

CYSE 609 – FUND LINUX SYST FOR CYBER

Module 6 | Shell Scripting

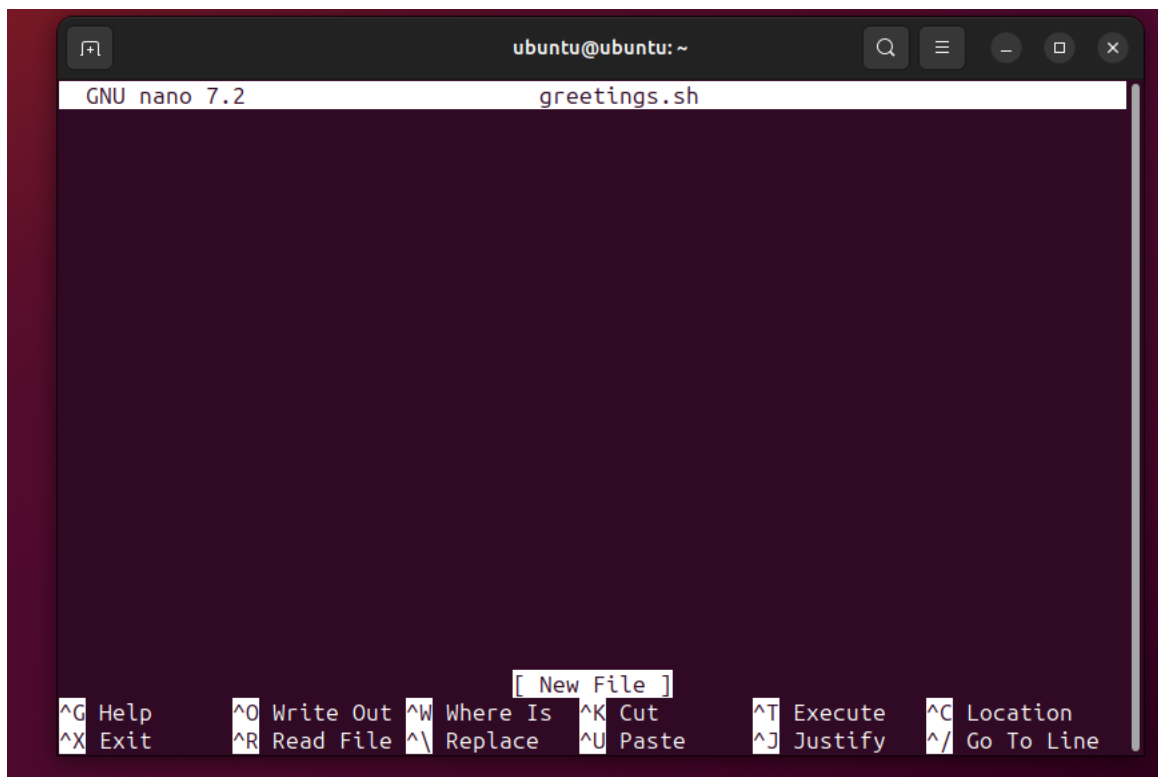
Total: 100 Points

Name: [Click or tap here to enter text.](#)

Directions: Complete the following tasks in Linux VM – Ubuntu using various Linux commands for shell scripting. Submit a document that includes the scripts (greeting.sh and file_check.sh) along with screenshots of their execution. Insert screenshots where applicable. Upload completed document in Canvas.

Task 1: Shell Script Creating Variables and Taking User Input

- **(5 Points)** Open a text editor and create a file named **greetings.sh**. Upload the screenshot for this step after executing the command.



- **(25 Points)** Write a simple script that:
 - Prints "Enter your name:" to the console.
 - Declares a variable to store a user's name and use the **read** command to take the user's name as input.
 - Prints a personalized greeting using the entered name.

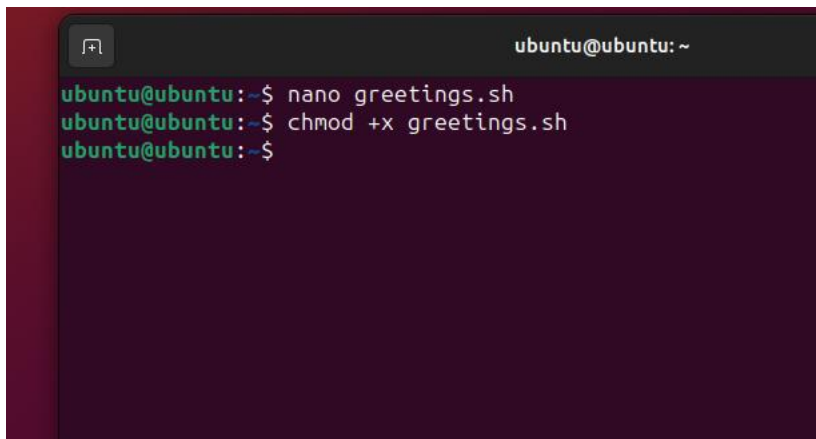
Upload the screenshot for this script after completing all the above steps.

A screenshot of a terminal window showing the nano 7.2 editor editing a file named greetings.sh. The file content is:

```
#!/bin/bash  
  
echo "Enter your name:"  
read name  
echo "Hello, $name! Welcome to shell scripting."
```

```
GNU nano 7.2 greetings.sh *  
#!/bin/bash  
  
echo "Enter your name:"  
read name  
echo "Hello, $name! Welcome to shell scripting."
```

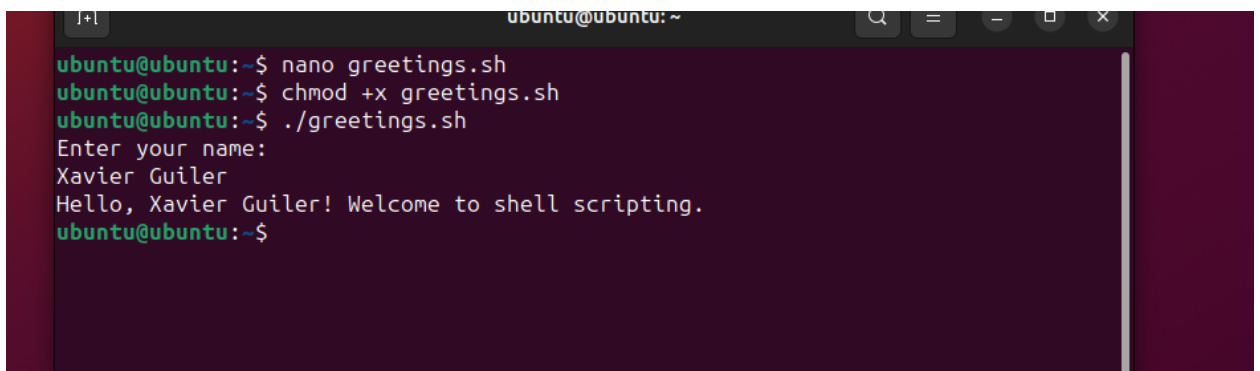
- **(10 Points)** Save and make the script executable. Upload the screenshot for this step after executing the command.

A screenshot of a terminal window showing the following commands being executed:

```
ubuntu@ubuntu:~  
ubuntu@ubuntu:~$ nano greetings.sh  
ubuntu@ubuntu:~$ chmod +x greetings.sh  
ubuntu@ubuntu:~$
```

```
ubuntu@ubuntu:~  
ubuntu@ubuntu:~$ nano greetings.sh  
ubuntu@ubuntu:~$ chmod +x greetings.sh  
ubuntu@ubuntu:~$
```

- **(10 Points)** Run the script and provide your name when prompted. Upload the screenshot for this step after executing the command.

A screenshot of a terminal window showing the script being executed and the user's input. The commands and output are:

```
ubuntu@ubuntu:~$ nano greetings.sh  
ubuntu@ubuntu:~$ chmod +x greetings.sh  
ubuntu@ubuntu:~$ ./greetings.sh  
Enter your name:  
Xavier Guiler  
Hello, Xavier Guiler! Welcome to shell scripting.  
ubuntu@ubuntu:~$
```

```
ubuntu@ubuntu:~$ nano greetings.sh  
ubuntu@ubuntu:~$ chmod +x greetings.sh  
ubuntu@ubuntu:~$ ./greetings.sh  
Enter your name:  
Xavier Guiler  
Hello, Xavier Guiler! Welcome to shell scripting.  
ubuntu@ubuntu:~$
```

Task 2: Shell Scripting for File Manipulation

- **(2 Points)** Create a directory named **testDir**. Upload the screenshot for this step after executing the command.

```
Xavier Guiler
Hello, Xavier Guiler! Welcome to shell script
ubuntu@ubuntu:~$ mkdir testDir
ubuntu@ubuntu:~$
```

- **(3 Points)** Inside the directory, create a file named **testfile.txt**. Upload the screenshot for this step after executing the command.

```
ubuntu@ubuntu:~$ cd testDir
ubuntu@ubuntu:~/testDir$ touch testfile.txt
ubuntu@ubuntu:~/testDir$
```

- **(25 Points)** Write a script named **file_check.sh** to display information about the file:
 - Check if the file **testfile.txt** exists.
 - Display its permissions, owner, and size of the file **testfile.txt**.

Upload the screenshot for this step after executing the command.

```
GNU nano 7.2 file_check.sh *
#!/bin/bash

if [ -f testfile.txt ]; then
echo "testfile.txt exists."
ls -l testfile.txt
stat -c "Owner: %U" testfile.txt
stat -c "Size: %s bytes" testfile.txt
else
echo "testfile.txt does not exist."
fi
```

- **(10 Points)** Save and make the script executable. Upload the screenshot for this step after executing the command.

```
ubuntu@ubuntu:~/testDir$ nano file_check.sh
ubuntu@ubuntu:~/testDir$ chmod +x file_check.sh
ubuntu@ubuntu:~/testDir$
```

- **(10 Points)** Run the script and observe the output. Upload the screenshot for this step after executing the command.

```
ubuntu@ubuntu:~/testDir$ nano file_check.sh
ubuntu@ubuntu:~/testDir$ ./file_check.sh
testfile.txt exists.
-rw-rw-r-- 1 ubuntu ubuntu 0 Mar  9 00:24 testfile.txt
Owner: ubuntu
Size: 0 bytes
ubuntu@ubuntu:~/testDir$
```

Grading Criteria

Task 1: Shell Script Creating Variables and Taking User Input **[4 subtasks = 50 Points]**

Task 2: Shell Scripting for File Manipulation **[5 subtasks = 50 Points]**