

## CYSE 270: Linux System for Cybersecurity

### Lab 8 – Shell Scripting

(Total 100 Points)

Please Refer to the slides for week-8-Shell scripting and write shell scripts to complete the following

tasks. Submit the screenshot for the script and its output, both.

NOTE: Please replace the name of the script with the name you used for the script. In the sample

screenshot, I have used those names to create my script.

Task A (Correct script (25 points) + result/output after executing the script (25 points)- Take your MIDAS/name

Write a script like below that reads MIDAS/name and displays the message (for example, the screenshot

here), if the following requirements are satisfied:

1. Only lower-case letter [a-z] are allowed
2. MIDAS/name must be between 4 to 8 characters

Test your script with the following examples:

- Your MIDAS /name with one upper case
- A string less than 4 characters
- A string longer than 8 characters
- Your MIDAS/name in lower case, between 4-8 characters in length

```
#!/bin/bash

echo "Enter your MIDAS ID"
read MIDAS

while echo $MIDAS | egrep -v "^[a-z]{4,8}$" > /dev/null 2>&1
do
    echo "MIDAS ID must be between 4 to 8 characters in length and all
lower cased"
    read MIDAS
done

echo "Thank you, you have entered correct pattern for the MIDAS ID"

~
~
~
~
~
~
```

10,18 All

```
(brandon@PearsonKali)-[~]
└─$ vi homework8.sh

(brandon@PearsonKali)-[~]
└─$ chmod a+x homework8.sh
```

```
(brandon@PearsonKali)-[~]
└─$ ls -l homework8.sh
-rwxr-xr-x 1 brandon brandon 301 Mar 16 22:05 homework8.sh
```

```
(brandon@PearsonKali)-[~]
└─$ ./homework8.sh
Enter your MIDAS ID
car
MIDAS ID must be between 4 to 8 characters in length and all lower case
overeightssefsgesg
MIDAS ID must be between 4 to 8 characters in length and all lower case
bpear
Thank you, you have entered correct pattern for the MIDAS ID
```

Task B (Correct script (25 points) + result/output after executing the script (25 points) - Create a new directory

Write a shell script like below, that performs the following task:

1. Reads the name of the directory.
2. Check whether the given input is a directory or regular file.
3. If the input is a directory and exists, then display the message "Directory exists. Do not create".
  - a. (Extra credit: 10 points) Display the contents for that directory)
4. If the input is a regular file, then display the message "It is a regular file. Do not create".
5. If the given input name in step-1 doesn't exist, then create the new directory with the given name in step-1.

(Sample screenshot for executing the script is shown below)

```
(brandon@PearsonKali)-[~]  
$ vi create_dir.sh
```

chmod a+x

```
(brandon@PearsonKali)-[~]  
$ ls -l create_dir.sh
```

```
-rwxr-xr-x 1 brandon brandon 317 Mar 16 23:19 create_dir.sh
```

```
#!/bin/bash
```

```
#dir.sh
```

```
echo "Enter the directory name"
```

```
read dir_name
```

```
if [ -d "$dir_name" ]
```

```
then
```

```
    echo "directory exists. Do not create."
```

```
elif [ -f "$dir_name" ]
```

```
then
```

```
    echo "It is a regular file. Do not create."
```

```
else
```

```
    echo "file doesn't exist, creating now"
```

```
    mkdir -p -- ./ $dir_name
```

```
    echo "directory created"
```

```
fi
```

```
~  
~ 239 MB vol
```

```
(brandon@PearsonKali)-[~]
```

```
$ ls -ld test_dirr
```

```
drwxr-xr-x 2 brandon brandon 4096 Mar 16 23:17 test_dirr
```

```
(brandon@PearsonKali)-[~]
```

```
$ ./create_dir.sh
```

```
Enter the directory name
```

```
test_dirr
```

```
file doesn't exist, creating now
```

```
directory created
```

```
(brandon@PearsonKali)-[~]
```

```
$ ./create_dir.sh
```

```
Enter the directory name
```

```
/home
```

```
directory exists. Do not create.
```

```
(brandon@PearsonKali)-[~]
```

```
$ ./create_dir.sh
```

```
Enter the directory name
```

```
/etc/passwd
```

```
It is a regular file. Do not create.
```