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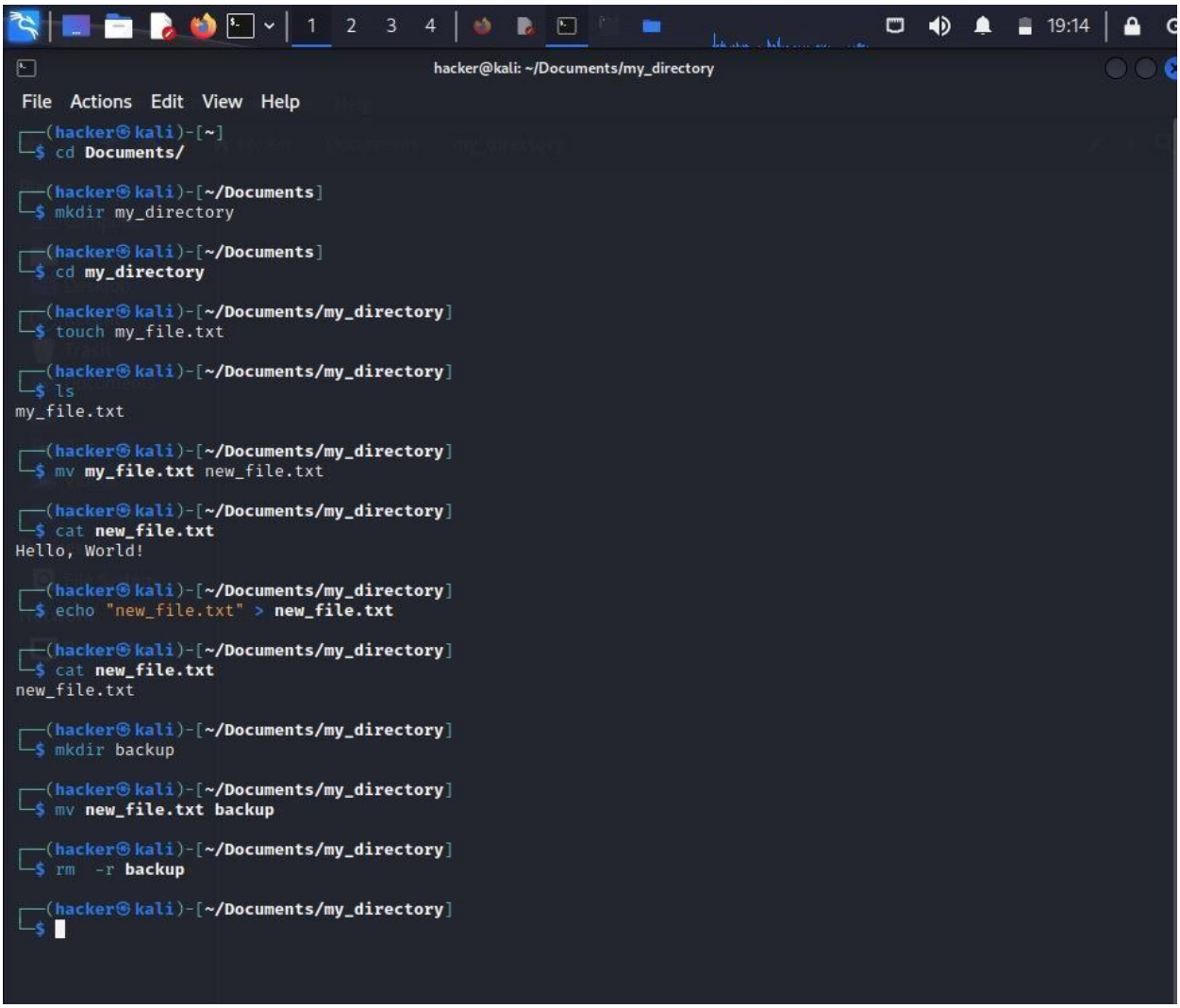
20BCE2790

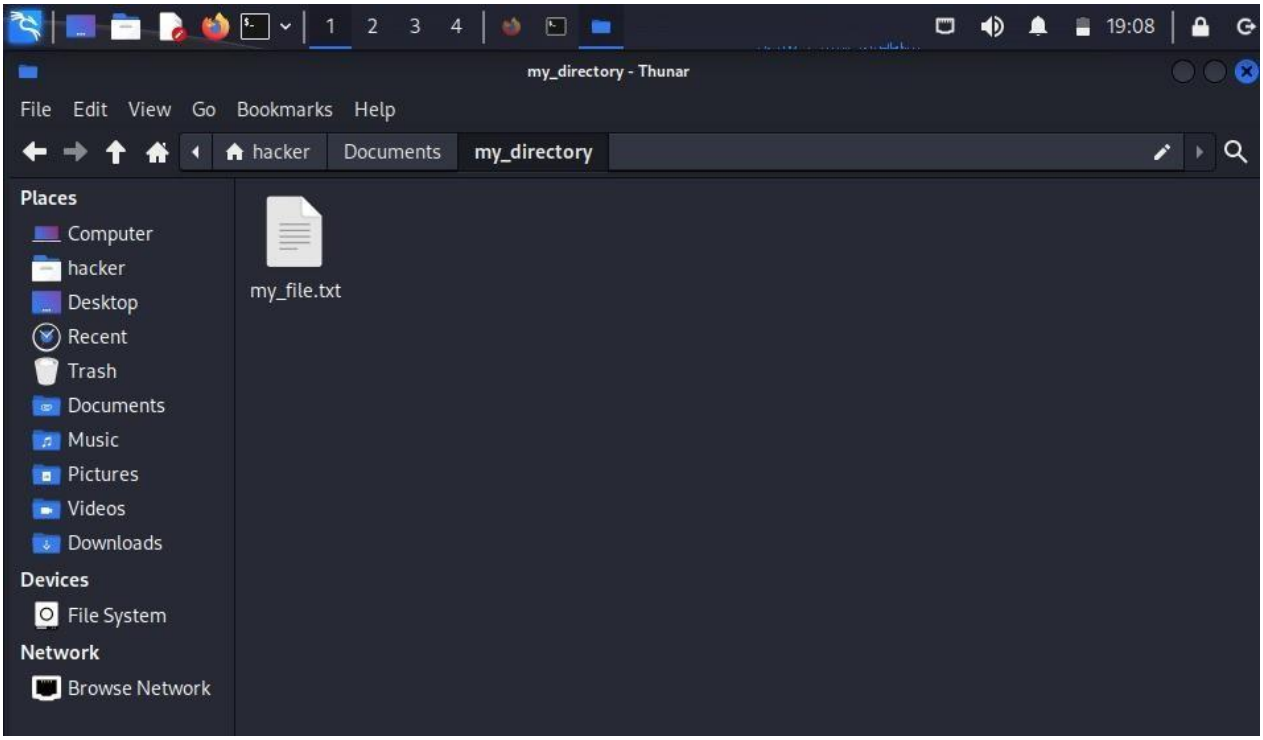
Assignment: Bash Shell BasicsTask

1: File and Directory Manipulation

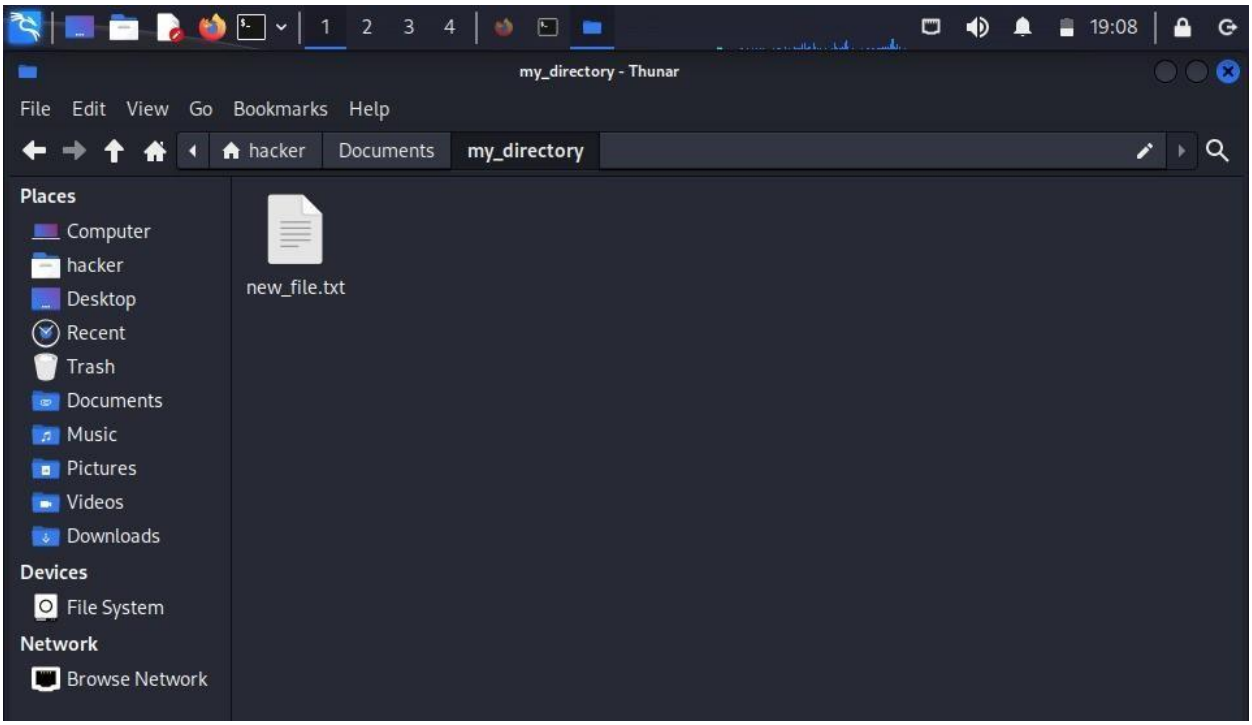
1. Create a directory called "my_directory".
2. Navigate into the "my_directory".
3. Create an empty file called "my_file.txt".
4. List all the files and directories in the current directory.
5. Rename "my_file.txt" to "new_file.txt".
6. Display the content of "new_file.txt" using a pager tool of your choice.
7. Append the text "Hello, World!" to "new_file.txt".
8. Create a new directory called "backup" within "my_directory".
9. Move "new_file.txt" to the "backup" directory.
10. Verify that "new_file.txt" is now located in the "backup" directory.
11. Delete the "backup" directory and all its contents.


1 2 3 4
19:14
hacker@kali: ~/Documents/my_directory
File Actions Edit View Help
(hacker㉿kali)-[~]
$ cd Documents/
(hacker㉿kali)-[~/Documents]
$ mkdir my_directory
(hacker㉿kali)-[~/Documents]
$ cd my_directory
(hacker㉿kali)-[~/Documents/my_directory]
$ touch my_file.txt
(hacker㉿kali)-[~/Documents/my_directory]
$ ls
my_file.txt
(hacker㉿kali)-[~/Documents/my_directory]
$ mv my_file.txt new_file.txt
(hacker㉿kali)-[~/Documents/my_directory]
$ cat new_file.txt
Hello, World!
(hacker㉿kali)-[~/Documents/my_directory]
$ echo "new_file.txt" > new_file.txt
(hacker㉿kali)-[~/Documents/my_directory]
$ cat new_file.txt
new_file.txt
(hacker㉿kali)-[~/Documents/my_directory]
$ mkdir backup
(hacker㉿kali)-[~/Documents/my_directory]
$ mv new_file.txt backup
(hacker㉿kali)-[~/Documents/my_directory]
$ rm -r backup
(hacker㉿kali)-[~/Documents/my_directory]
$

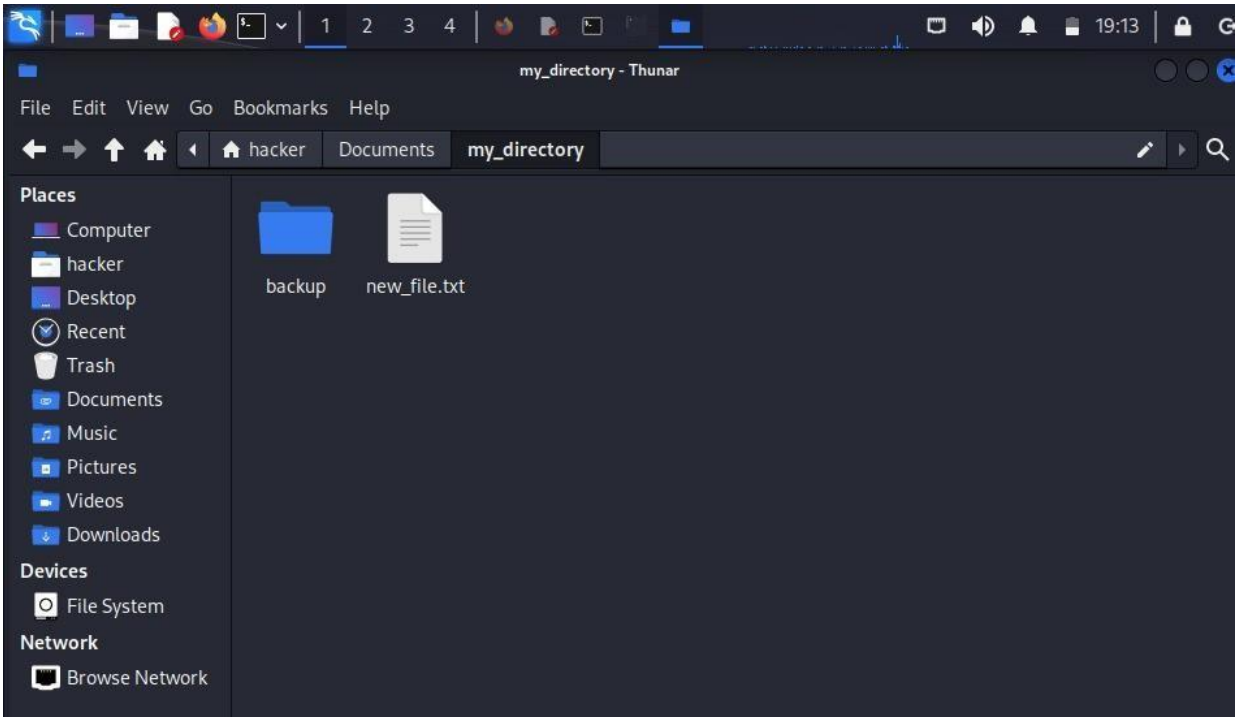
Creating a file name my_file.txt



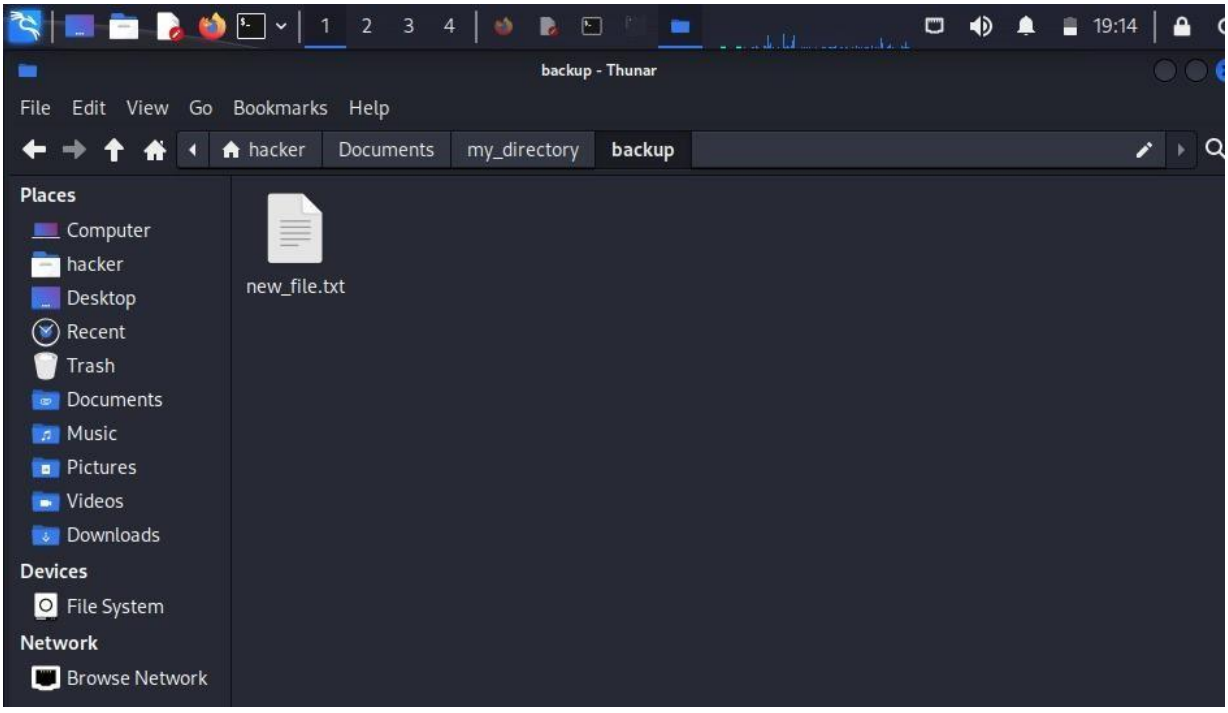
mv my_file.txt to new_file.txt



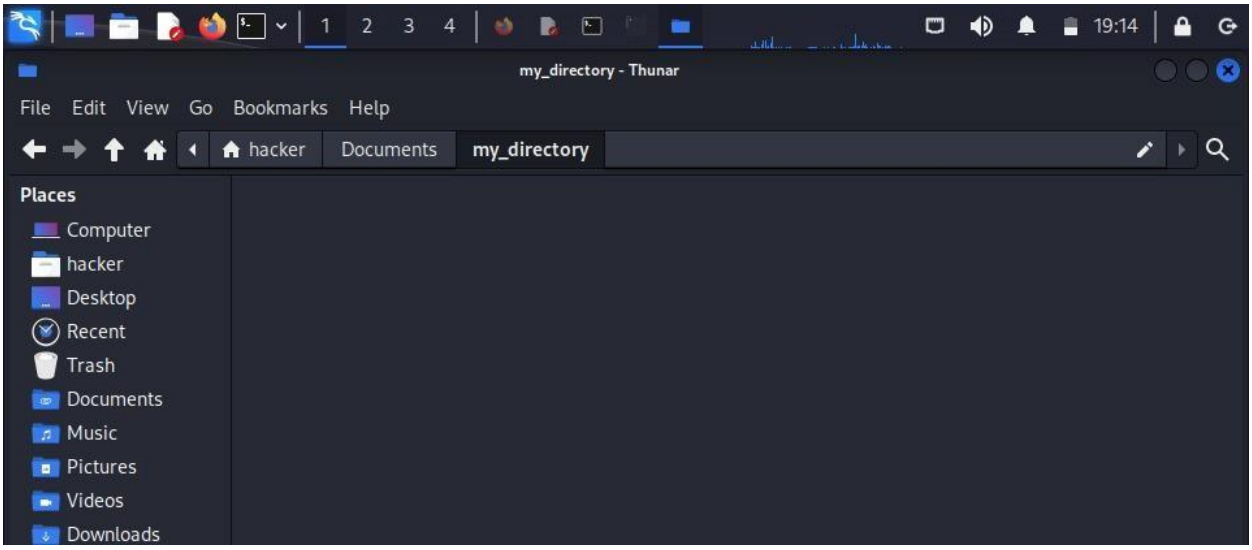
Creating a new directory with name backup in the same directory name my_direcrory



Move the new_file.txt to backup directory



Remove the backup directory and its contents



Task 2: Permissions and Scripting

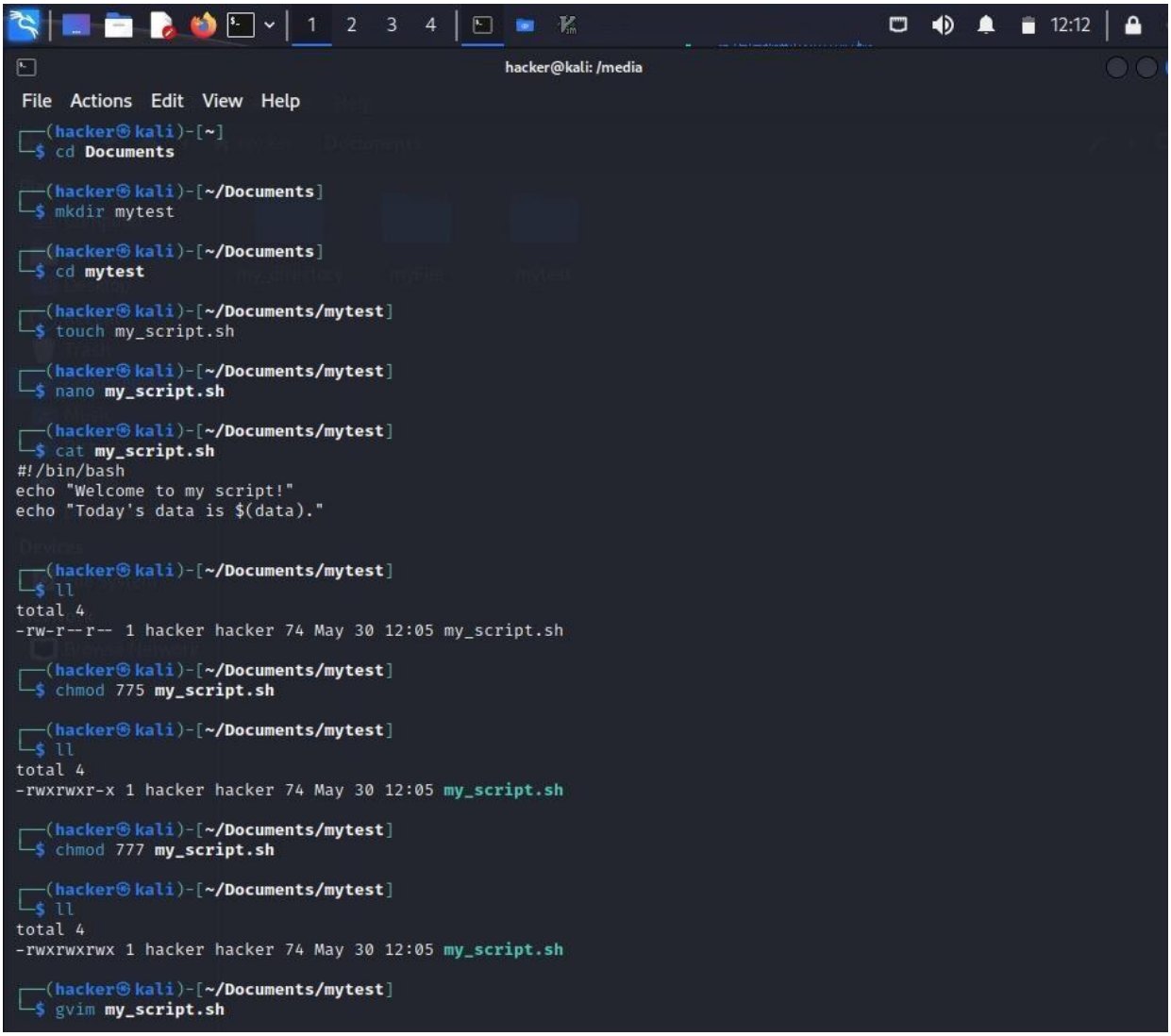
- Create a new file called "my_script.sh".

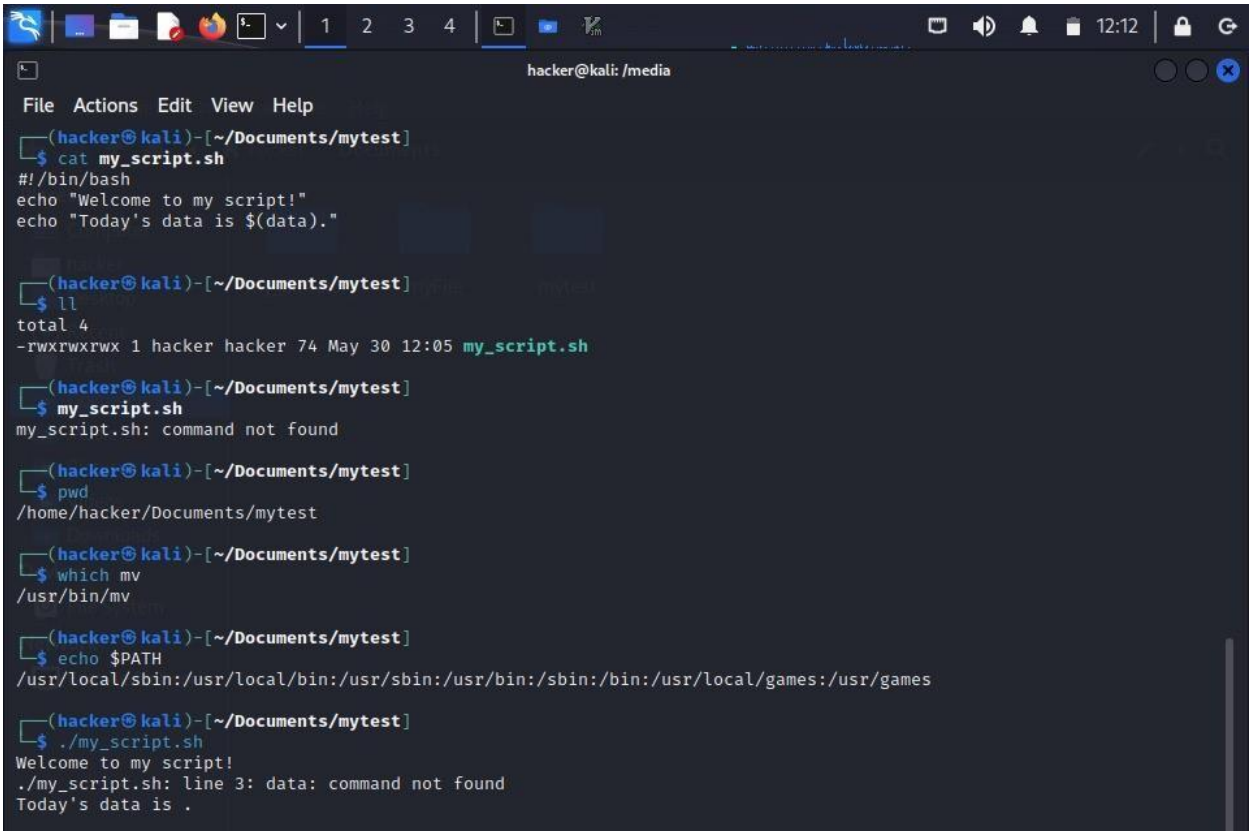
- Edit "my_script.sh" u

to

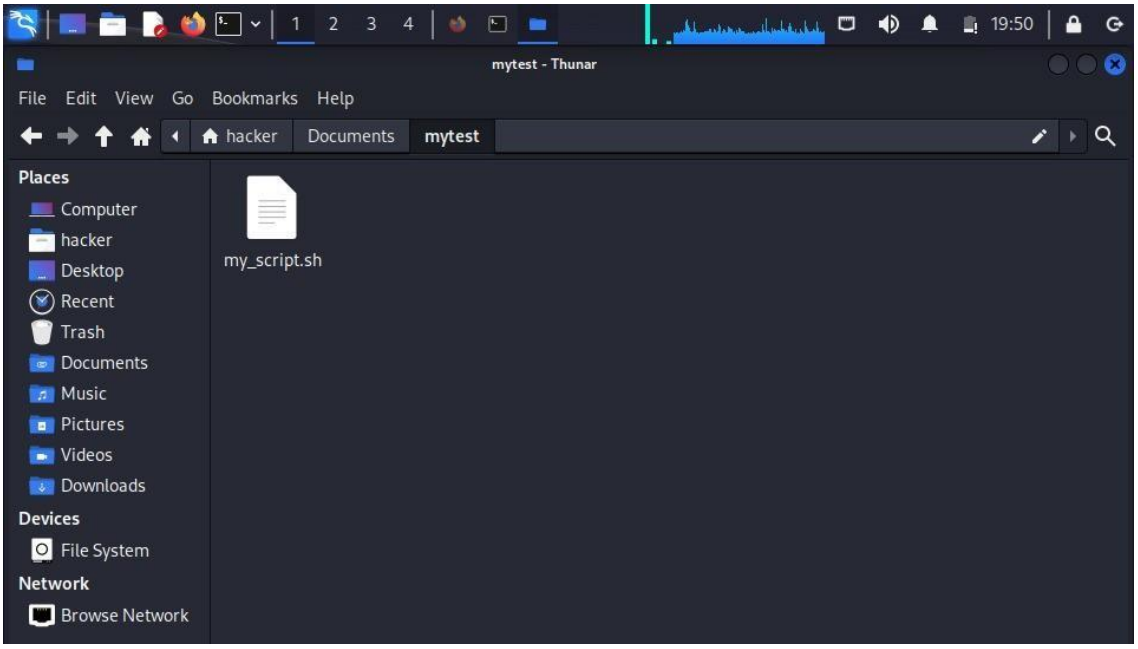
#!/bin/bash
echo "Welcome to my script!" echo "Today's date is $(date)."Save and exit the file.

- Make "my_script.sh" executable.
- Run "my_script.sh" and verify that the output matches the expected result.

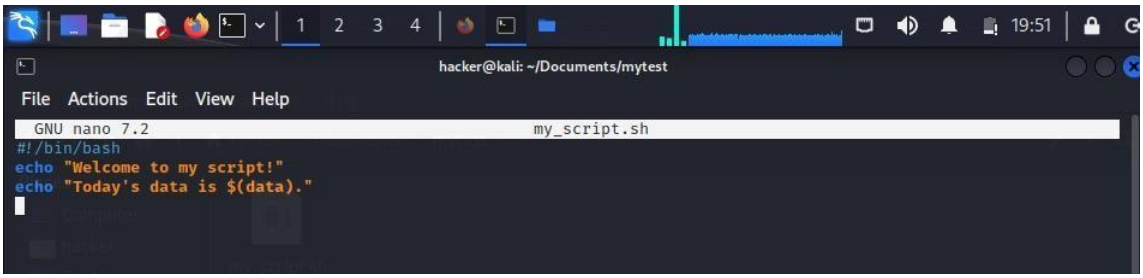




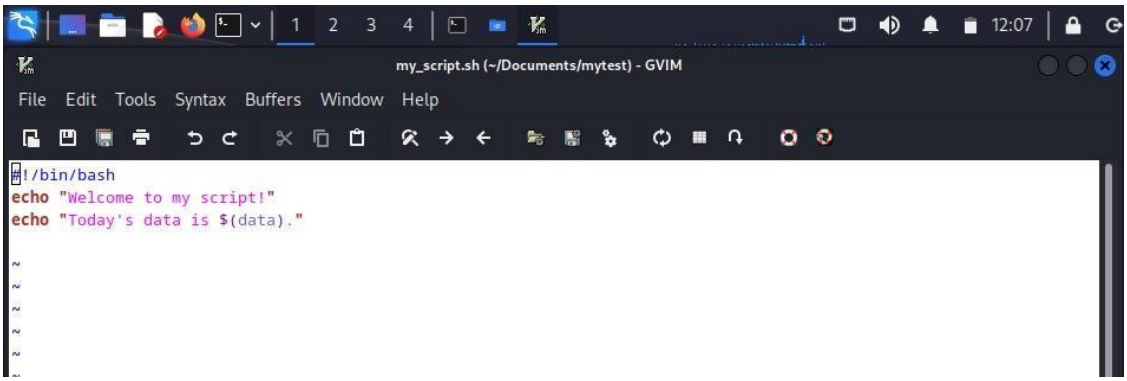
Create a new file with name my_script.sh



nano command window



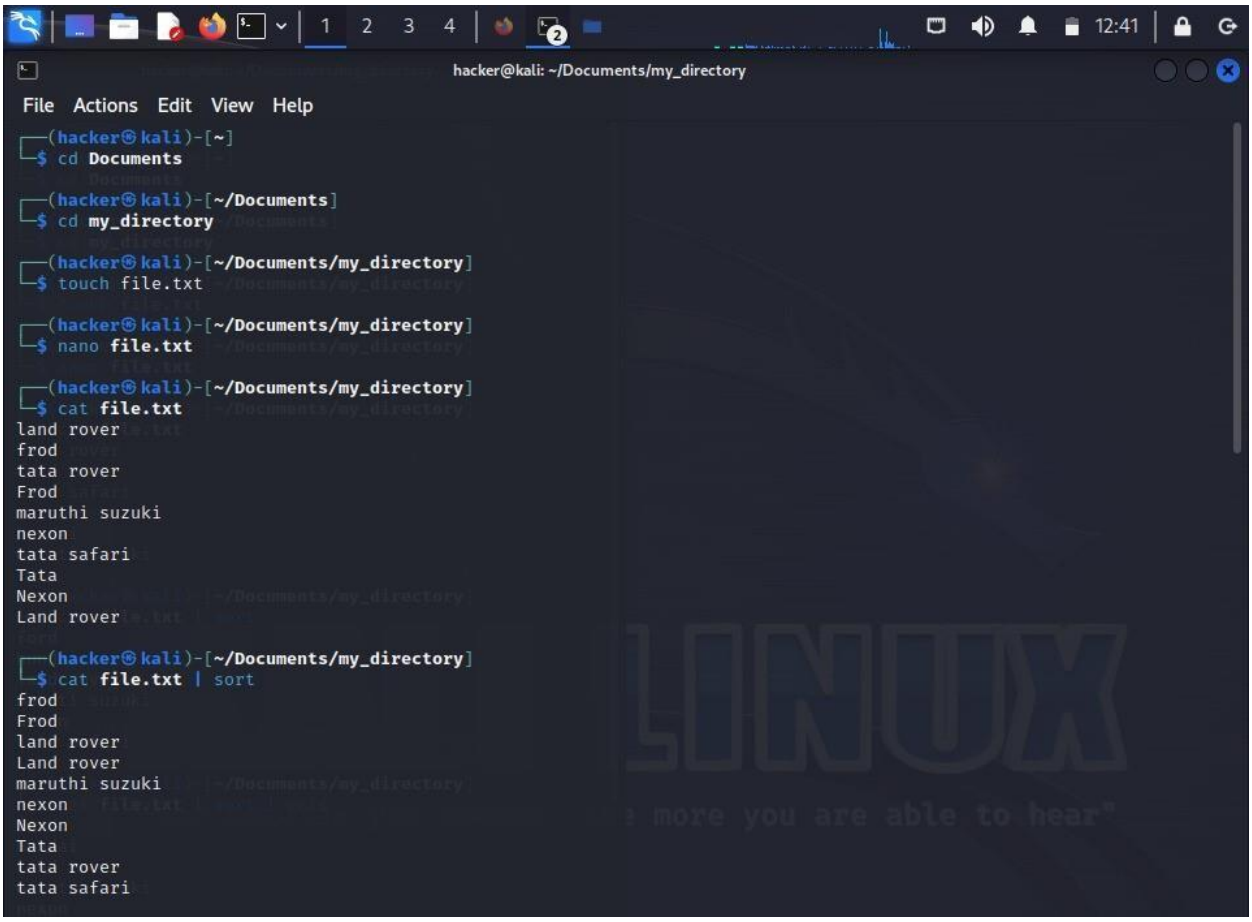
Running the file "my_script.sh" and verifying that the output matches withthe expected output.

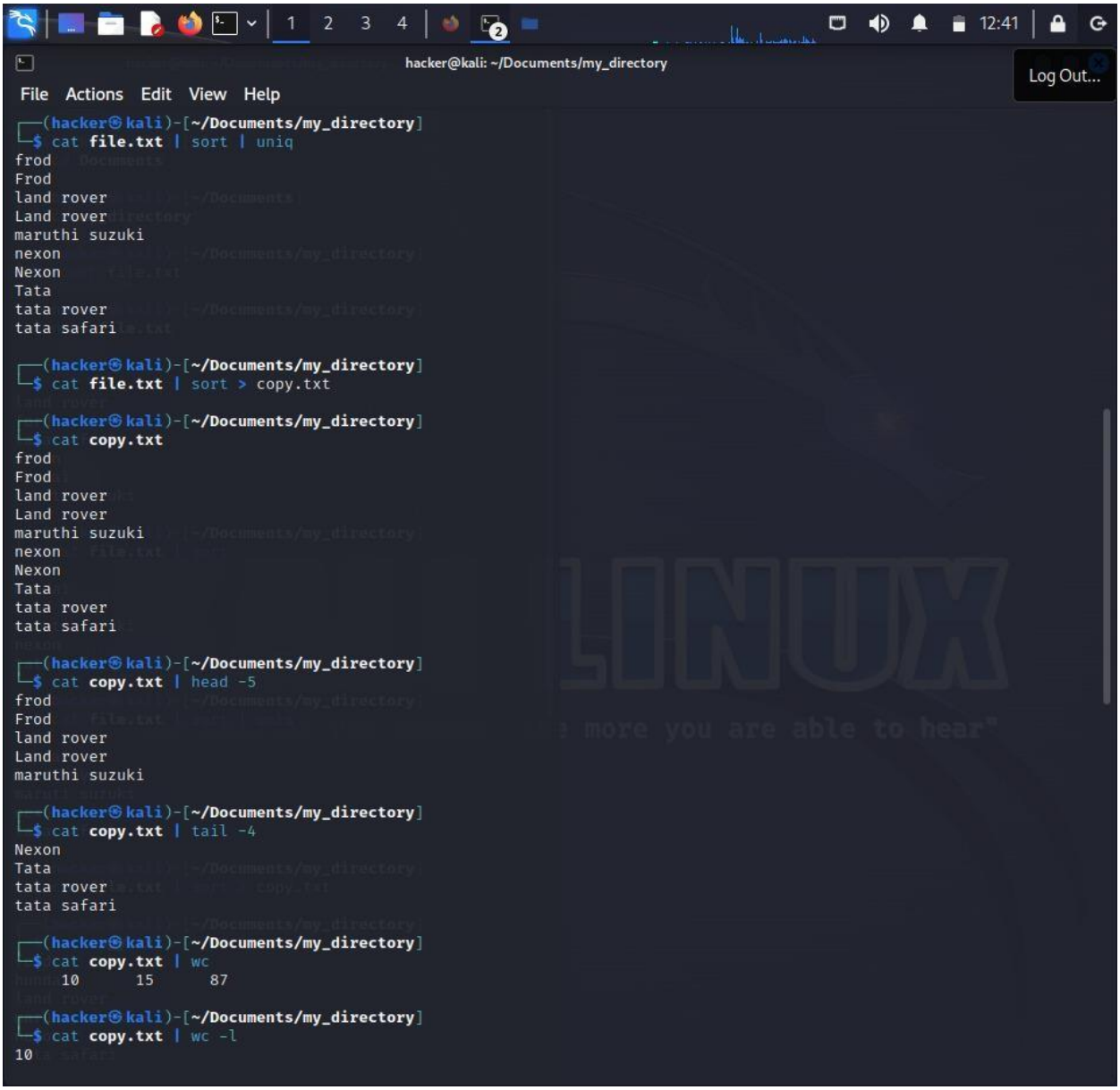


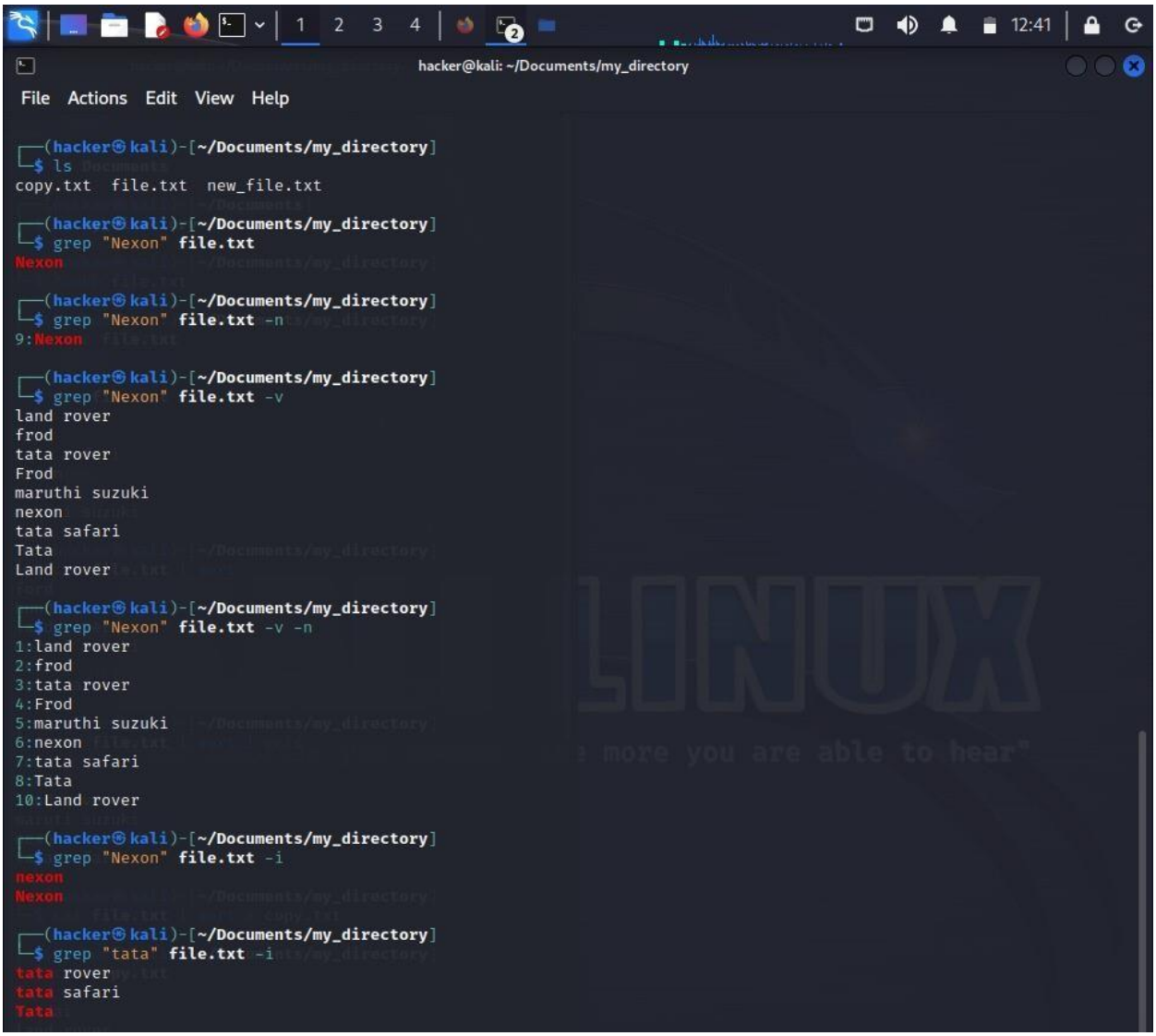
Task 3: Command Execution and Pipelines

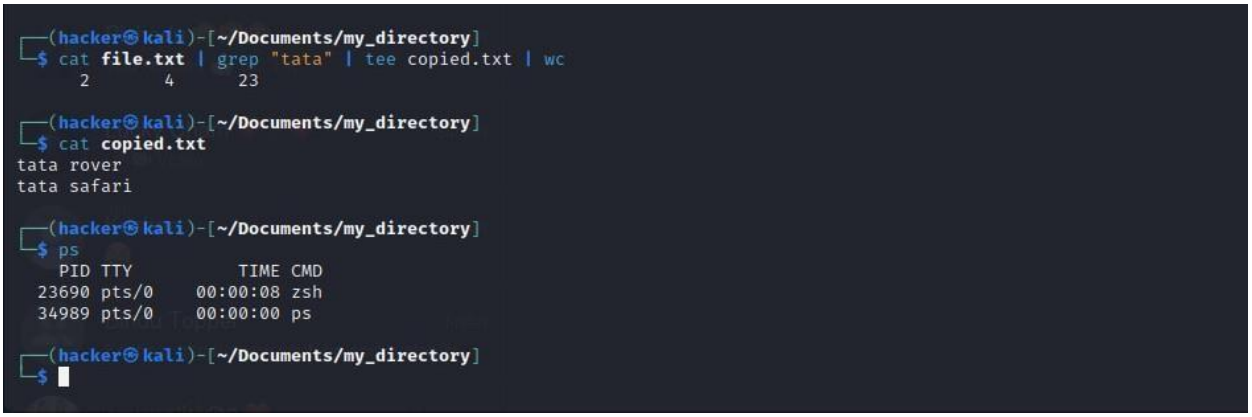
- List all the processes running on your system using the "ps" command.
- Use the "grep" command to filter the processes list and display onlythe processes with "bash" in their name.
- Use the "wc" command to count the number of lines in the filtered output.

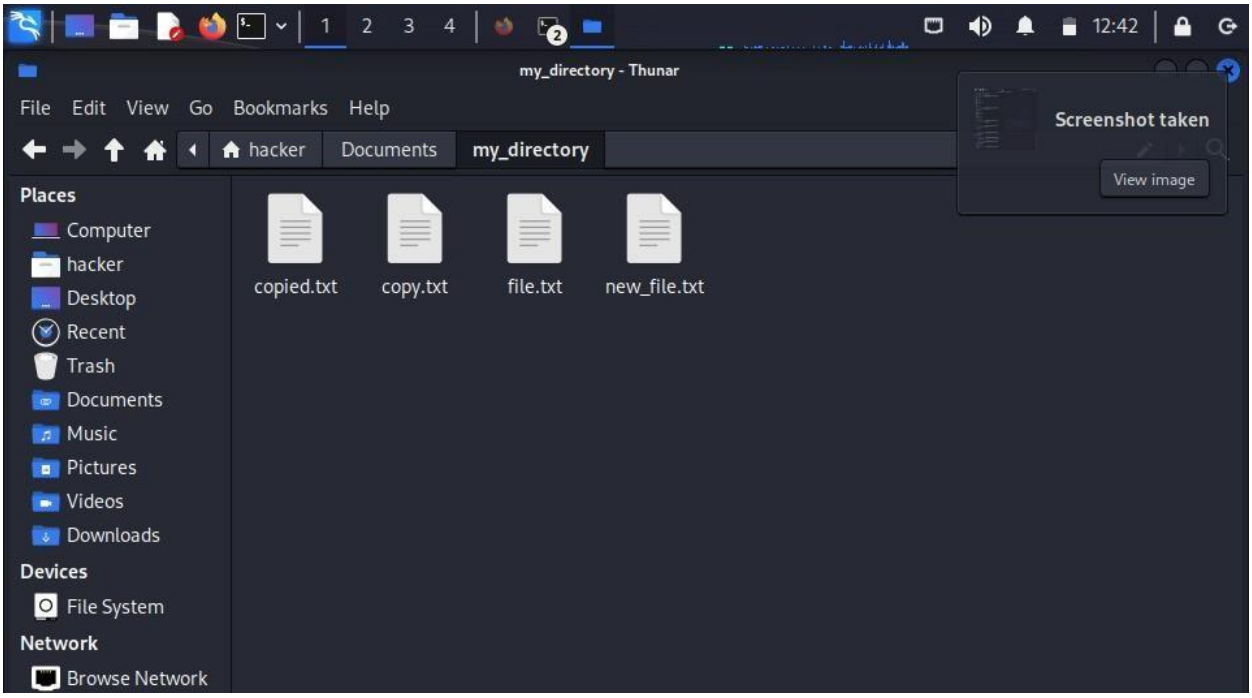
cat – to display the content of the file
cat file.txt | sort – to sort the names in alphabetical order
cat file.txt | sort | uniq – to sort the names in alphabetical order and the names should not repeat
cat file.txt | sort > copy.txt – copy the file content from one file to otherhead – top of the content in the file
tail – bottom of the content in the filewc – it us a word count
wc -l – number of lines in the list or file


1 2 3 4
12:41
hacker@kali: ~/Documents/my_directory
File Actions Edit View Help
(hacker㉿kali)-[~]
$ cd Documents
(hacker㉿kali)-[~/Documents]
$ cd my_directory
(hacker㉿kali)-[~/Documents/my_directory]
$ touch file.txt
(hacker㉿kali)-[~/Documents/my_directory]
$ nano file.txt
(hacker㉿kali)-[~/Documents/my_directory]
$ cat file.txt
land rover
frod
tata rover
Frod
maruthi suzuki
nexon
tata safari
Tata
Nexon
Land rover
(hacker㉿kali)-[~/Documents/my_directory]
$ cat file.txt | sort
frod
Frod
land rover
Land rover
maruthi suzuki
nexon
Nexon
Tata
tata rover
tata safari


1 2 3 4
12:41
hacker@kali: ~/Documents/my_directory
Log Out...
File Actions Edit View Help
(hacker㉿kali)-[~/Documents/my_directory]
$ cat file.txt | sort | uniq
frod
Frod
land rover
Land rover
maruthi suzuki
nexon
Nexon
Tata
tata rover
tata safari
(hacker㉿kali)-[~/Documents/my_directory]
$ cat file.txt | sort > copy.txt
(hacker㉿kali)-[~/Documents/my_directory]
$ cat copy.txt
frod
Frod
land rover
Land rover
maruthi suzuki
nexon
Nexon
Tata
tata rover
tata safari
(hacker㉿kali)-[~/Documents/my_directory]
$ cat copy.txt | head -5
frod
Frod
land rover
Land rover
maruthi suzuki
(hacker㉿kali)-[~/Documents/my_directory]
$ cat copy.txt | tail -4
Nexon
Tata
tata rover
tata safari
(hacker㉿kali)-[~/Documents/my_directory]
$ cat copy.txt | wc
10 15 87
(hacker㉿kali)-[~/Documents/my_directory]
$ cat copy.txt | wc -l
10


hacker@kali: ~/Documents/my_directory
File Actions Edit View Help
(hacker㉿kali)-[~/Documents/my_directory]
$ ls
copy.txt file.txt new_file.txt
(hacker㉿kali)-[~/Documents/my_directory]
$ grep "Nexon" file.txt
Nexon
(hacker㉿kali)-[~/Documents/my_directory]
$ grep "Nexon" file.txt -n
9:Nexon
(hacker㉿kali)-[~/Documents/my_directory]
$ grep "Nexon" file.txt -v
land rover
frod
tata rover
Frod
maruthi suzuki
nexon
tata safari
Tata
Land rover
(hacker㉿kali)-[~/Documents/my_directory]
$ grep "Nexon" file.txt -v -n
1:land rover
2:frod
3:tata rover
4:Frod
5:maruthi suzuki
6:nexon
7:tata safari
8:Tata
10:Land rover
(hacker㉿kali)-[~/Documents/my_directory]
$ grep "Nexon" file.txt -i
nexon
Nexon
(hacker㉿kali)-[~/Documents/my_directory]
$ grep "tata" file.txt -i
tata rover
tata safari
Tata


(hacker㉿kali)-[~/Documents/my_directory]
$ cat file.txt | grep "tata" | tee copied.txt | wc
2 4 23
(hacker㉿kali)-[~/Documents/my_directory]
$ cat copied.txt
tata rover
tata safari
(hacker㉿kali)-[~/Documents/my_directory]
$ ps
PID TTY TIME CMD
23690 pts/0 00:00:08 zsh
34989 pts/0 00:00:00 ps
(hacker㉿kali)-[~/Documents/my_directory]
$



All tasks are performed in kali linux and verified the outputs.