

CYSE 695 – Linux for Cybersecurity

Module 3 | File System Management

Total: 100 Points

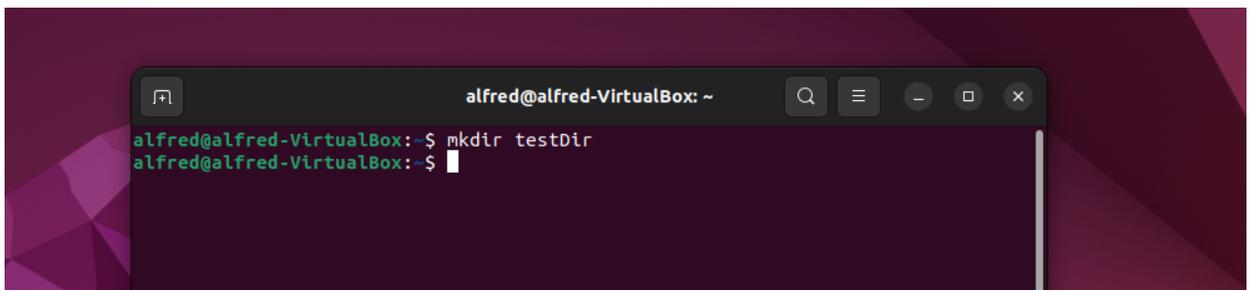
Name: Alfred Acquaye

Directions: Practice the following tasks in Linux VM – Ubuntu using various Linux commands for file management. Insert screenshots where applicable. Upload completed document in Canvas.

Task 1: Linux File System Management

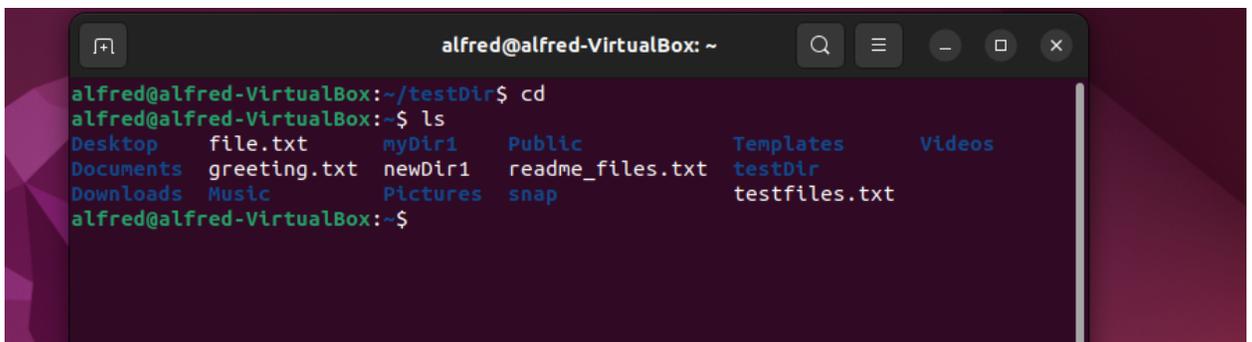
- Create a directory named "**testDir**" in your home directory. Upload the screenshot for this step after executing the command.

[Add screenshot here]

A terminal window titled 'alfred@alfred-VirtualBox: ~' with search, menu, and window control icons. The terminal shows the command 'mkdir testDir' being executed successfully, with the prompt returning to 'alfred@alfred-VirtualBox: ~\$'.

- List the contents of your home directory to confirm the creation of the "**testDir**" directory. Upload the screenshot for this step after executing the command.

[Add screenshot here]

A terminal window titled 'alfred@alfred-VirtualBox: ~' with search, menu, and window control icons. The terminal shows the user navigating to the 'testDir' directory with 'cd /testDir' and then listing the contents of the home directory with 'ls'. The output shows various system directories and files, including 'testDir'.

- Change your working directory to "**testDir**" using the cd command. Upload the screenshot for this step after executing the command.

[Add screenshot here]

```
Documents  greeting.txt  newDir1  readme_files.txt  testDir
Downloads  Music           Pictures  snap              testfiles.txt
alfred@alfred-VirtualBox:~$ cd testDir
alfred@alfred-VirtualBox:~/testDir$
```

- List the contents of "**testDir**". Upload the screenshot for this step after executing the command.
Upload the screenshot for this step after executing the command.

[Add screenshot here]

```
Documents  greeting.txt  newDir1  readme_files.txt  testDir
Downloads  Music           Pictures  snap              testfiles.txt
alfred@alfred-VirtualBox:~$ cd testDir
alfred@alfred-VirtualBox:~/testDir$
```

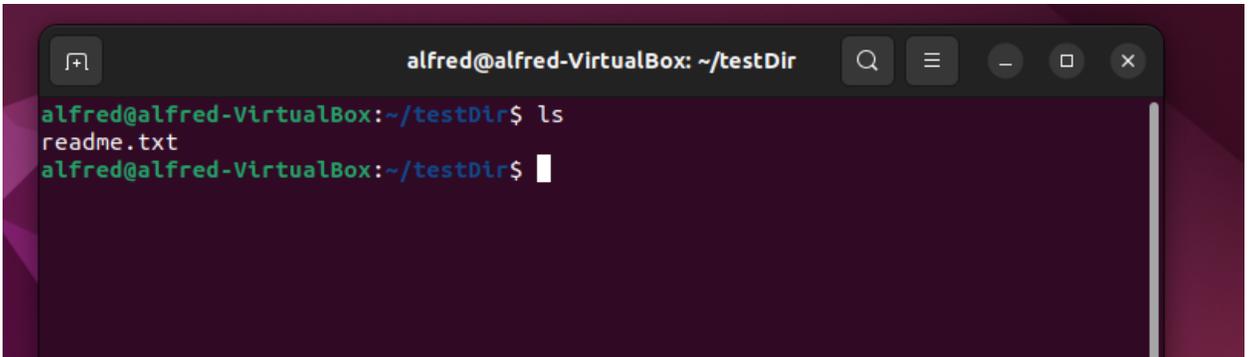
- Create an empty text file named "**readme.txt**" within the "**tesDir**" directory using the **touch** command. Upload the screenshot for this step after executing the command.

[Add screenshot here]

```
alfred@alfred-VirtualBox:~/testDir$ ls
alfred@alfred-VirtualBox:~/testDir$ touch readme.txt
alfred@alfred-VirtualBox:~/testDir$
```

- Verify the creation of the "**readme.txt**" file. Upload the screenshot for this step after executing the command.

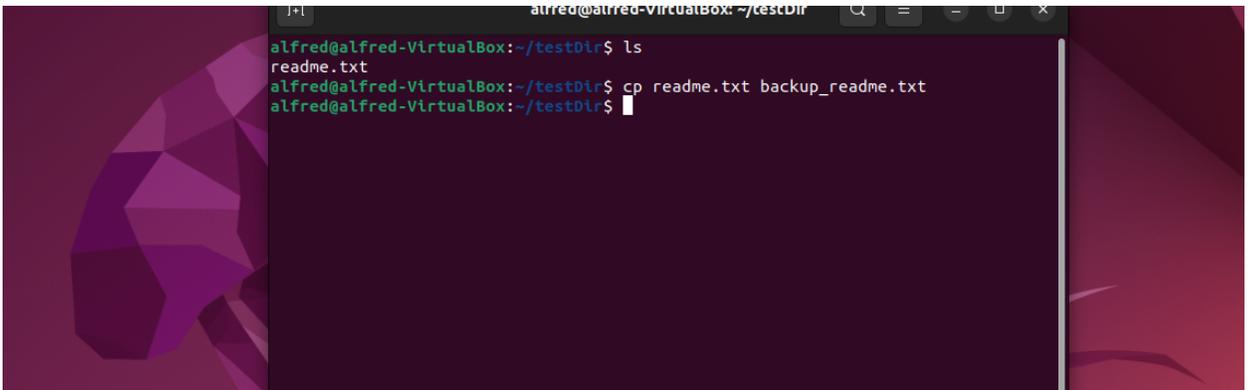
[Add screenshot here]

A terminal window titled 'alfred@alfred-VirtualBox: ~/testDir'. The prompt is 'alfred@alfred-VirtualBox:~/testDir\$'. The user has entered 'ls' and the output is 'readme.txt'. The prompt is now 'alfred@alfred-VirtualBox:~/testDir\$' with a cursor.

```
alfred@alfred-VirtualBox:~/testDir$ ls
readme.txt
alfred@alfred-VirtualBox:~/testDir$
```

- Create a copy of the "readme.txt" file and name it "backup_readme.txt" using the **cp** command. Upload the screenshot for this step after executing the command.

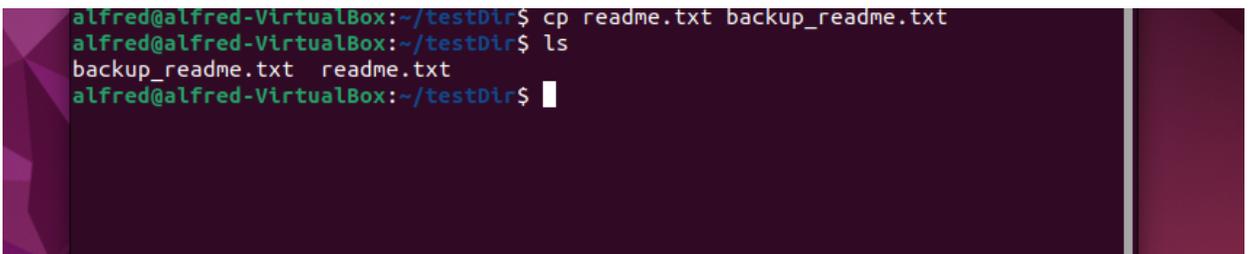
[Add screenshot here]

A terminal window titled 'alfred@alfred-VirtualBox: ~/testDir'. The prompt is 'alfred@alfred-VirtualBox:~/testDir\$'. The user has entered 'ls' and the output is 'readme.txt'. The user has then entered 'cp readme.txt backup_readme.txt' and the prompt is now 'alfred@alfred-VirtualBox:~/testDir\$' with a cursor.

```
alfred@alfred-VirtualBox:~/testDir$ ls
readme.txt
alfred@alfred-VirtualBox:~/testDir$ cp readme.txt backup_readme.txt
alfred@alfred-VirtualBox:~/testDir$
```

- Confirm the existence of the copied file. Upload the screenshot for this step after executing the command.

[Add screenshot here]

A terminal window titled 'alfred@alfred-VirtualBox: ~/testDir'. The prompt is 'alfred@alfred-VirtualBox:~/testDir\$'. The user has entered 'cp readme.txt backup_readme.txt'. The user has then entered 'ls' and the output is 'backup_readme.txt readme.txt'. The prompt is now 'alfred@alfred-VirtualBox:~/testDir\$' with a cursor.

```
alfred@alfred-VirtualBox:~/testDir$ cp readme.txt backup_readme.txt
alfred@alfred-VirtualBox:~/testDir$ ls
backup_readme.txt  readme.txt
alfred@alfred-VirtualBox:~/testDir$
```

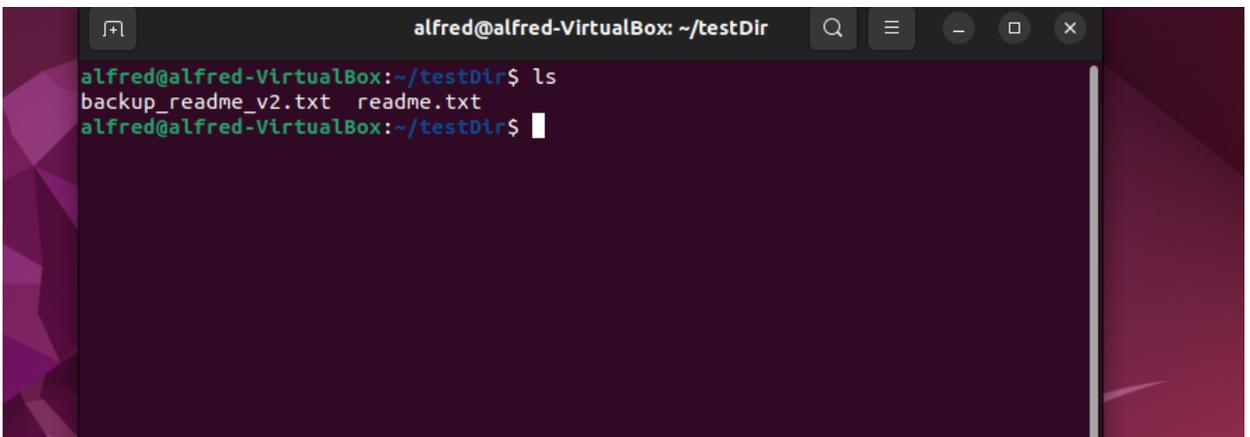
- Rename the "backup_readme.txt" file to "backup_readme_v2.txt" using the **mv** command. Upload the screenshot for this step after executing the command.

[Add screenshot here]

```
alfred@alfred-VirtualBox:~/testDir$ ls
backup_readme.txt  readme.txt
alfred@alfred-VirtualBox:~/testDir$ mv backup_readme.txt backup_readme_v2.txt
alfred@alfred-VirtualBox:~/testDir$
```

- Check that the file has been successfully renamed. Upload the screenshot for this step after executing the command.

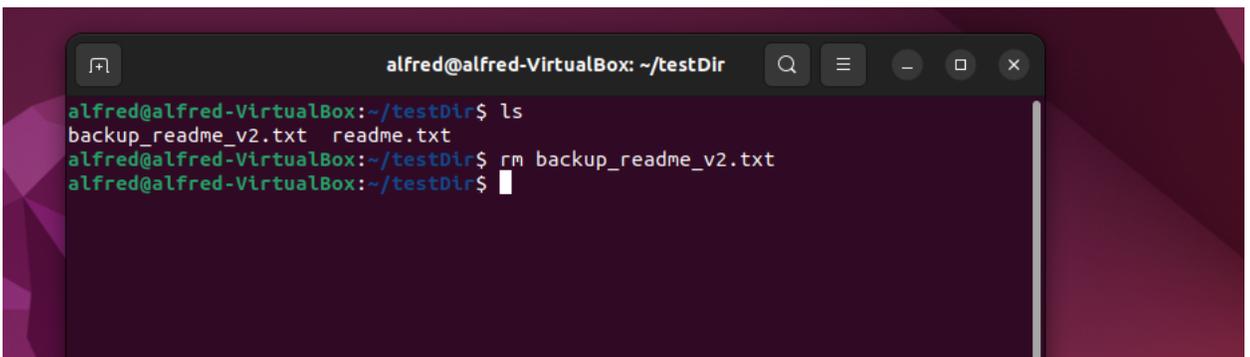
[Add screenshot here]



```
alfred@alfred-VirtualBox: ~/testDir
alfred@alfred-VirtualBox:~/testDir$ ls
backup_readme_v2.txt  readme.txt
alfred@alfred-VirtualBox:~/testDir$
```

- Remove the "**backup_readme_v2.txt**" file using the **rm** command. Upload the screenshot for this step after executing the command.

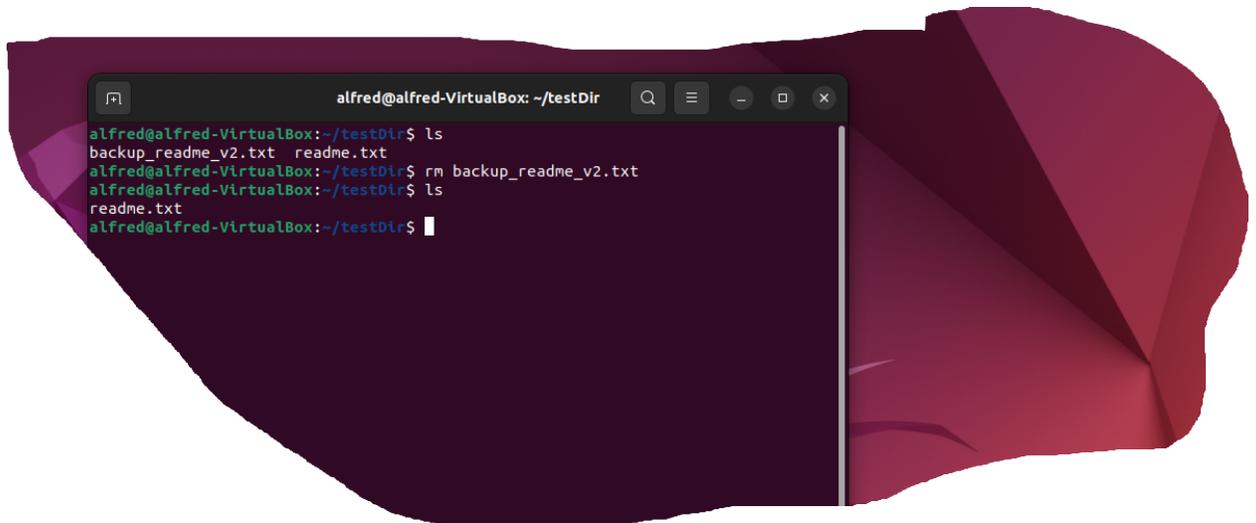
[Add screenshot here]



```
alfred@alfred-VirtualBox: ~/testDir
alfred@alfred-VirtualBox:~/testDir$ ls
backup_readme_v2.txt  readme.txt
alfred@alfred-VirtualBox:~/testDir$ rm backup_readme_v2.txt
alfred@alfred-VirtualBox:~/testDir$
```

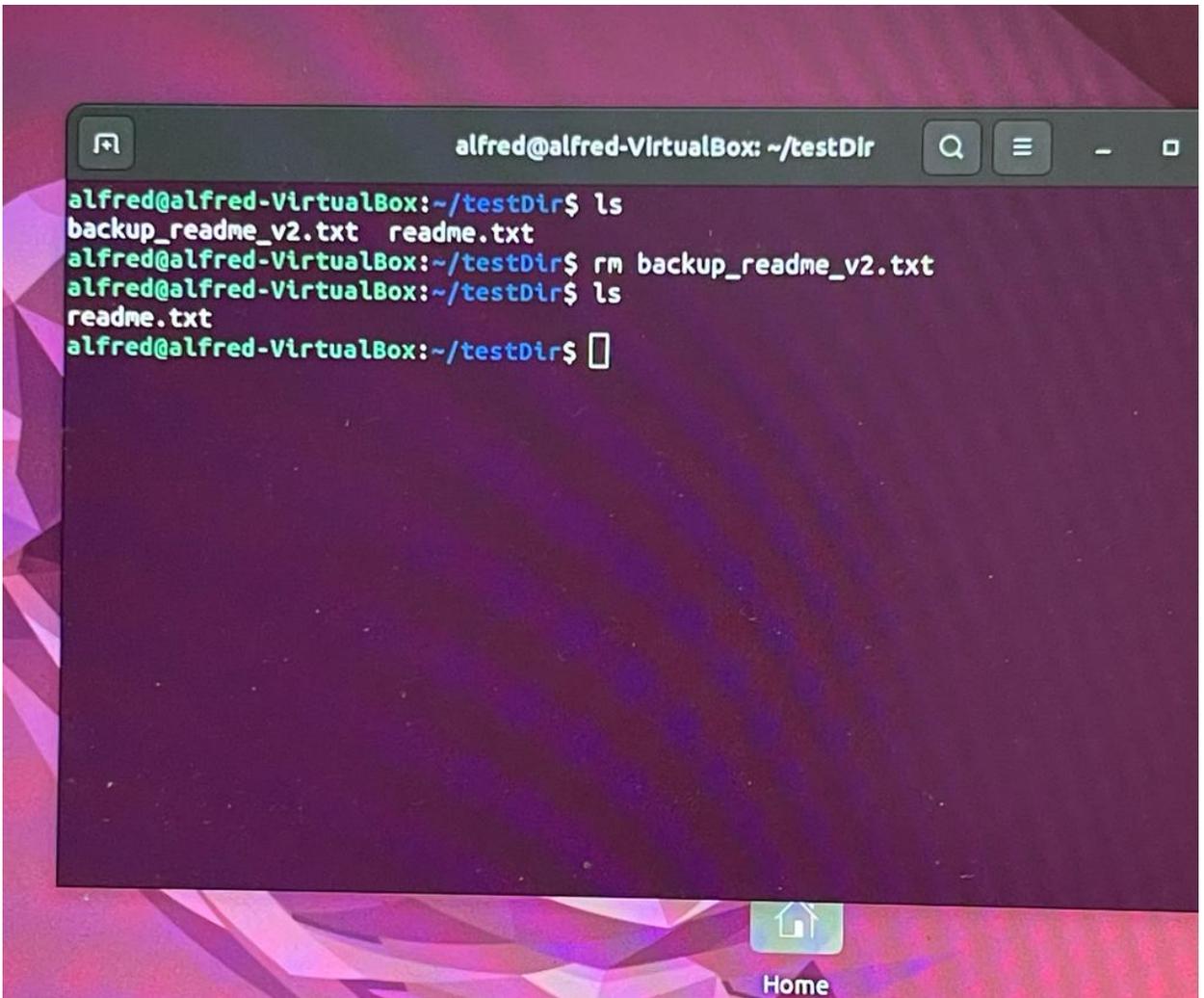
- Remove the "**testDir**" directory and its contents using the appropriate **rm** or **rmdir** command. Upload the screenshot for this step after executing the command.

[Add screenshot here]



- Verify that both the file and directory have been deleted. Upload the screenshot for this step after executing the command.

[Add screenshot here]

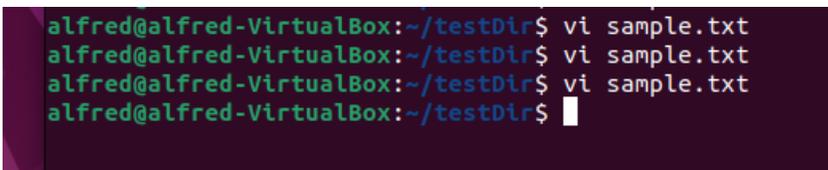
A terminal window titled 'alfred@alfred-VirtualBox: ~/testDir' with search, menu, and window control icons. The terminal shows the following commands and output:

```
alfred@alfred-VirtualBox:~/testDir$ ls
backup_readme_v2.txt  readme.txt
alfred@alfred-VirtualBox:~/testDir$ rm backup_readme_v2.txt
alfred@alfred-VirtualBox:~/testDir$ ls
readme.txt
alfred@alfred-VirtualBox:~/testDir$
```

A 'Home' button is visible at the bottom of the terminal window.

- Create a new text file named **"sample.txt"** using the **vi/vim** editor. Upload the screenshot for this step after executing the command.

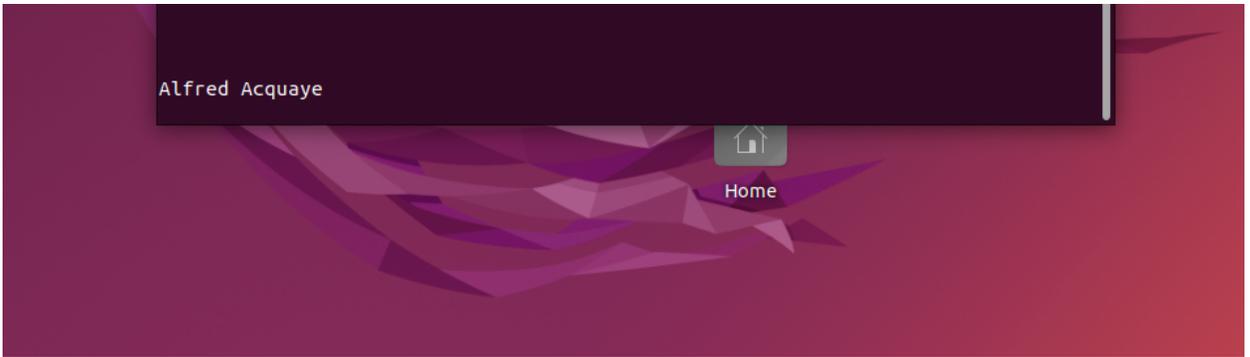
[Add screenshot here]

A terminal window showing the command to create a new file:

```
alfred@alfred-VirtualBox:~/testDir$ vi sample.txt
alfred@alfred-VirtualBox:~/testDir$ vi sample.txt
alfred@alfred-VirtualBox:~/testDir$ vi sample.txt
alfred@alfred-VirtualBox:~/testDir$
```

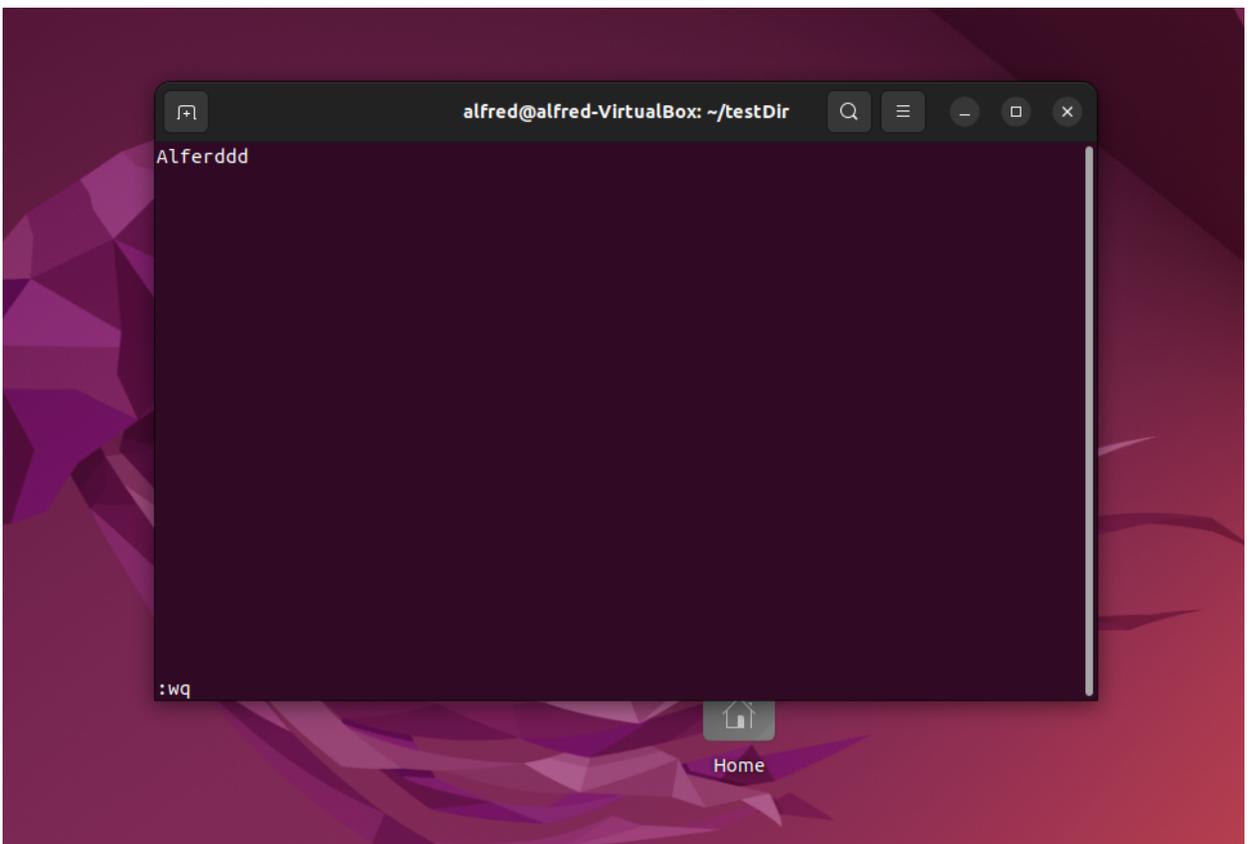
- Add **"your name"** as the content to the file [Hit the command letter **"i"** to be in insert mode to insert/type any text. Upload the screenshot for this step after executing the command.

[Add screenshot here]



- Use Linux command for vi editor to save your changes and exit the vi editor. Upload the screenshot for this step after executing the command.

[Add screenshot here]



- Use the **grep** command to search for your name within "cd." Upload the screenshot for this step after executing the command.

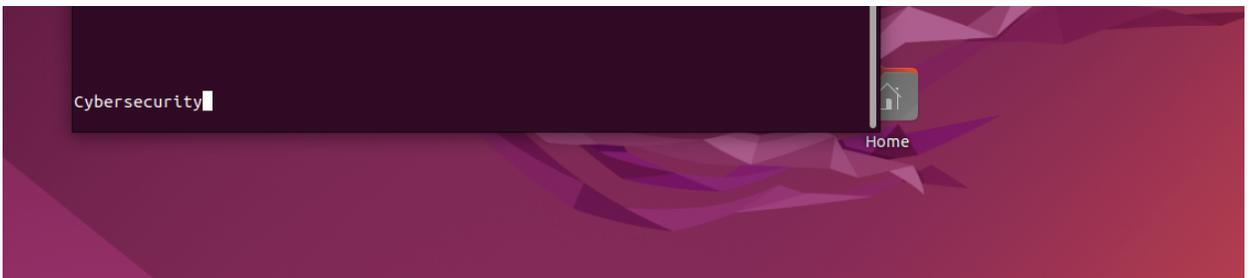
[Add screenshot here]

```
[2]+ Stopped vi sample.txt
alfred@alfred-VirtualBox:~/testDir$ vi sample.txt

[3]+ Stopped vi sample.txt
alfred@alfred-VirtualBox:~/testDir$ ls
readme.txt sample.txt
alfred@alfred-VirtualBox:~/testDir$ grep Alfred Acquaye
grep: Acquaye: No such file or directory
alfred@alfred-VirtualBox:~/testDir$ cd grep Alfred Acquaye
bash: cd: too many arguments
alfred@alfred-VirtualBox:~/testDir$ cd
```

- Open the file "sample.txt" using vi editor and hit the command " i " to be in insert mode to type some text " **Cybersecurity** ". Upload the screenshot for this step after executing the command.

[Add screenshot here]



- Save the file using " :wq ". Upload the screenshot for this step after executing the command.

[Add screenshot here]



- Verify the creation of the "sample.txt" file. Upload the screenshot for this step after executing the command.

[Add screenshot here]

```
alfred@alfred-VirtualBox:~/testDir$ ls
readme.txt sample.txt
alfred@alfred-VirtualBox:~/testDir$
```

Grading Criteria

Task 1: Linux File System Management [20 x 5 Points = 100 Points]

