upper case**
2. The input having length **less than 4 digits**.
3. The input having length **larger than 8 digits**.
4. Your input in **lower case** and should have length between 4 to 8.

**\*\* picture for steps 1 – 4 \*\***

```
gavin@gavin-VirtualBox: ~  
gavin@gavin-VirtualBox:~$ chmod +x lab8-2.sh  
gavin@gavin-VirtualBox:~$ ./lab8-2.sh  
Provide an input (lowercase [a-z] and numbers [0-9], length must be between 4-8 characters):  
Cat52  
Invalid input.  
gavin@gavin-VirtualBox:~$ ./lab8-2.sh  
Provide an input (lowercase [a-z] and numbers [0-9], length must be between 4-8 characters):  
cat  
Invalid input.  
gavin@gavin-VirtualBox:~$ ./lab8-2.sh  
Provide an input (lowercase [a-z] and numbers [0-9], length must be between 4-8 characters):  
kittycat52  
Invalid input.  
gavin@gavin-VirtualBox:~$ ./lab8-2.sh  
Provide an input (lowercase [a-z] and numbers [0-9], length must be between 4-8 characters):  
cat52  
Valid input.  
gavin@gavin-VirtualBox:~$
```