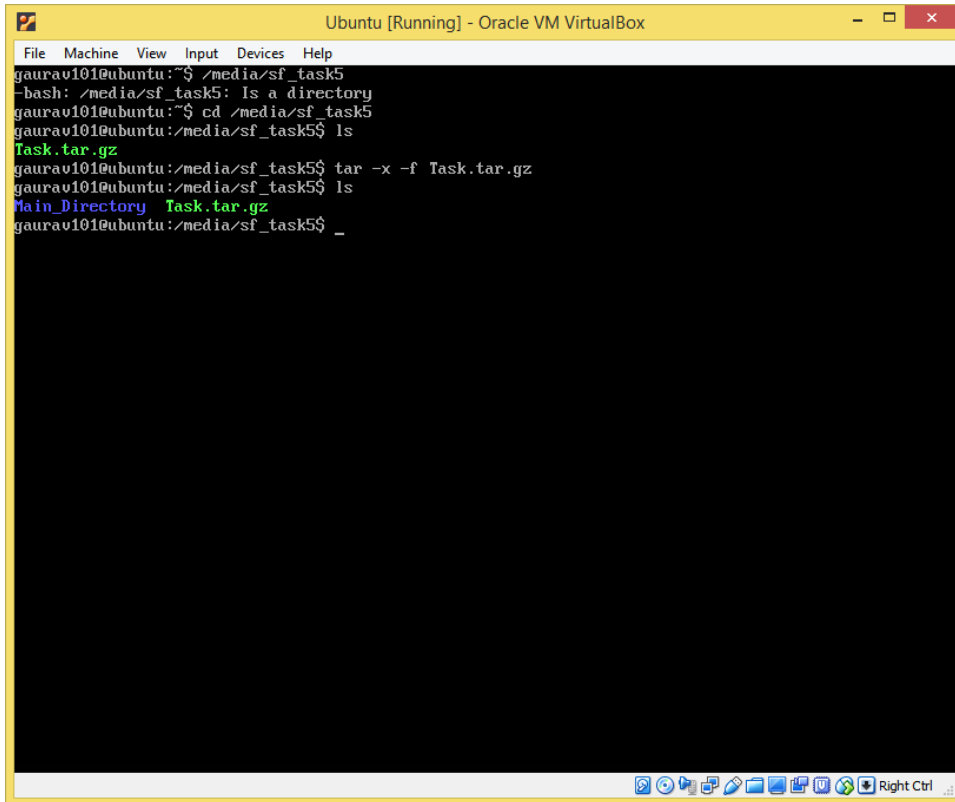


# COGNIZANCE CLUB TASK

## TASK-5



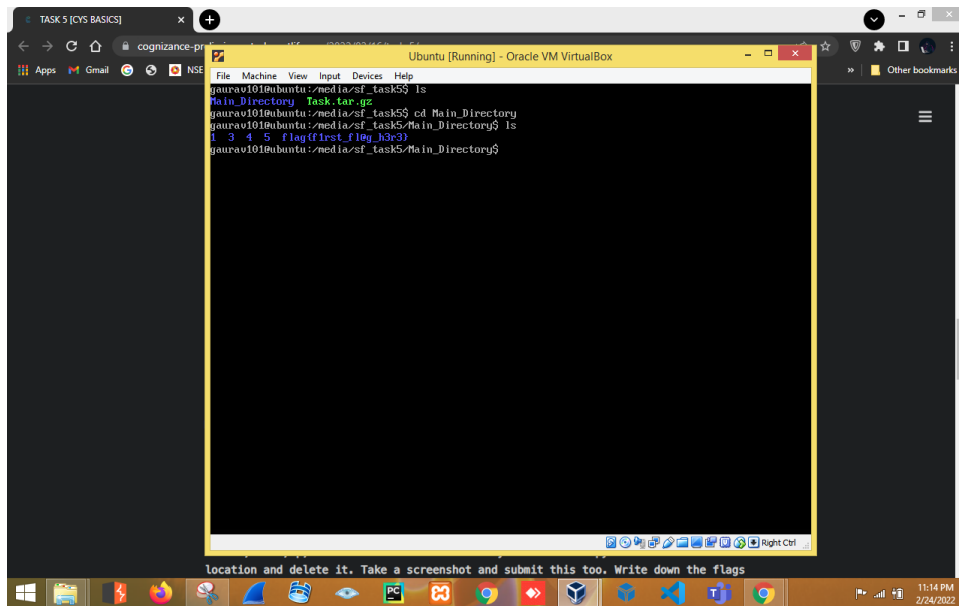
```
gaurav101@ubuntu:~$ /media/sf_task5
-bash: /media/sf_task5: Is a directory
gaurav101@ubuntu:~$ cd /media/sf_task5
gaurav101@ubuntu:/media/sf_task5$ ls
Task.tar.gz
gaurav101@ubuntu:/media/sf_task5$ tar -x -f Task.tar.gz
gaurav101@ubuntu:/media/sf_task5$ ls
Main_Directory Task.tar.gz
gaurav101@ubuntu:/media/sf_task5$ _
```

In the first command I am accessing the shared folder named “task5” in the VM which is located inside the media directory.

In the second command, I am unzipping the .tar folder with the help of command

” tar -x -f <filename.tar.gz>”

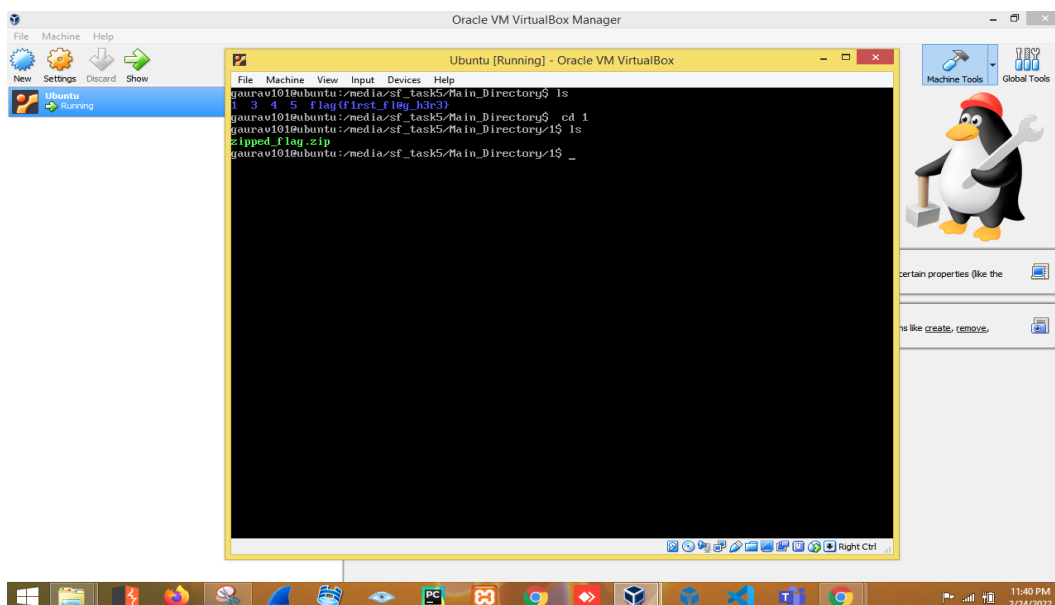
In the third command, I am listing the content of the folder using “ls” command.



Now getting inside the directory named “Main\_Directory” using command “cd <Directory name>”

“ls” command is used to display the content of the directory named “Main\_Directory”.

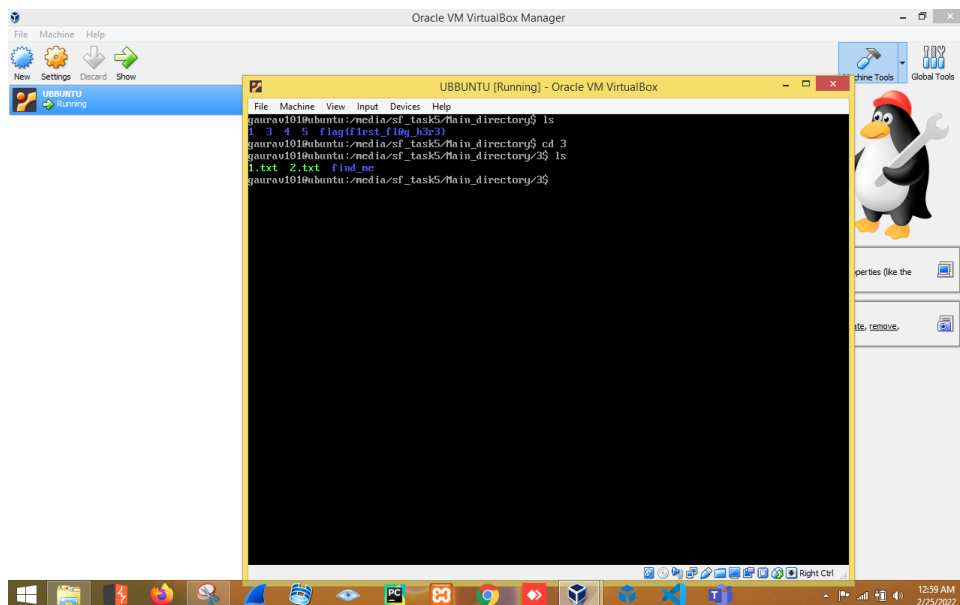
BLUE colour represents the directory, so we are getting inside each Sub-directory to find the flag.



Here, we are getting inside the sub-directories using command “cd <directory name>”

Inside the directory named “1” there is a Zipp file so unzipping that zip file using command “unzip <Filename.zip>”

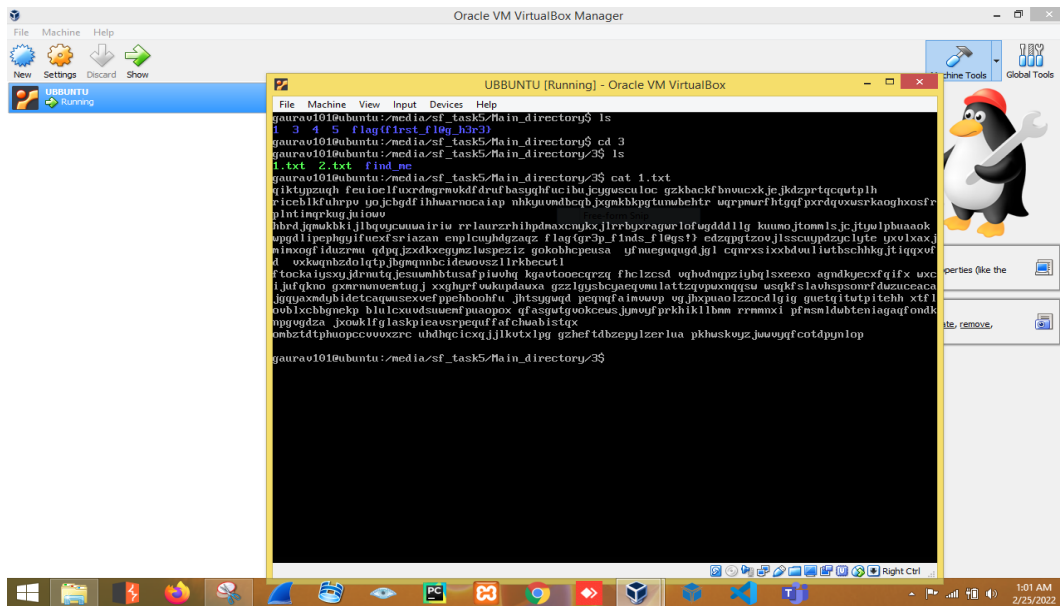
NOTE: unzip package doesn’t come pre-installed with many Linux distro so install the package with the command “apt-get install unzip” to install the unzip package.



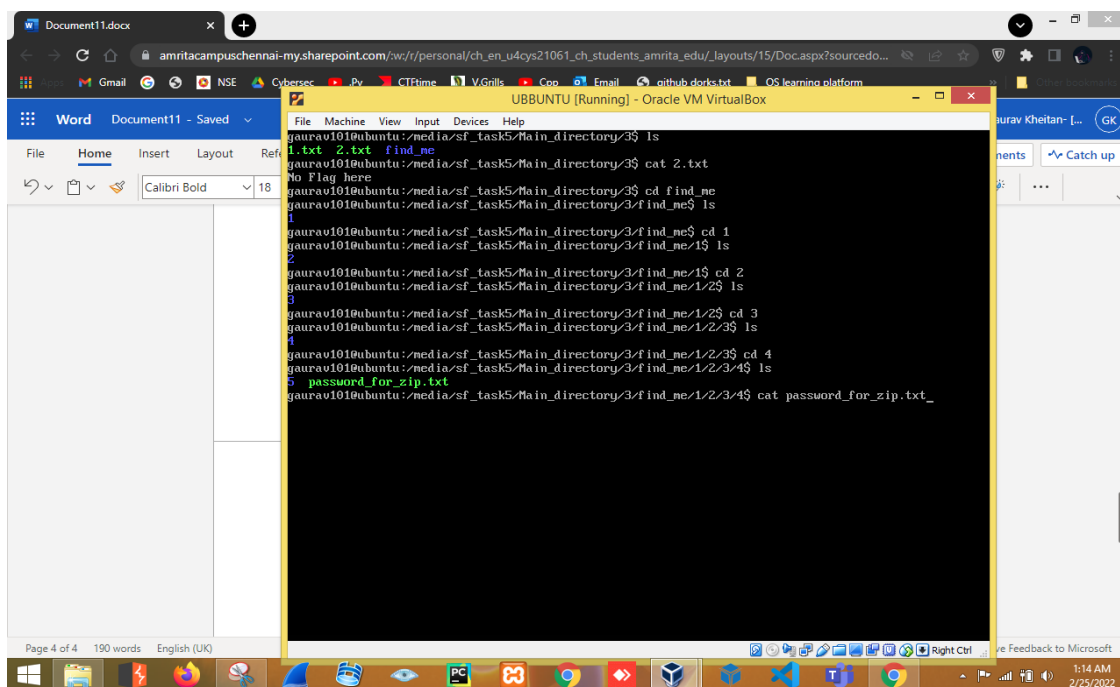
Getting inside the directory named “3” using command “cd 3”.

Inside the directory there are some text files and some sub-directories.

Displaying the content of the text file named 1.txt using command “cat <filename>”

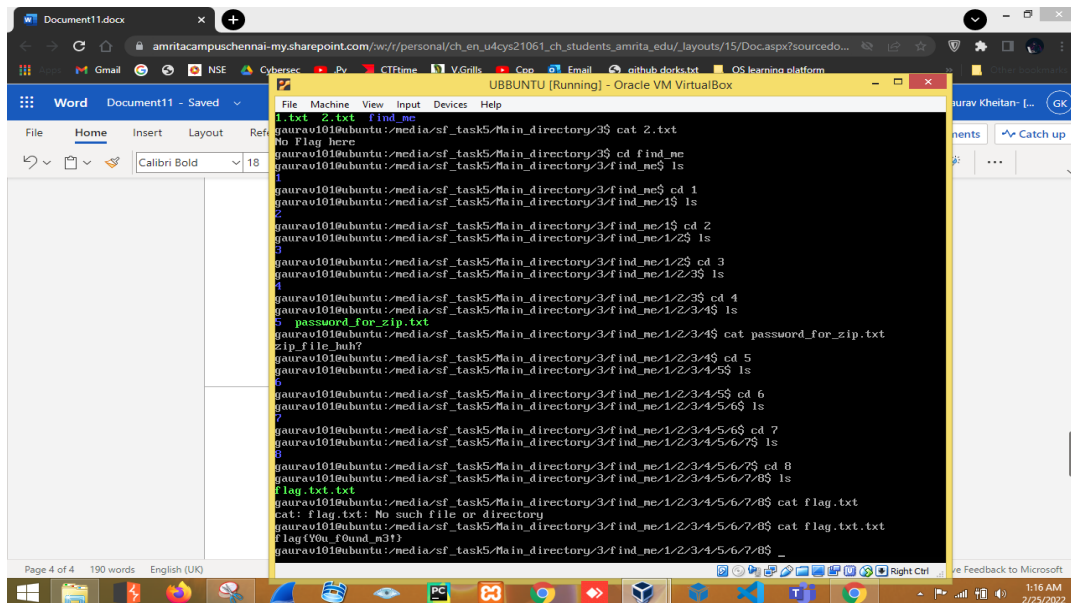


1) flag{gr3p\_finds\_fl@gs!}



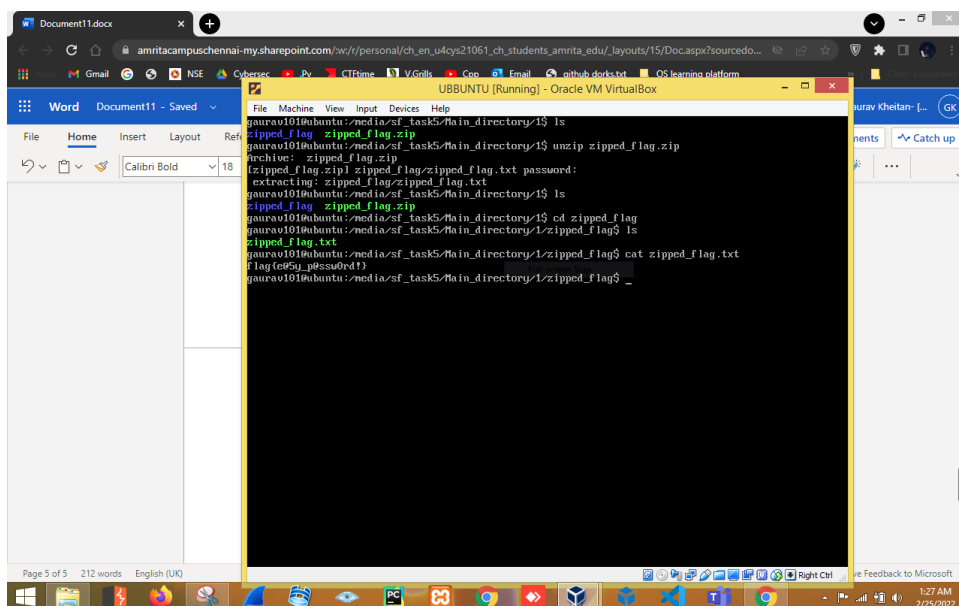
Inside this directory we got the password for the zip file in the directory named "1"

Also, some text file contains the flag



```
1.txt 2.txt find_ne
gaurav101@ubuntu:/media/sf_task5/Main_directory/3$ cat 2.txt
No Flag here
gaurav101@ubuntu:/media/sf_task5/Main_directory/3$ cd find_ne$ ls
4
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne$ cd 1
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1$ ls
2
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1$ cd 2
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1/2$ ls
3
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1/2$ cd 3
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1/2/3$ ls
4
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1/2/3$ cd 4
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1/2/3/4$ ls
5 password_for_zip.txt
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1/2/3/4$ cat password_for_zip.txt
zip_file_huh?
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1/2/3/4$ cd 5
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1/2/3/4/5$ ls
6
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1/2/3/4/5$ cd 6
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1/2/3/4/5/6$ ls
7
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1/2/3/4/5/6$ cd 7
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1/2/3/4/5/6/7$ ls
8
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1/2/3/4/5/6/7$ cd 8
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1/2/3/4/5/6/7/8$ ls
flag.txt.txt
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1/2/3/4/5/6/7/8$ cat flag.txt
cat: flag.txt: No such file or directory
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1/2/3/4/5/6/7/8$ cat flag.txt.txt
flag{Y0u_f0und_m3!}
gaurav101@ubuntu:/media/sf_task5/Main_directory/3/find_ne/1/2/3/4/5/6/7/8$ _
```

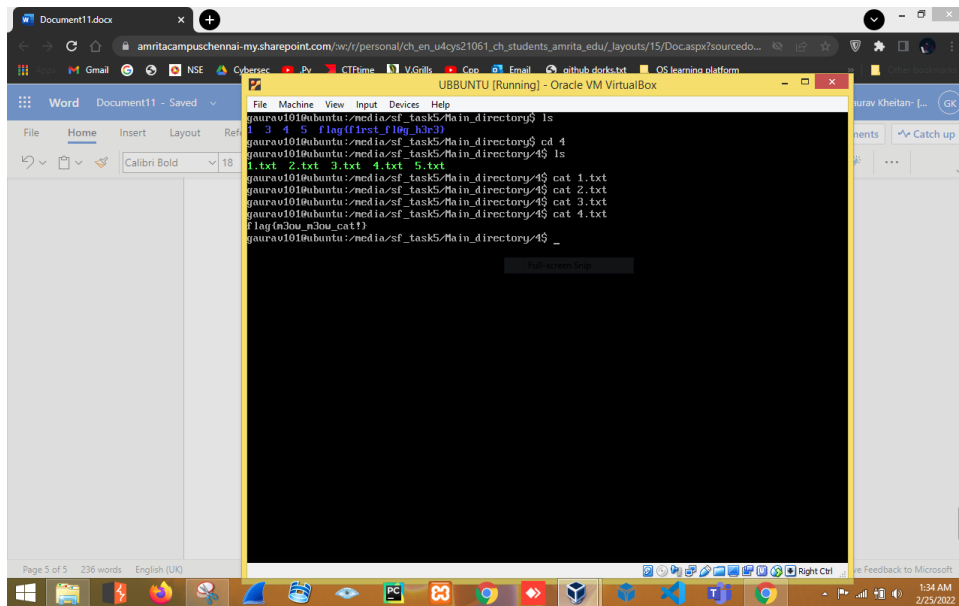
2)flag{Y0u\_f0und\_m3!}



```
gaurav101@ubuntu:/media/sf_task5/Main_directory/1$ ls
zipped_flag zipped_flag.zip
gaurav101@ubuntu:/media/sf_task5/Main_directory/1$ unzip zipped_flag.zip
Archive:  zipped_flag.zip
(zipped_flag.zip) zipped_flag/zipped_flag.txt password:
extracting: zipped_flag/zipped_flag.txt
gaurav101@ubuntu:/media/sf_task5/Main_directory/1$ ls
zipped_flag zipped_flag.zip
gaurav101@ubuntu:/media/sf_task5/Main_directory/1$ cd zipped_flag
gaurav101@ubuntu:/media/sf_task5/Main_directory/1/zipped_flag$ ls
zipped_flag.txt
gaurav101@ubuntu:/media/sf_task5/Main_directory/1/zipped_flag$ cat zipped_flag.txt
flag{e@5y_p@ssw0rd!}
gaurav101@ubuntu:/media/sf_task5/Main_directory/1/zipped_flag$ _
```

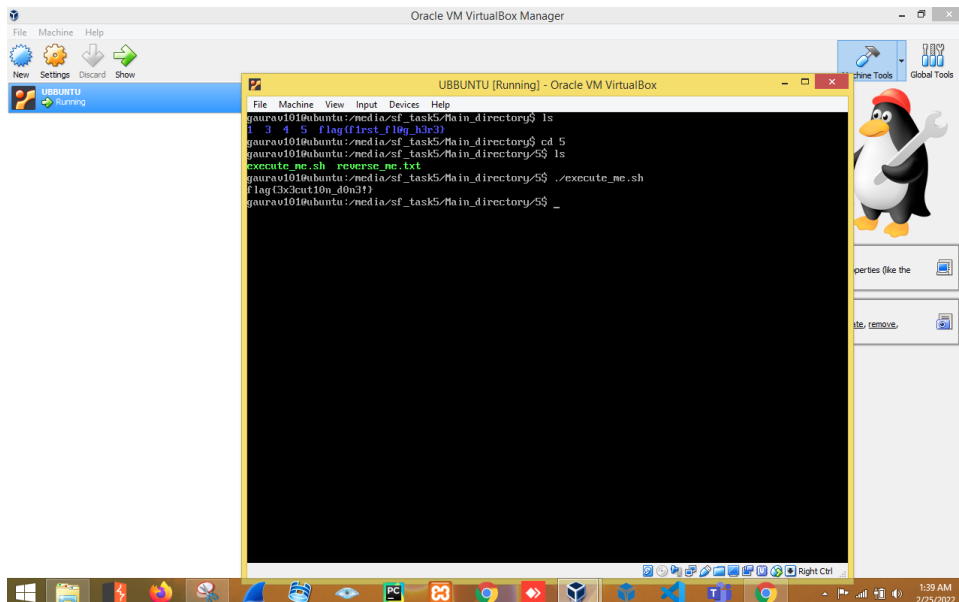
Inside the directory named “1” there was a zip file with password protected. Unzipping the file gave the text file containing the flag.

3)flag{e@5y\_p@ssw0rd!}



Getting inside the Directory named “4”. there was a text file named “4.txt” containing the flag.

4)flag{m3ow\_m30w\_cat!}



Inside the Directory named “5” there was a bash file. While executing it gave the flag.

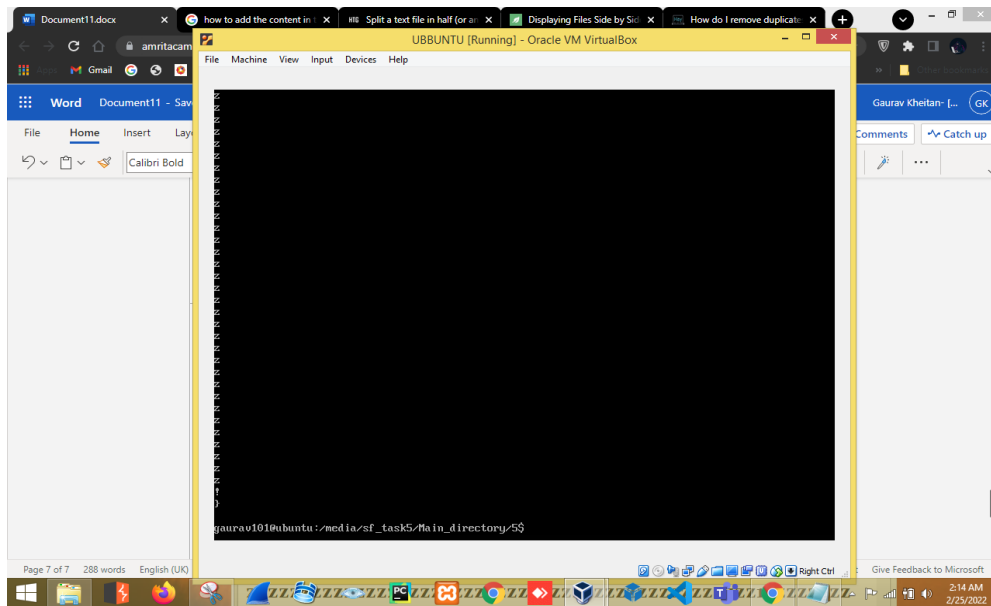
The screenshot shows a Windows desktop environment. In the background, a document editor window titled 'Document11.docx' is open, displaying a document with a table. The table has two columns: 'Name' and 'Age'. The first row contains 'Gaurav' and '18'. The document is in 'Calibri Bold' font, size 18. The status bar at the bottom of the document editor indicates 'Page 6 of 6', '270 words', and 'English (UK)'.

In the foreground, a terminal window titled 'UBUNTU [Running] - Oracle VM VirtualBox' is open. The terminal shows a series of commands and their outputs in a black background with white text. The commands and outputs are as follows:

```
gaurav@101ubuntu:/media/sf_task5/Main_directory$ ls
1 3 4 5 flag(first_flag_h3k3)
gaurav@101ubuntu:/media/sf_task5/Main_directory$ cd 5
gaurav@101ubuntu:/media/sf_task5/Main_directory/5$ ls
execute_me.sh reverse_me.txt
gaurav@101ubuntu:/media/sf_task5/Main_directory/5$ ./execute_me.sh
flag(3k3cut10n_d0n3t)
gaurav@101ubuntu:/media/sf_task5/Main_directory/5$ cat reverse_me.txt
f
0
n
0
t
5
1
C
n
t
(
t
(
t
(
t
f
gaurav@101ubuntu:/media/sf_task5/Main_directory/5$ _
```

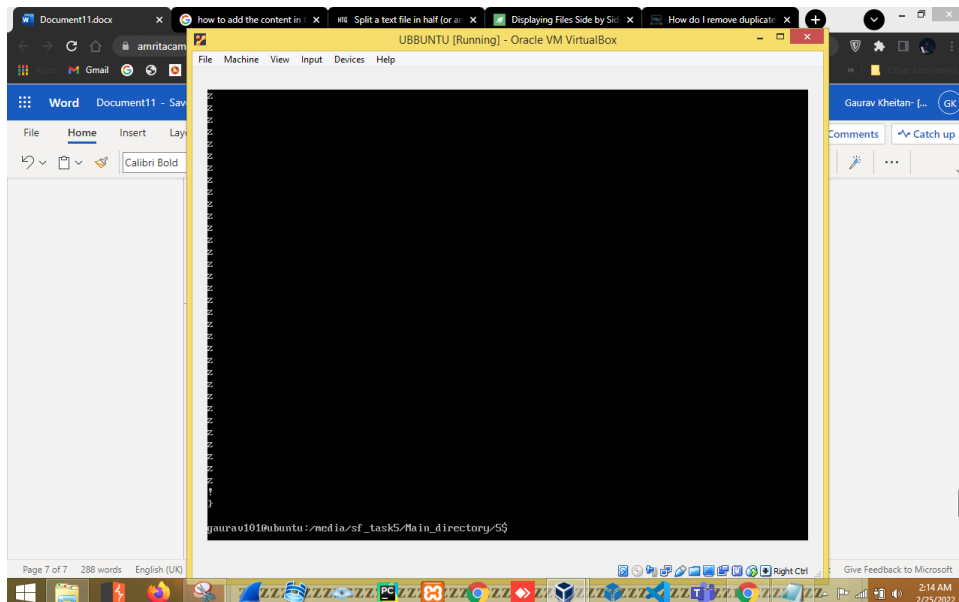
The terminal window also shows a 'Run Window Script' button in the center.

## 6)flag{t@c\_15\_fun!}



Inside the directory named “5” there are some hidden files named “comapare\_me1.txt” with the flag hiding inside it.

**7) flag{d1ff\_comm@ndis\_u53ful!}**



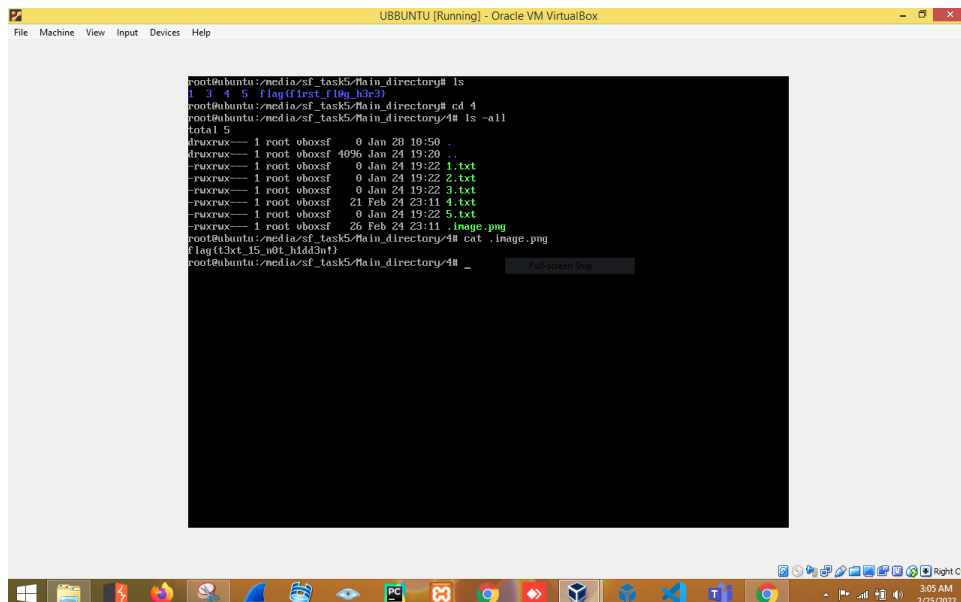
**8) flag{comm@nd}**





Hidden file was present in the directory “3” named “flag.txt” .

## 10) flag{h1dden\_fil3!}



```
root@ubuntu:/media/sf_task5/main_directory# ls
1 3 4 5 flag{first_flag_h3r3}
root@ubuntu:/media/sf_task5/main_directory# cd 4
root@ubuntu:/media/sf_task5/main_directory/4# ls -all
total 5
drwxr-xr-x 1 root vboxsf  0 Jan 28 10:50 .
drwxr-xr-x 1 root vboxsf 4096 Jan 24 19:20 ..
-rwxr-xr-x 1 root vboxsf  0 Jan 24 19:22 1.txt
-rwxr-xr-x 1 root vboxsf  0 Jan 24 19:22 2.txt
-rwxr-xr-x 1 root vboxsf  0 Jan 24 19:22 3.txt
-rwxr-xr-x 1 root vboxsf 21 Feb 24 23:11 4.txt
-rwxr-xr-x 1 root vboxsf  0 Jan 24 19:22 5.txt
-rwxr-xr-x 1 root vboxsf 26 Feb 24 23:11 .image.png
root@ubuntu:/media/sf_task5/main_directory/4# cat .image.png
flag{t3xt_15_n0t_h1dd3n!}
root@ubuntu:/media/sf_task5/main_directory/4#
```

Image file named “.image.png” was hidden inside the directory named “4”

## 11)flag{t3xt\_15\_n0t\_h1dd3n!}

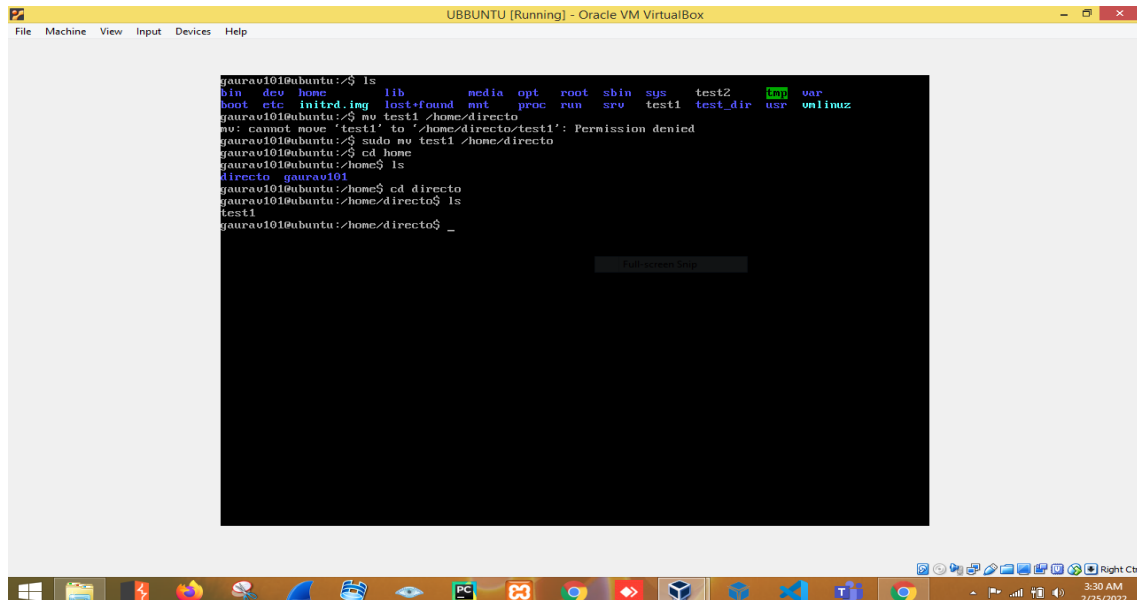
**mv command:-**

Mv command is used to move the file to the specific directory.

**Syntax: -**

Mv <file name> <directory name>

We are moving the file named “test1” to the directory named “directo” inside /home directory.



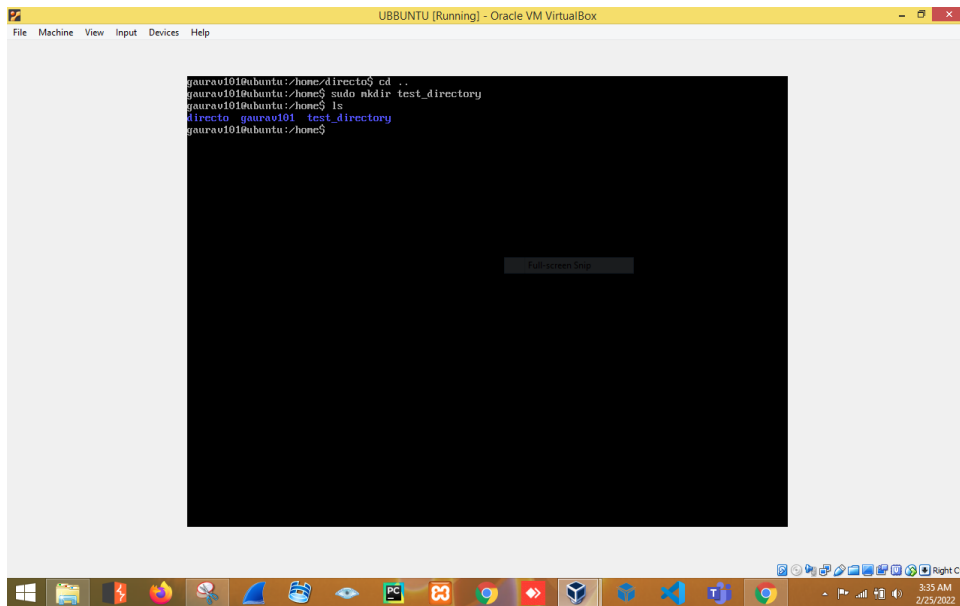
```
gauravi01@ubuntu:~$ ls
bin  dev  home  lib  media  opt  root  sbin  sys  test2  var
boot  etc  initrd.img  lost+found  mnt  proc  run  srv  test1  test_dir  usr  onlinuz
gauravi01@ubuntu:~$ mv test1 /home/directo
mv: cannot move 'test1' to '/home/directo/test1': Permission denied
gauravi01@ubuntu:~$ sudo mv test1 /home/directo
gauravi01@ubuntu:~$ cd /home
gauravi01@ubuntu:~$ ls
directo  gauravi01
gauravi01@ubuntu:~$ cd directo
gauravi01@ubuntu:~/directo$ ls
test1
gauravi01@ubuntu:~/directo$ _
```

## mkdir command: -

The mkdir command in Linux/Unix allows users to create or make new directories. mkdir stands for “make directory.”

## Syntax:-

mkdir <directory name>



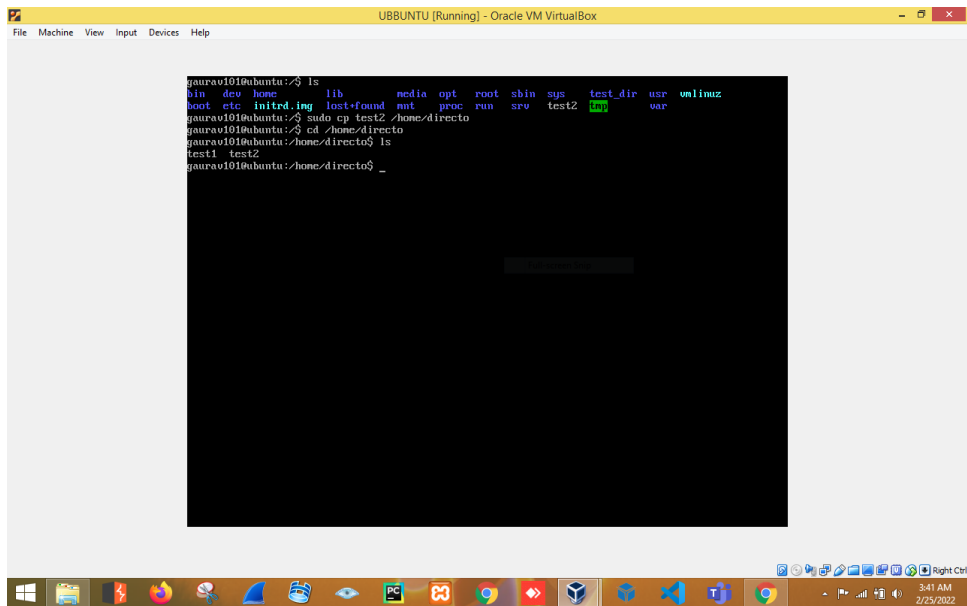
### **cp command: -**

cp command is used for copying files and directories to another location.

Now we will copy the file named "test2" into the /home/directo directory.

### **Syntax: -**

Cp <file name> <location path>

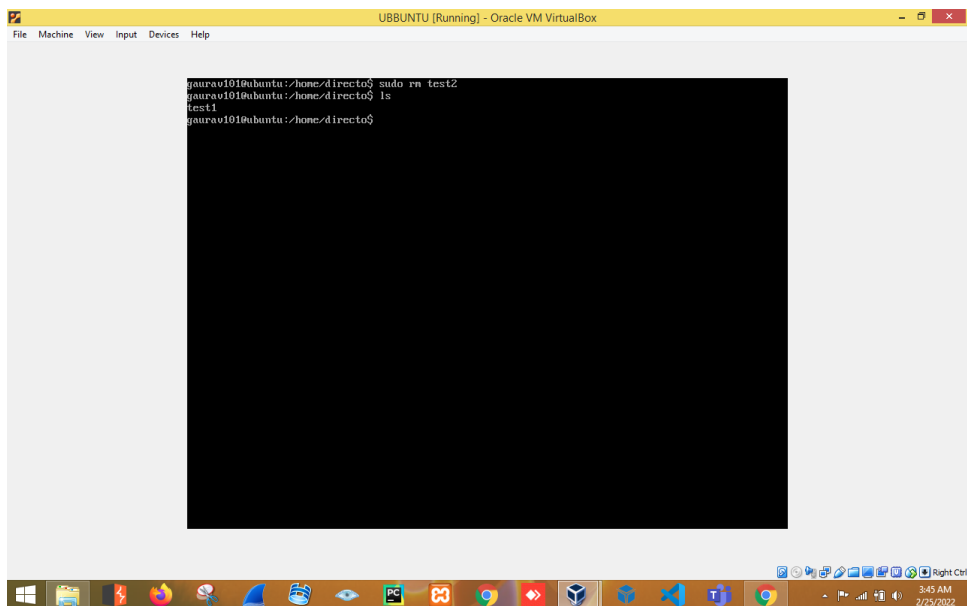


## rm command:-

rm removes each file specified on the command line

## Syntax: -

Rm <file name>

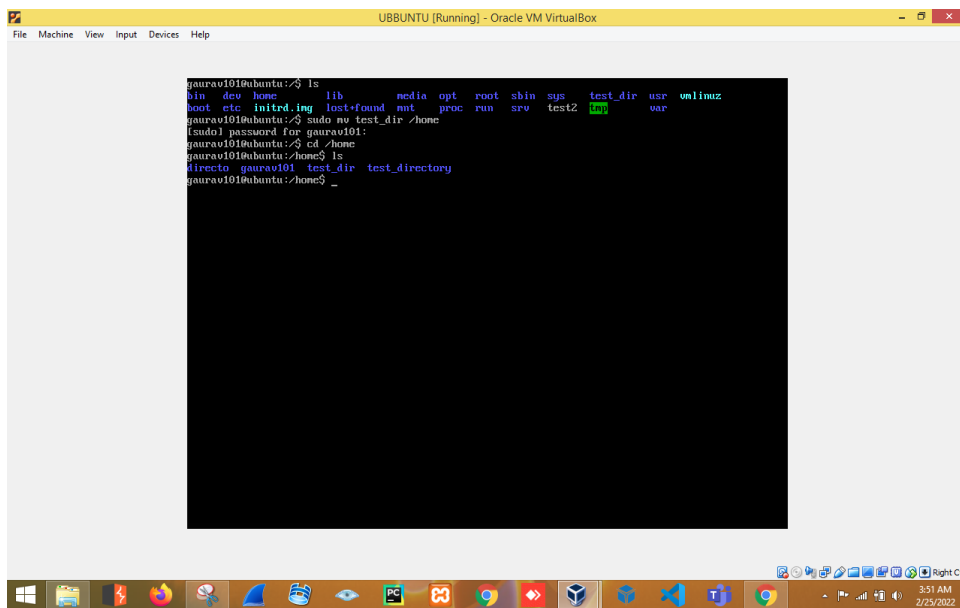


Moving the directory to the other location using mv command

Moving directory named “test\_dir” to the location /home directory

**Syntax: -**

Mv <directory name> <location path>

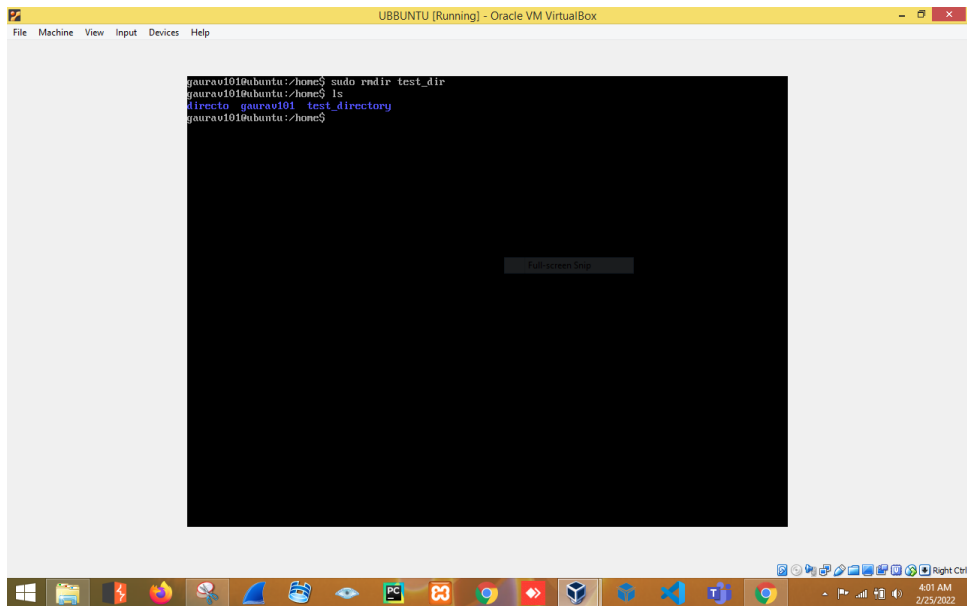
A screenshot of a terminal window titled "UBUNTU [Running] - Oracle VM VirtualBox". The terminal shows a user named gaurav101@ubuntu. The user runs 'ls' and lists the contents of the current directory, which includes 'bin', 'dev', 'home', 'lib', 'media', 'opt', 'root', 'sbin', 'sys', 'test\_dir', 'usr', and 'vmlinuz'. Then, the user runs 'sudo mv test\_dir /home'. A password prompt appears, and the user enters 'gaurav101'. The terminal then shows the user has successfully moved the directory, as 'test\_dir' is no longer in the current directory listing. The terminal window has a menu bar with 'File', 'Machine', 'View', 'Input', 'Devices', and 'Help'. The bottom of the window shows a taskbar with various application icons and a system clock indicating 3:31 AM on 2/25/2022.

**rmdir command: -**

rmdir is a command-line utility for deleting empty directories

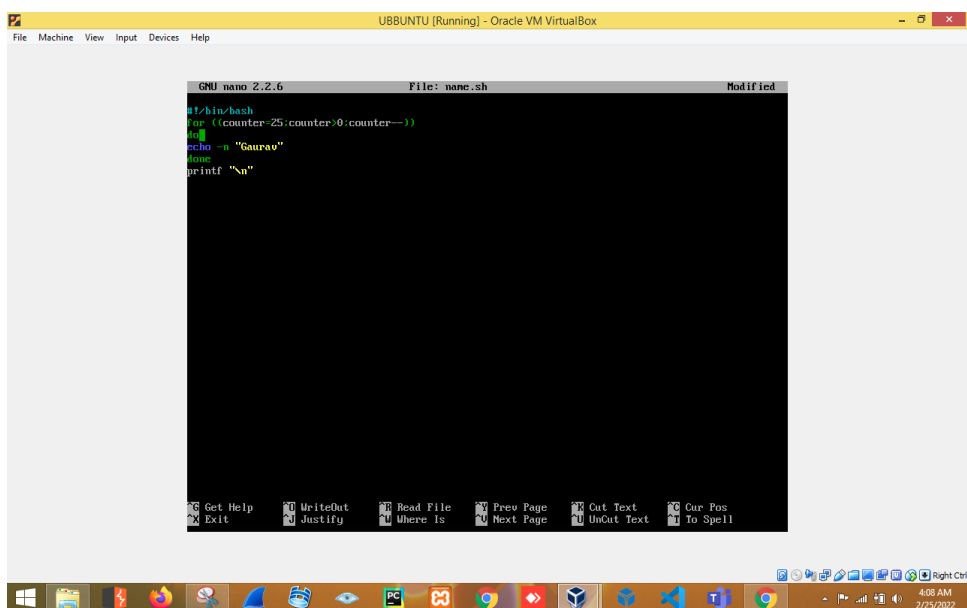
**Syntax:**

rmdir <directory name>

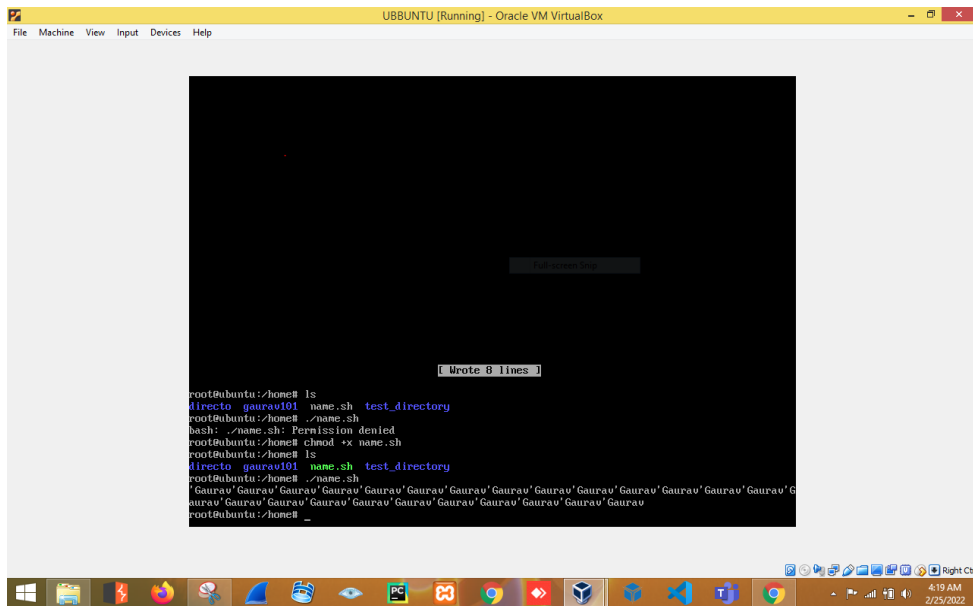


## PART –2

- 1) Write a bash script to echo your name 25 times



Output: -



2) What command should I use to display the first 30 entries of syslog file?

“Head” command is used to display the first few lines of the file.

Here I am printing the first 30 lines of the test file “system.log” present in the home directory

**Syntax:**

head <-30> <file name>



```
root@ubuntu:~/home/gaurav101# head -30 system.log
hello
this
is the
test
log file
to check
the functionality
of the
head
and
tail
command
of
the
linux system
this
is
the
task-5
of
our
cognizance
club
of
the
amrita
chennai
branch
this
task
root@ubuntu:~/home/gaurav101#
```

3) What command should I use to display the last 30 entries of syslog file?

Tail command is used to display the last few lines of the file

### Syntax:

Tail -30 <file name>

```
root@ubuntu:~/home/gaurav101# tail -30 system.log
our
cognizance
club
of
the
amrita
chennai
branch
this
task
is
related
to
linux
system
for
getting
friendly
with
the
CLI
version
this
task
is
really
interesting
to
do
root@ubuntu:~/home/gaurav101#
```

4) What command should I use to arrange the entries of a file  
Alphabetically

Reverse order

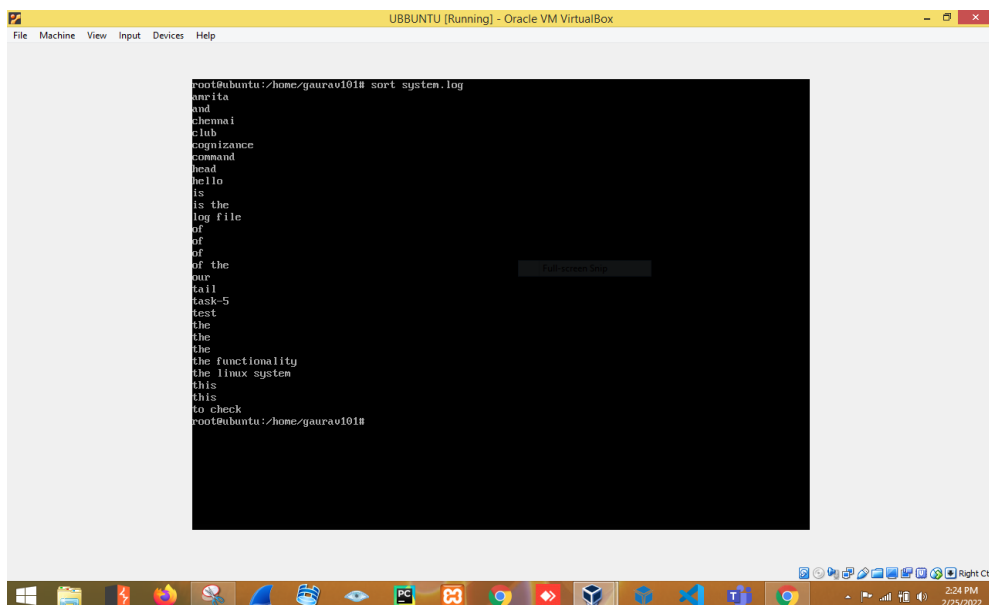
Numerical order

To arrange the entries of the file we use “sort” command with different flags to perform sorting of different type

**To arrange the content in alphabetical order: -**

**Syntax: -**

Sort <file name>

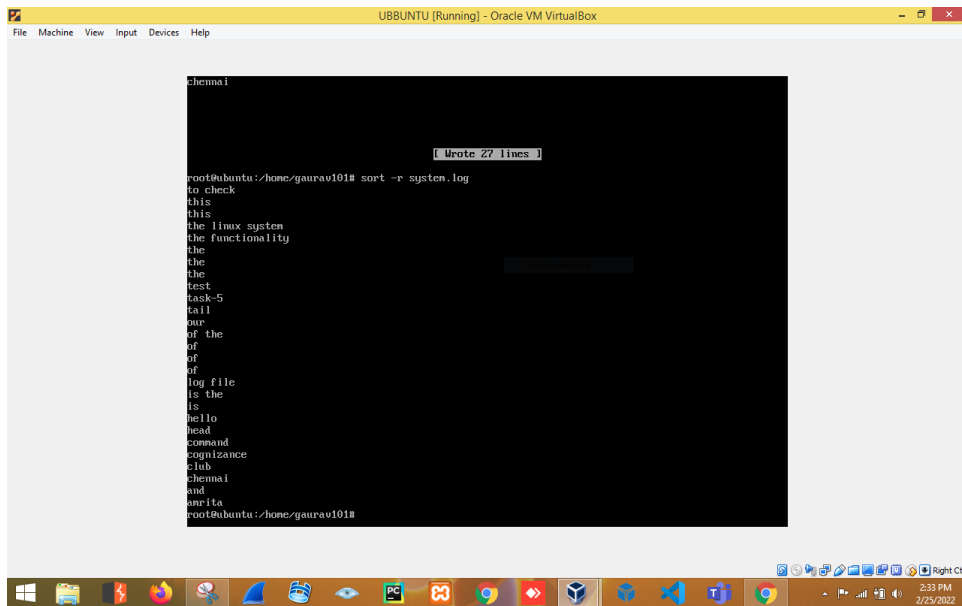
A screenshot of a terminal window titled "UBUNTU [Running] - Oracle VM VirtualBox". The terminal shows the command "root@ubuntu:/home/gaurav101# sort system.log" and its output, which lists words from a file in alphabetical order: "anrita", "and", "chennai", "club", "cognizance", "command", "head", "hello", "is", "is the", "log file", "of", "of", "of the", "our", "tail", "task-5", "test", "the", "the", "the", "the functionality", "the linux system", "this", "this", "to check". The prompt "root@ubuntu:/home/gaurav101#" is visible at the bottom of the terminal output. The window has a menu bar (File, Machine, View, Input, Devices, Help) and a taskbar at the bottom with various application icons and system status indicators.

**To arrange the content in reverse order:**

-r flag is used along with sort command to arrange the content in reverse order

**Syntax:**

Sort -r <file name>



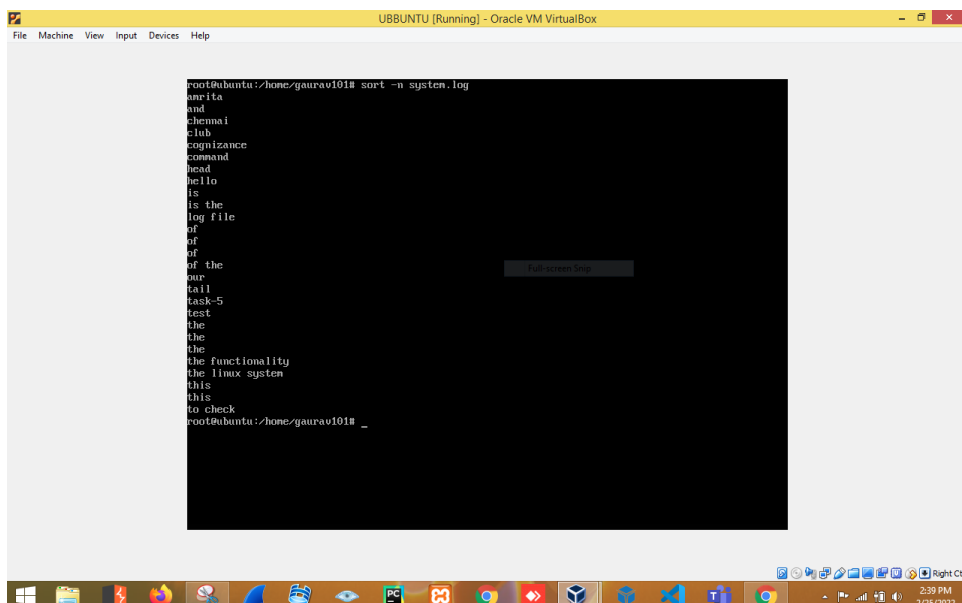
```
chennai
[ Wrote 27 lines ]
root@ubuntu:/home/gaurav101# sort -r system.log
to check
this
this
the linux system
the functionality
the
the
test
task-5
tail
our
of the
of
of
of
log file
is the
is
hello
head
command
cognizance
club
chennai
and
ancita
root@ubuntu:/home/gaurav101#
```

**TO arrange the entries in the numerical order: -**

-n flag is used along with sort command to arrange the entries in numerical order.it compares according to the string numerical value (ASCII value).

**Syntax:**

Sort -n <file name>



```
root@ubuntu:/home/gaurav101# sort -n system.log
ancita
and
chennai
club
cognizance
command
head
hello
is
is the
log file
of
of
of
of the
our
tail
task-5
test
the
the
the
the functionality
the linux system
this
this
to check
root@ubuntu:/home/gaurav101#
```

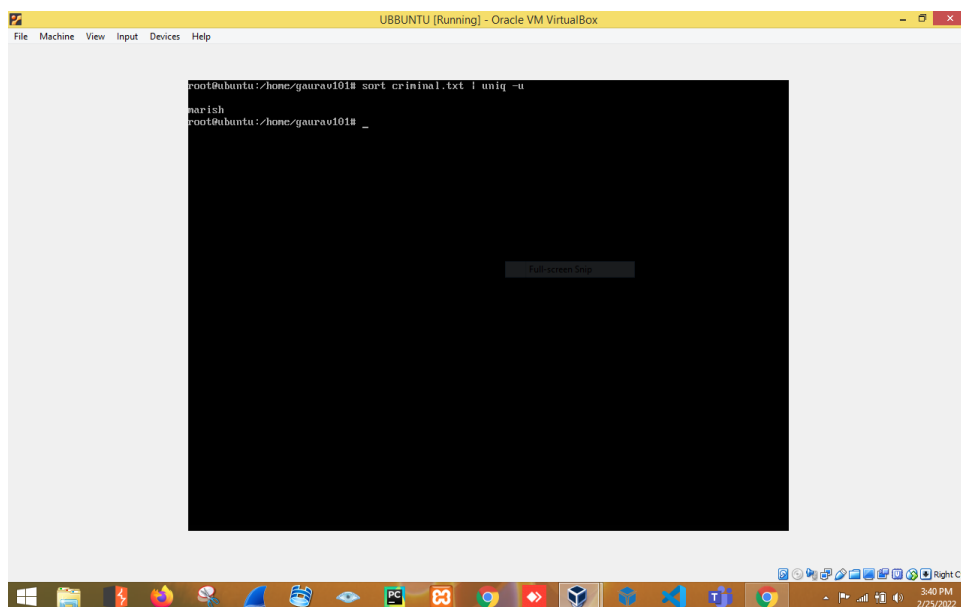
5) Copee is a hard-working cop. He found a case and almost at the verge of cracking it. It could be his best breakthrough. He has the list of criminals but lots of duplicates are there. He needs to find the only one that is different. He sought your help. How will you sort this issue?

“Uniq” command is used to remove the duplicate from the text file. For uniq to work, you must first sort the output.

### Syntax:

Sort <file name> | uniq -u

-u flag is used to find the unique entry in the file



Here we are sorting the file named “criminal.txt” containing the multiple duplicates entry and the using sort command with the flag “-u” to find the unique entry.

6) What are the four parts of file's permission?

“ls -l” command is used to display the permission of the files

Four parts of the file permission are: -

**Read:** -Read permission provides the “Read-only” permission that means no other than creator can makes changes in the file. Read permission on a directory gives you the ability to lists its content.

**Write:** Write permission provides the” Read and write only” permission that means other users can also modify the content of the file. The write permission on a directory gives you the authority to add, remove and rename files stored in the directory.

**Execute:** -In Unix/Linux, you cannot run a program unless the execute permission is set. If the execute permission is not set, you might still be able to see/modify the program code (provided read & write permissions are set), but not run it.

**Delete:** -In order to delete the file, we need read, write and execute permission on a directory to remove the file from the directory. Note a user needs no permissions on a file nor be the file's owner to delete it!

**Thank you for reading patiently.**

