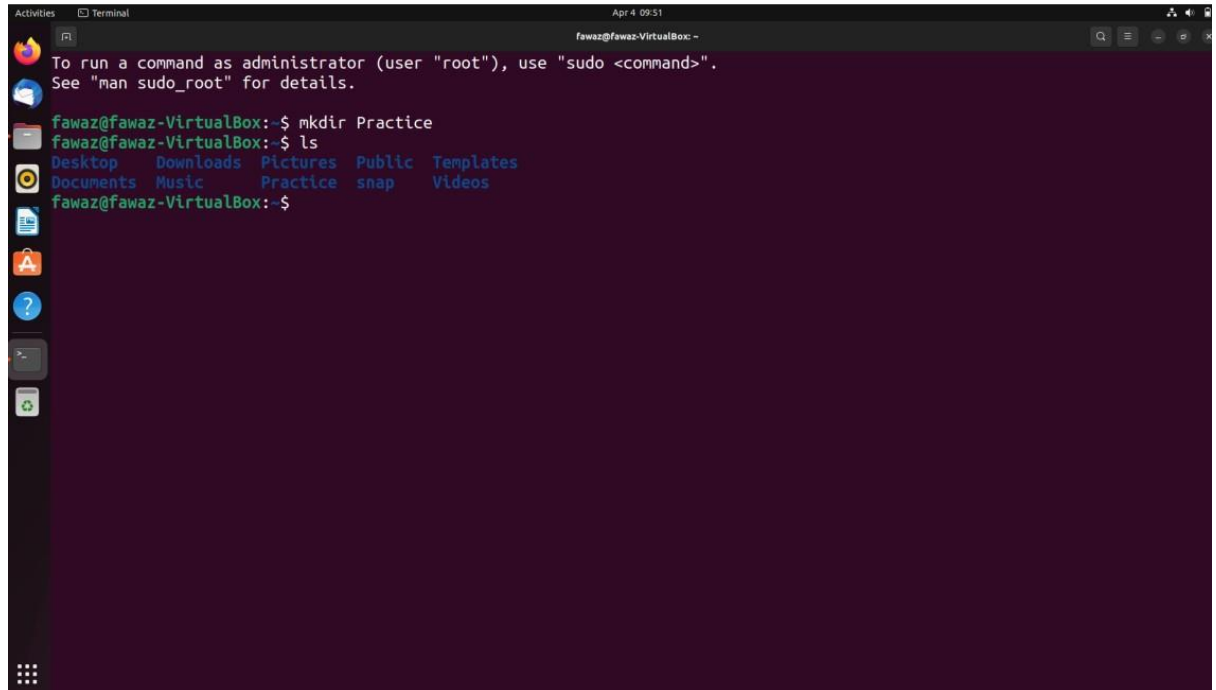


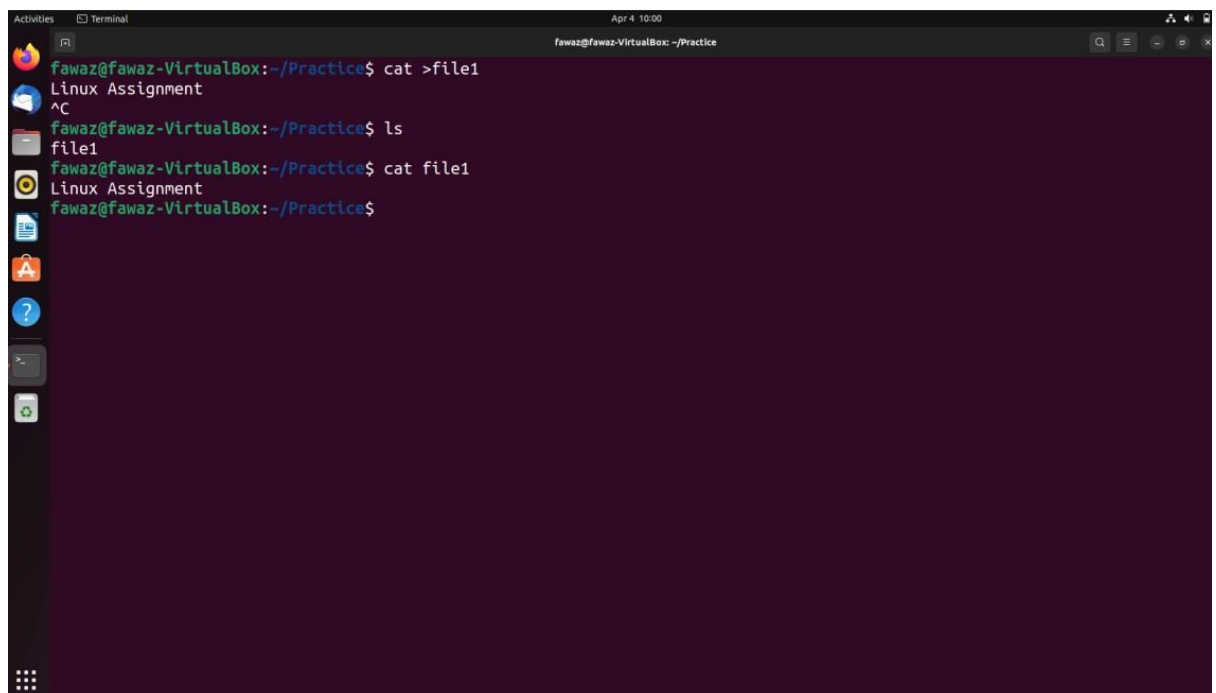
Linux Assignment

1. Create a new directory called "practice" in your home directory.

A terminal window titled 'fawaz@fawaz-VirtualBox: ~' with a dark purple background. It shows the execution of 'mkdir Practice' and 'ls' commands. The 'ls' output lists standard Linux directories plus the newly created 'Practice' directory. A sidebar on the left contains application icons.

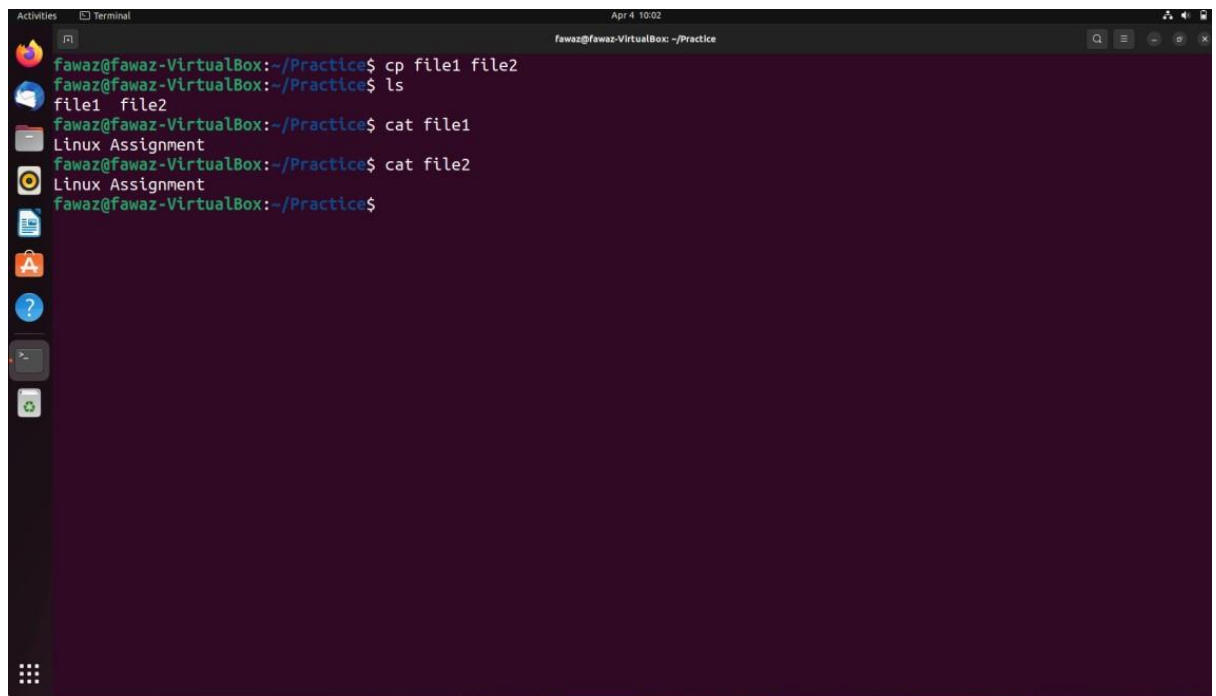
```
fawaz@fawaz-VirtualBox:~$ mkdir Practice
fawaz@fawaz-VirtualBox:~$ ls
Desktop  Downloads  Pictures  Public  Templates
Documents Music      Practice  snap    Videos
fawaz@fawaz-VirtualBox:~$
```

2. Inside the "practice" directory, create a new file called "file1.txt" and add some text to it

A terminal window titled 'fawaz@fawaz-VirtualBox: ~/Practice' with a dark purple background. It shows the user navigating to the 'Practice' directory and creating 'file1' with the text 'Linux Assignment'. The 'cat' command is used to verify the file's content. A sidebar on the left contains application icons.

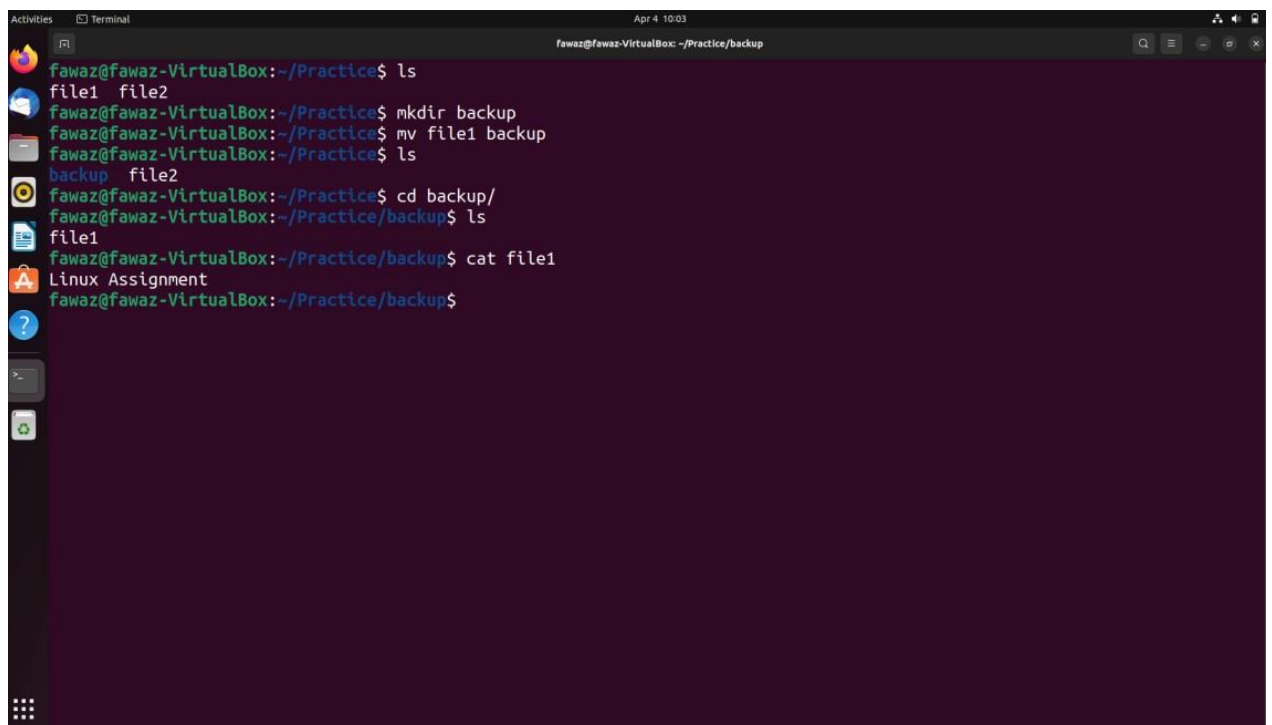
```
fawaz@fawaz-VirtualBox:~/Practice$ cat >file1
Linux Assignment
^C
fawaz@fawaz-VirtualBox:~/Practice$ ls
file1
fawaz@fawaz-VirtualBox:~/Practice$ cat file1
Linux Assignment
fawaz@fawaz-VirtualBox:~/Practice$
```

3. Copy "file1.txt" to a new file called "file2.txt" in the same directory.

A terminal window titled 'fawaz@fawaz-VirtualBox: ~/Practice' showing the execution of several commands. The user first copies 'file1' to 'file2' using 'cp file1 file2'. Then, they list the directory contents with 'ls', which shows 'file1' and 'file2'. Next, they use 'cat file1' and 'cat file2' to verify the content of both files, both displaying 'Linux Assignment'.

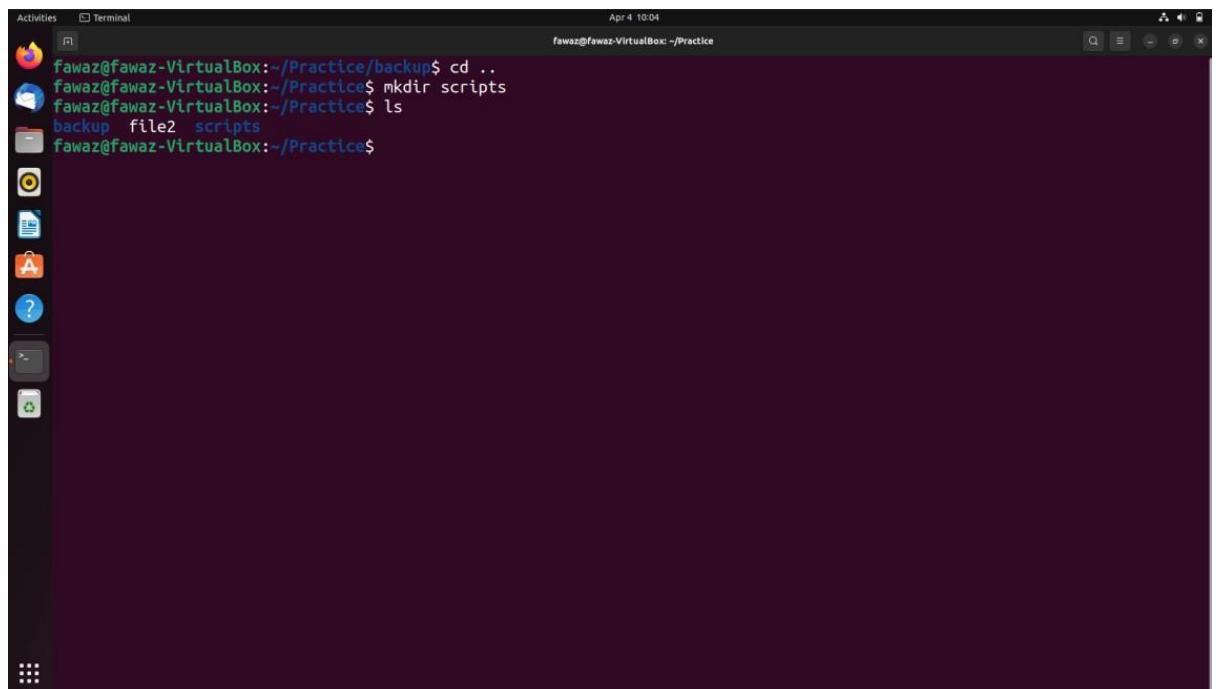
```
fawaz@fawaz-VirtualBox:~/Practice$ cp file1 file2
fawaz@fawaz-VirtualBox:~/Practice$ ls
file1  file2
fawaz@fawaz-VirtualBox:~/Practice$ cat file1
Linux Assignment
fawaz@fawaz-VirtualBox:~/Practice$ cat file2
Linux Assignment
fawaz@fawaz-VirtualBox:~/Practice$
```

4. Move "file2.txt" to a new directory called "backup" that is located inside the "practice" directory.

A terminal window titled 'fawaz@fawaz-VirtualBox: ~/Practice/backup' showing the execution of several commands. The user lists the current directory contents, showing 'file1' and 'file2'. Then, they create a new directory 'backup' with 'mkdir backup'. Next, they move 'file1' to the 'backup' directory using 'mv file1 backup'. They then list the contents of the 'backup' directory, showing 'file1' and 'file2'. Finally, they use 'cat file1' to verify the content of 'file1' in the 'backup' directory, which displays 'Linux Assignment'.

```
fawaz@fawaz-VirtualBox:~/Practice$ ls
file1  file2
fawaz@fawaz-VirtualBox:~/Practice$ mkdir backup
fawaz@fawaz-VirtualBox:~/Practice$ mv file1 backup
fawaz@fawaz-VirtualBox:~/Practice$ ls
backup  file2
fawaz@fawaz-VirtualBox:~/Practice$ cd backup/
fawaz@fawaz-VirtualBox:~/Practice/backup$ ls
file1
fawaz@fawaz-VirtualBox:~/Practice/backup$ cat file1
Linux Assignment
fawaz@fawaz-VirtualBox:~/Practice/backup$
```

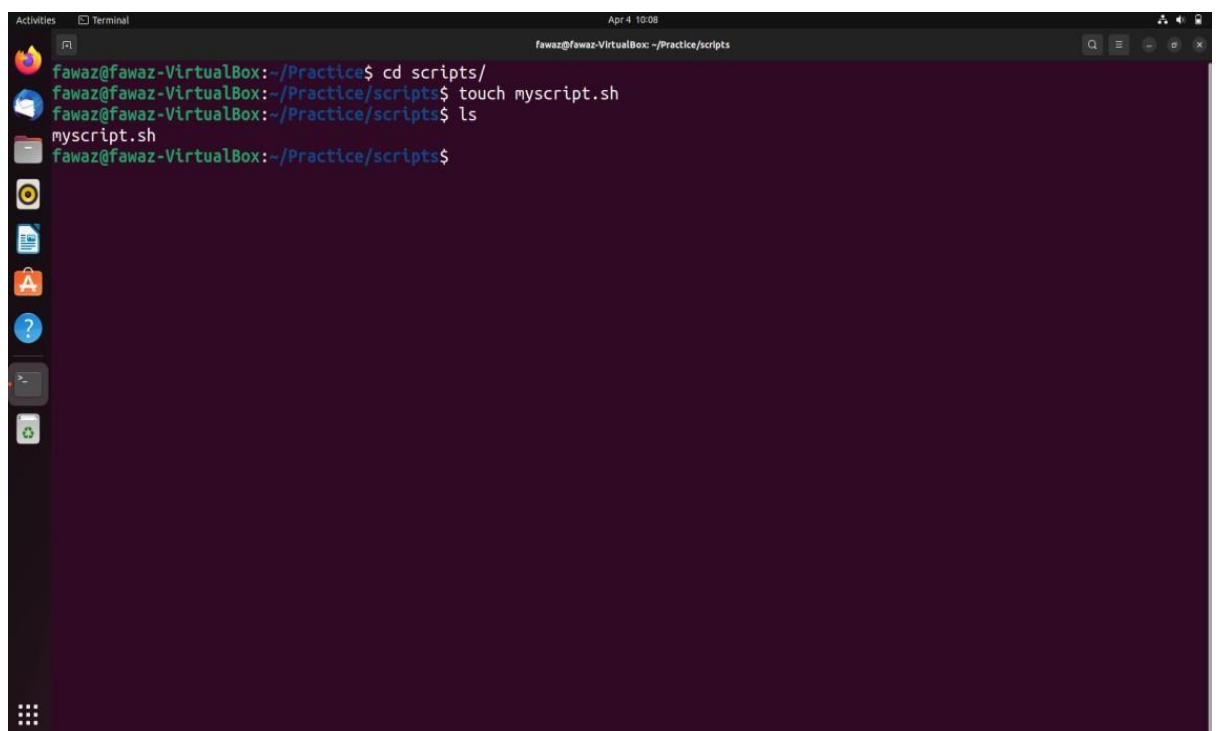
5. Create a new directory called "scripts" inside the "practice" directory.

A terminal window titled 'fawaz@fawaz-VirtualBox: ~/Practice' showing the following commands and output:

```
fawaz@fawaz-VirtualBox:~/Practice/backup$ cd ..  
fawaz@fawaz-VirtualBox:~/Practice$ mkdir scripts  
fawaz@fawaz-VirtualBox:~/Practice$ ls  
backup  file2  scripts  
fawaz@fawaz-VirtualBox:~/Practice$
```

The terminal window has a dark purple background. The left sidebar shows various application icons. The top bar indicates the date and time as 'Apr 4 10:04'.

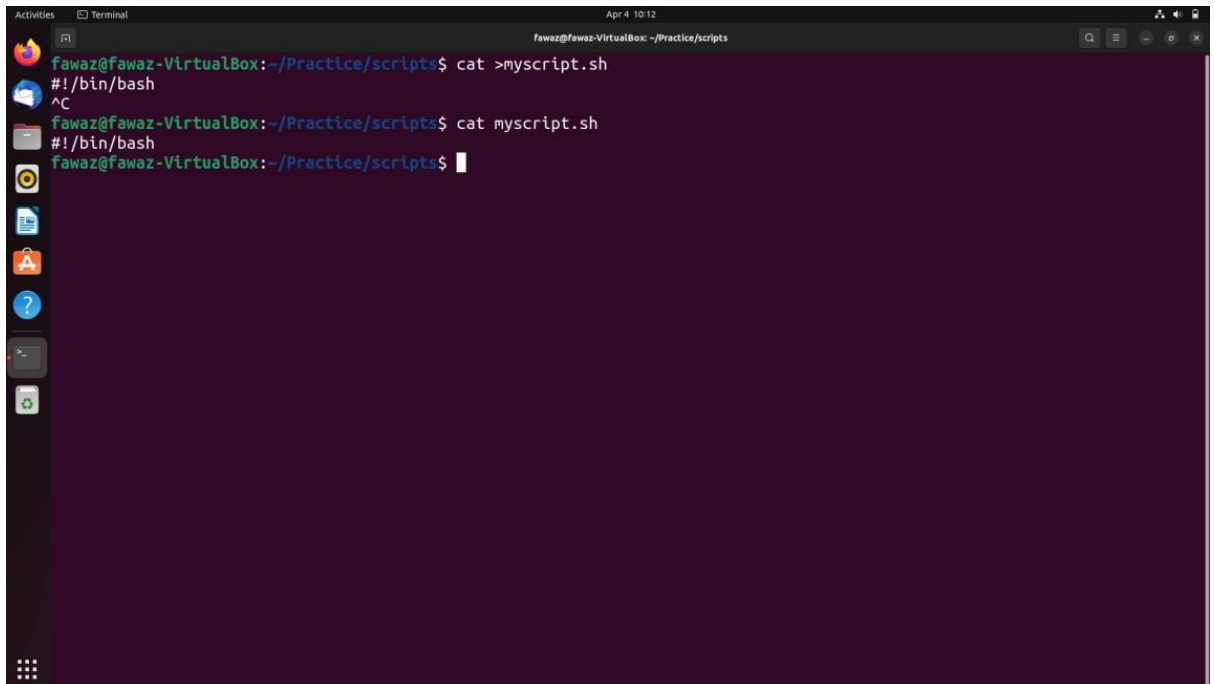
6. Create a new file called "myscript.sh" inside the "scripts" directory.

A terminal window titled 'fawaz@fawaz-VirtualBox: ~/Practice/scripts' showing the following commands and output:

```
fawaz@fawaz-VirtualBox:~/Practice$ cd scripts/  
fawaz@fawaz-VirtualBox:~/Practice/scripts$ touch myscript.sh  
fawaz@fawaz-VirtualBox:~/Practice/scripts$ ls  
myscript.sh  
fawaz@fawaz-VirtualBox:~/Practice/scripts$
```

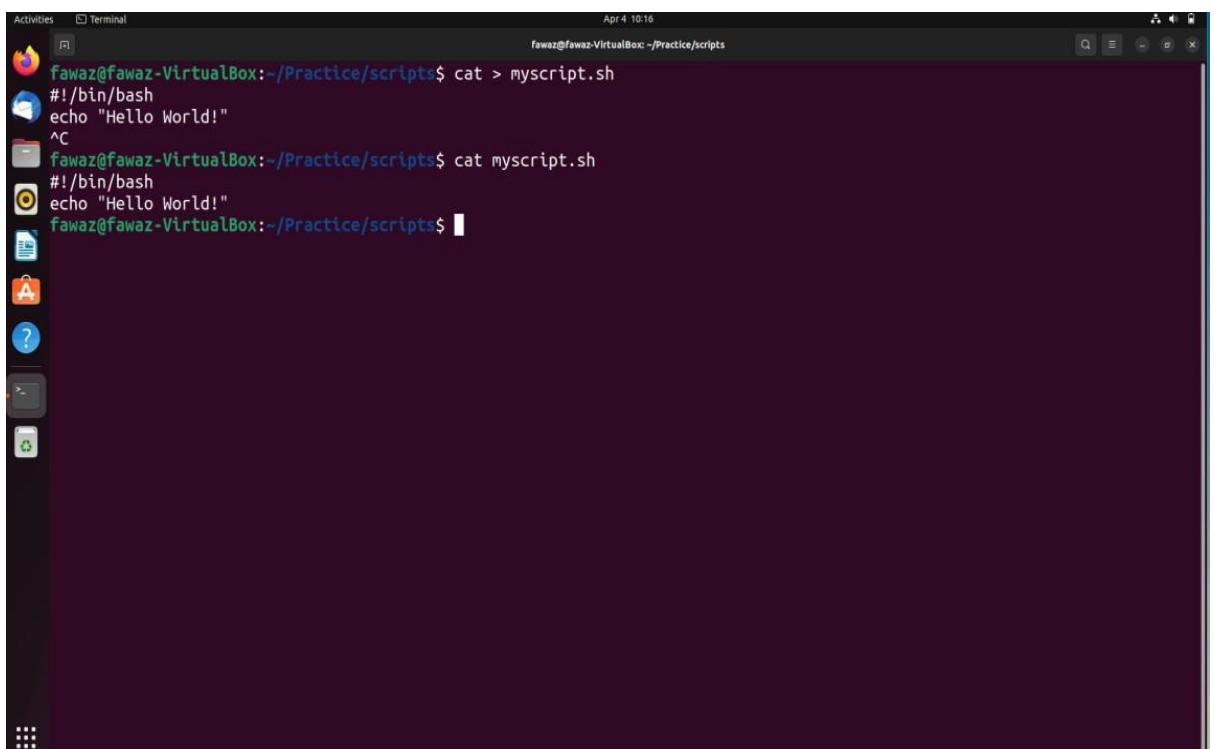
The terminal window has a dark purple background. The left sidebar shows various application icons. The top bar indicates the date and time as 'Apr 4 10:08'.

7. Add the following code to "myscript.sh": `#!/bin/bash`

A terminal window titled 'fawaz@fawaz-VirtualBox: ~/Practice/scripts' with a date and time of 'Apr 4 10:12'. The prompt is 'fawaz@fawaz-VirtualBox:~/Practice/scripts\$'. The user enters 'cat >myscript.sh', followed by a carriage return '^C', and then 'cat myscript.sh'. The output shows the file was created with the content '#!/bin/bash'.

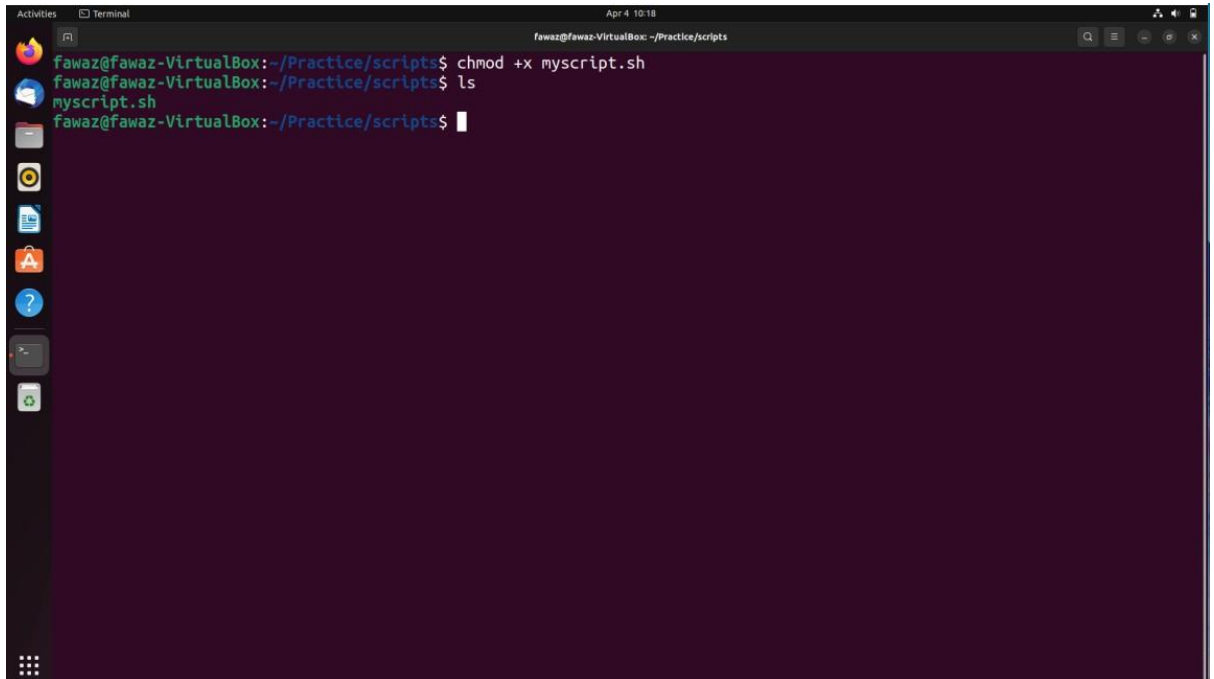
```
fawaz@fawaz-VirtualBox:~/Practice/scripts$ cat >myscript.sh
^C
fawaz@fawaz-VirtualBox:~/Practice/scripts$ cat myscript.sh
#!/bin/bash
fawaz@fawaz-VirtualBox:~/Practice/scripts$
```

8. `echo "Hello World!"`

A terminal window titled 'fawaz@fawaz-VirtualBox: ~/Practice/scripts' with a date and time of 'Apr 4 10:16'. The prompt is 'fawaz@fawaz-VirtualBox:~/Practice/scripts\$'. The user enters 'cat > myscript.sh', followed by a carriage return '^C', and then 'cat myscript.sh'. The output shows the file was updated with the content '#!/bin/bash' and 'echo "Hello World!"'.

```
fawaz@fawaz-VirtualBox:~/Practice/scripts$ cat > myscript.sh
^C
fawaz@fawaz-VirtualBox:~/Practice/scripts$ cat myscript.sh
#!/bin/bash
echo "Hello World!"
fawaz@fawaz-VirtualBox:~/Practice/scripts$
```

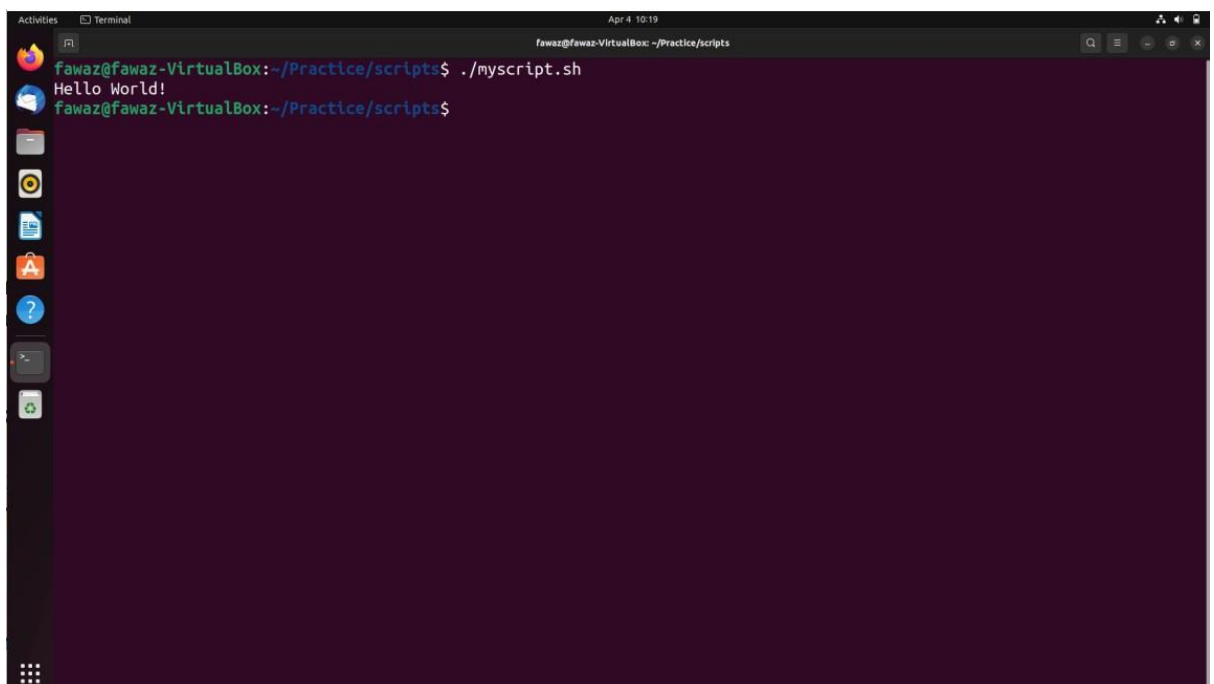
9. Make "myscript.sh" executable using the command "chmod +x myscript.sh".



```
fawaz@fawaz-VirtualBox: ~/Practice/scripts
fawaz@fawaz-VirtualBox:~/Practice/scripts$ chmod +x myscript.sh
fawaz@fawaz-VirtualBox:~/Practice/scripts$ ls
myscript.sh
fawaz@fawaz-VirtualBox:~/Practice/scripts$
```

A terminal window titled "Terminal" with the path "fawaz@fawaz-VirtualBox: ~/Practice/scripts". The user enters the command `chmod +x myscript.sh`, followed by `ls`, which lists the file `myscript.sh`. The prompt returns to `fawaz@fawaz-VirtualBox:~/Practice/scripts$`.

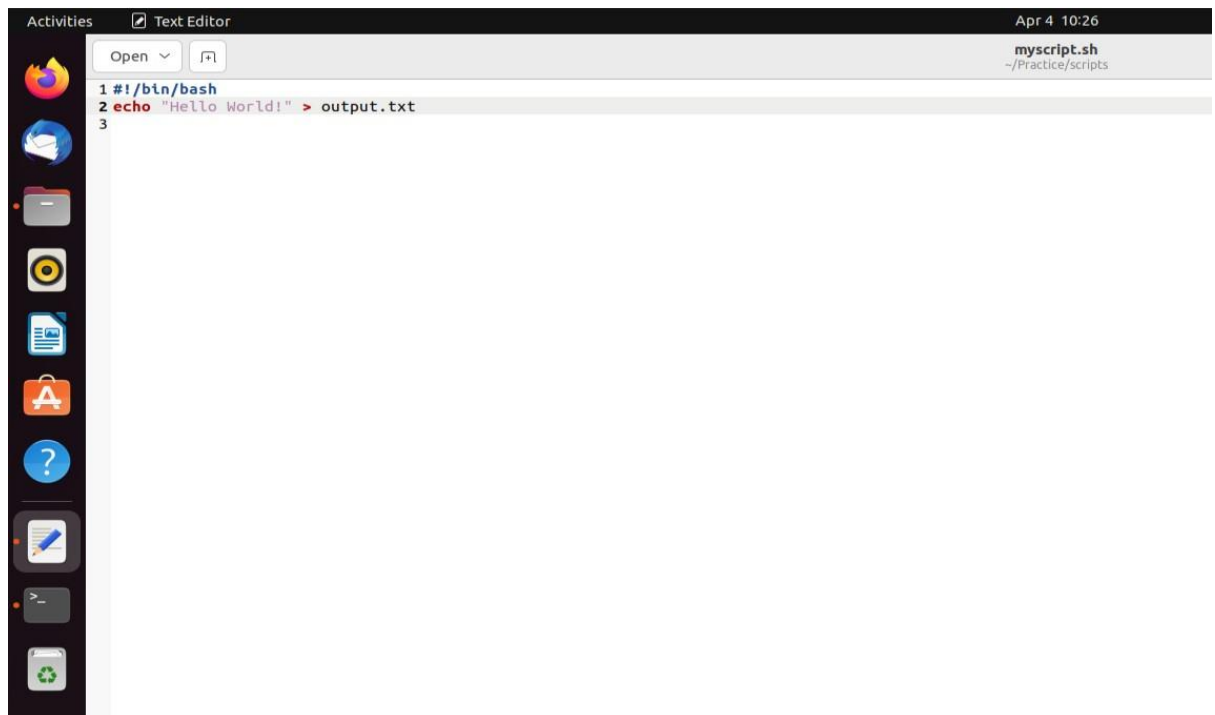
10. Run "myscript.sh" using the command "./myscript.sh"



```
fawaz@fawaz-VirtualBox: ~/Practice/scripts
fawaz@fawaz-VirtualBox:~/Practice/scripts$ ./myscript.sh
Hello World!
fawaz@fawaz-VirtualBox:~/Practice/scripts$
```

A terminal window titled "Terminal" with the path "fawaz@fawaz-VirtualBox: ~/Practice/scripts". The user enters the command `./myscript.sh`, which outputs `Hello World!`. The prompt returns to `fawaz@fawaz-VirtualBox:~/Practice/scripts$`.

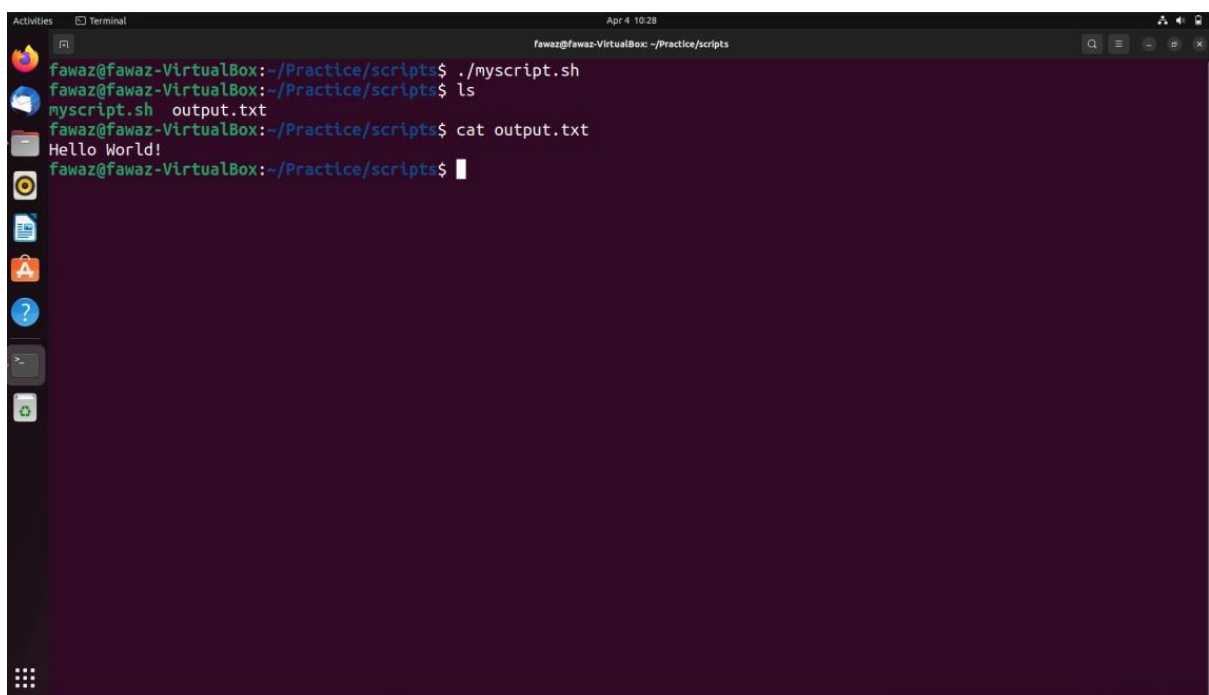
11. Add a line to "myscript.sh" that creates a new file called "output.txt" in the same directory and writes the output of the "echo" command to it.



The screenshot shows a Text Editor window titled "Text Editor" with a file named "myscript.sh" open at the path "~/Practice/scripts". The file contains three lines of code: a shebang line, an echo command, and a blank line.

```
1 #!/bin/bash
2 echo "Hello World!" > output.txt
3
```

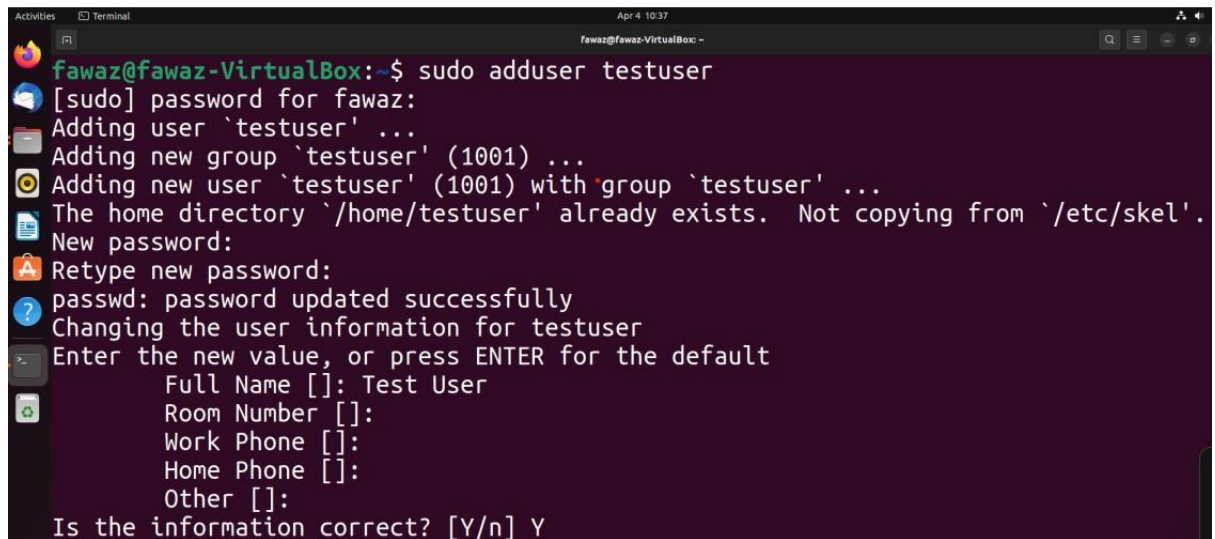
12. Run "myscript.sh" again and verify that "output.txt" has been created and contains the expected output.



The screenshot shows a Terminal window titled "Terminal" with the user "fawaz" at the host "fawaz-VirtualBox" in the directory "~/Practice/scripts". The user runs the script, lists the directory, and then cat's the output file.

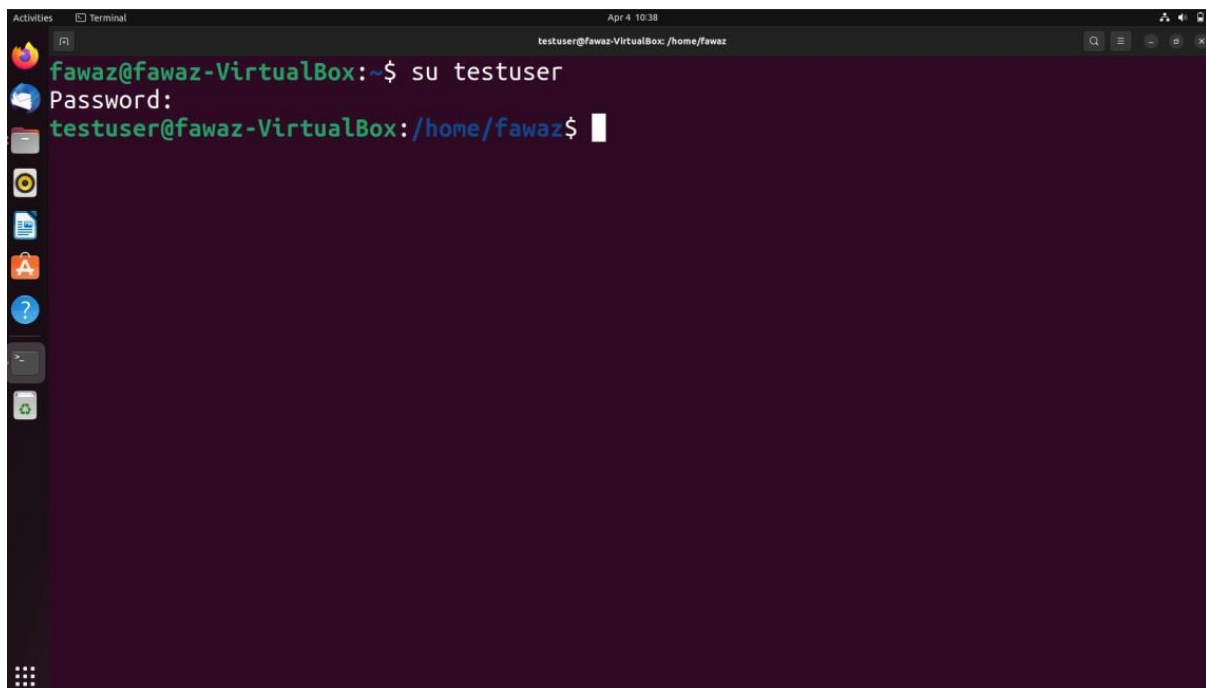
```
fawaz@fawaz-VirtualBox:~/Practice/scripts$ ./myscript.sh
fawaz@fawaz-VirtualBox:~/Practice/scripts$ ls
myscript.sh  output.txt
fawaz@fawaz-VirtualBox:~/Practice/scripts$ cat output.txt
Hello World!
fawaz@fawaz-VirtualBox:~/Practice/scripts$
```

13. Create a new user account called "testuser".



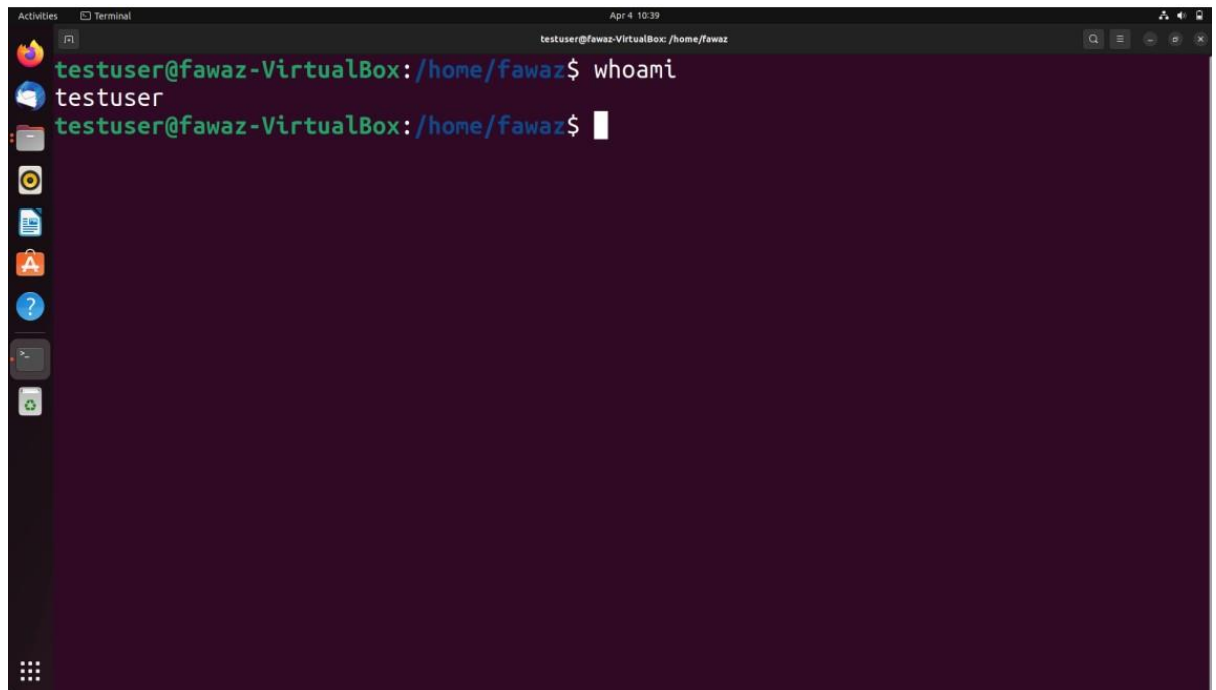
```
fawaz@fawaz-VirtualBox:~$ sudo adduser testuser
[sudo] password for fawaz:
Adding user `testuser' ...
Adding new group `testuser' (1001) ...
Adding new user `testuser' (1001) with group `testuser' ...
The home directory `/home/testuser' already exists. Not copying from `/etc/skel'.
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for testuser
Enter the new value, or press ENTER for the default
  Full Name []: Test User
    Room Number []:
    Work Phone []:
    Home Phone []:
      Other []:
Is the information correct? [Y/n] Y
```

14. Switch to the "test use r" account using the command "su testuser".



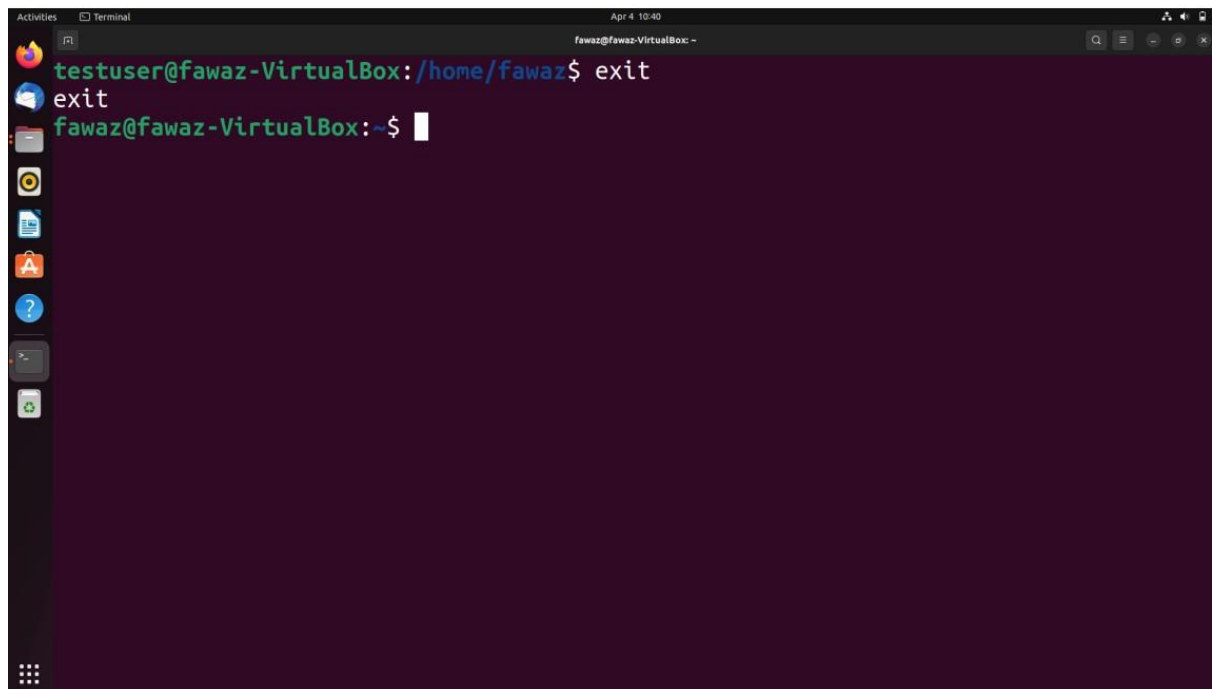
```
fawaz@fawaz-VirtualBox:~$ su testuser
Password:
testuser@fawaz-VirtualBox: /home/fawaz$
```

15. Verify that you are now logged in as "testuser" using the command "whoami".

A terminal window titled "Terminal" with a dark background. The prompt is "testuser@fawaz-VirtualBox:/home/fawaz\$". The user has entered the command "whoami". The output is "testuser" on the next line. The prompt is now "testuser@fawaz-VirtualBox:/home/fawaz\$".

```
testuser@fawaz-VirtualBox:/home/fawaz$ whoami
testuser
testuser@fawaz-VirtualBox:/home/fawaz$
```

16. Switch back to your original user account using the command "exit"

A terminal window titled "Terminal" with a dark background. The prompt is "testuser@fawaz-VirtualBox:/home/fawaz\$". The user has entered the command "exit". The output is "exit" on the next line. The prompt is now "fawaz@fawaz-VirtualBox:~\$".

```
testuser@fawaz-VirtualBox:/home/fawaz$ exit
exit
fawaz@fawaz-VirtualBox:~$
```