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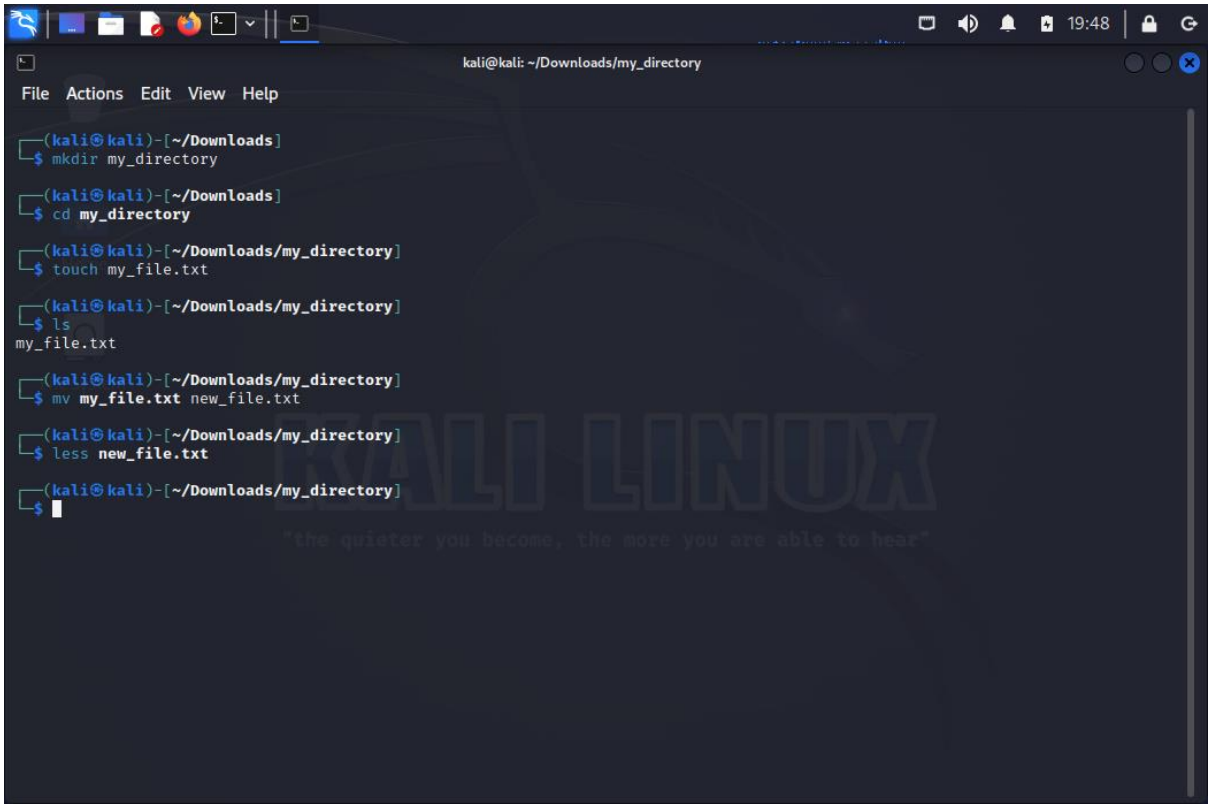
Vellore Institute of Technology, Vellore

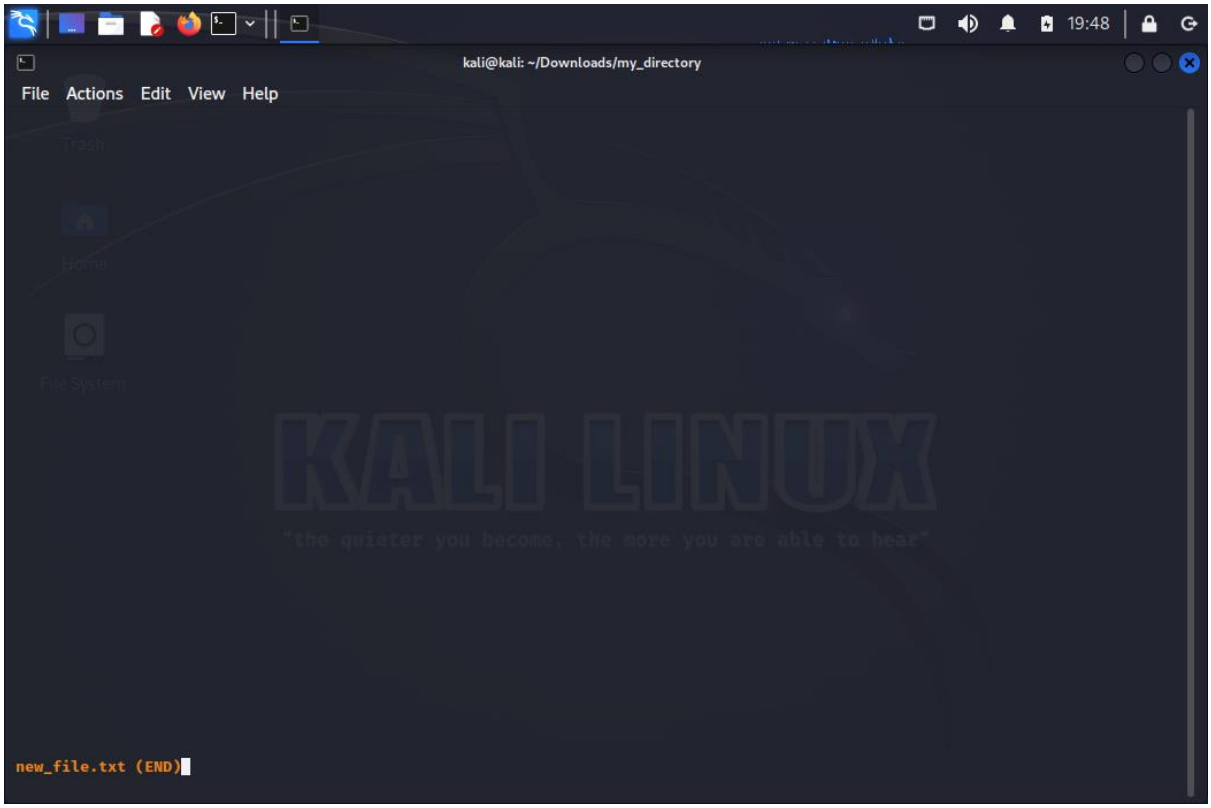
SmartBridge Externship Program in Cyber Security and Ethical Hacking

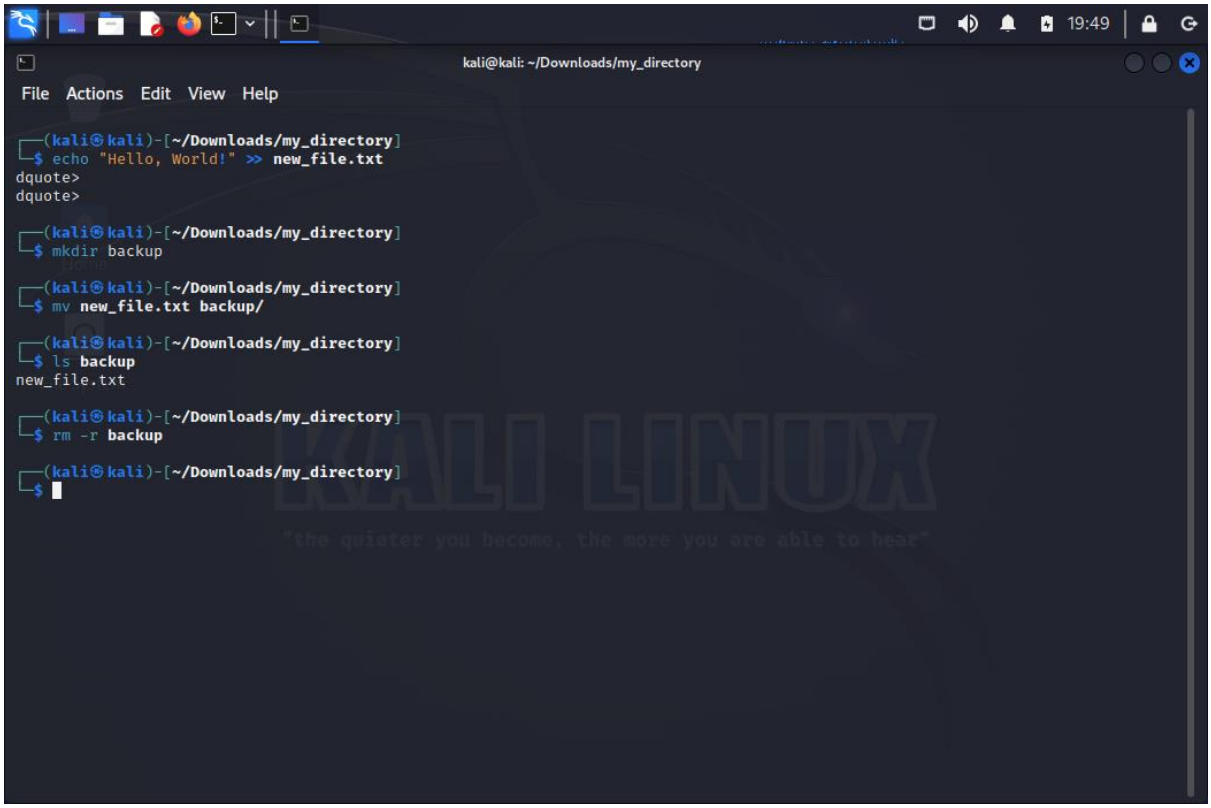
Week 2 Assignment

Task 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.


19:48
kali@kali: ~/Downloads/my_directory
File Actions Edit View Help
(kali㉿kali)-[~/Downloads]
$ mkdir my_directory
(kali㉿kali)-[~/Downloads]
$ cd my_directory
(kali㉿kali)-[~/Downloads/my_directory]
$ touch my_file.txt
(kali㉿kali)-[~/Downloads/my_directory]
$ ls
my_file.txt
(kali㉿kali)-[~/Downloads/my_directory]
$ mv my_file.txt new_file.txt
(kali㉿kali)-[~/Downloads/my_directory]
$ less new_file.txt
(kali㉿kali)-[~/Downloads/my_directory]
$
KALI LINUX
"the quieter you become, the more you are able to hear"


19:48
kali@kali: ~/Downloads/my_directory
File Actions Edit View Help
Trash
Home
File System
KALI LINUX
"the quieter you become, the more you are able to hear"
new_file.txt (END)


19:49
kali@kali: ~/Downloads/my_directory
File Actions Edit View Help
┌──(kali㉿kali)-[~/Downloads/my_directory]
└─$ echo "Hello, World!" >> new_file.txt
dquote>
dquote>
┌──(kali㉿kali)-[~/Downloads/my_directory]
└─$ mkdir backup
┌──(kali㉿kali)-[~/Downloads/my_directory]
└─$ mv new_file.txt backup/
┌──(kali㉿kali)-[~/Downloads/my_directory]
└─$ ls backup
new_file.txt
┌──(kali㉿kali)-[~/Downloads/my_directory]
└─$ rm -r backup
┌──(kali㉿kali)-[~/Downloads/my_directory]
└─$
KALI LINUX
"the quieter you become, the more you are able to hear"

Task 2: Permissions and Scripting

- Create a new file called "my_script.sh".
- Edit "my_script.sh" using a text editor of your choice and add the following lines:

bash

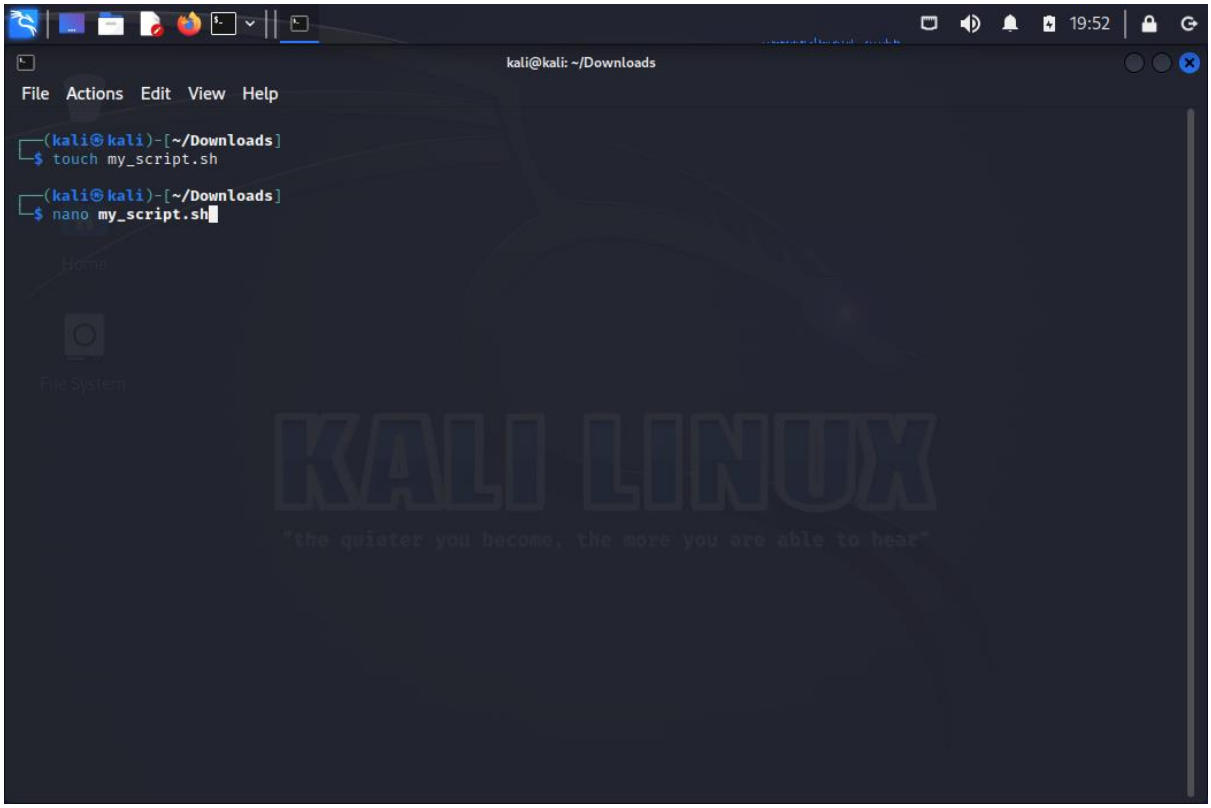
#!/bin/bash

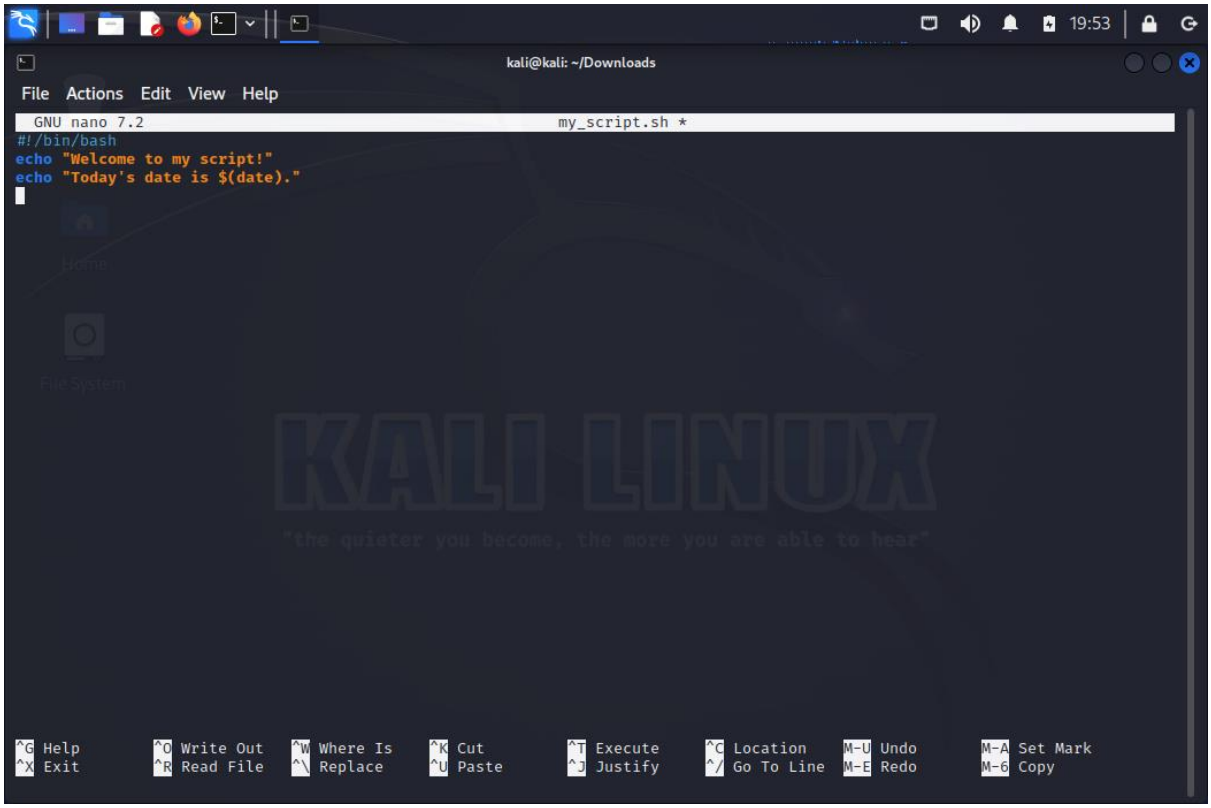
echo "Welcome to my script!"

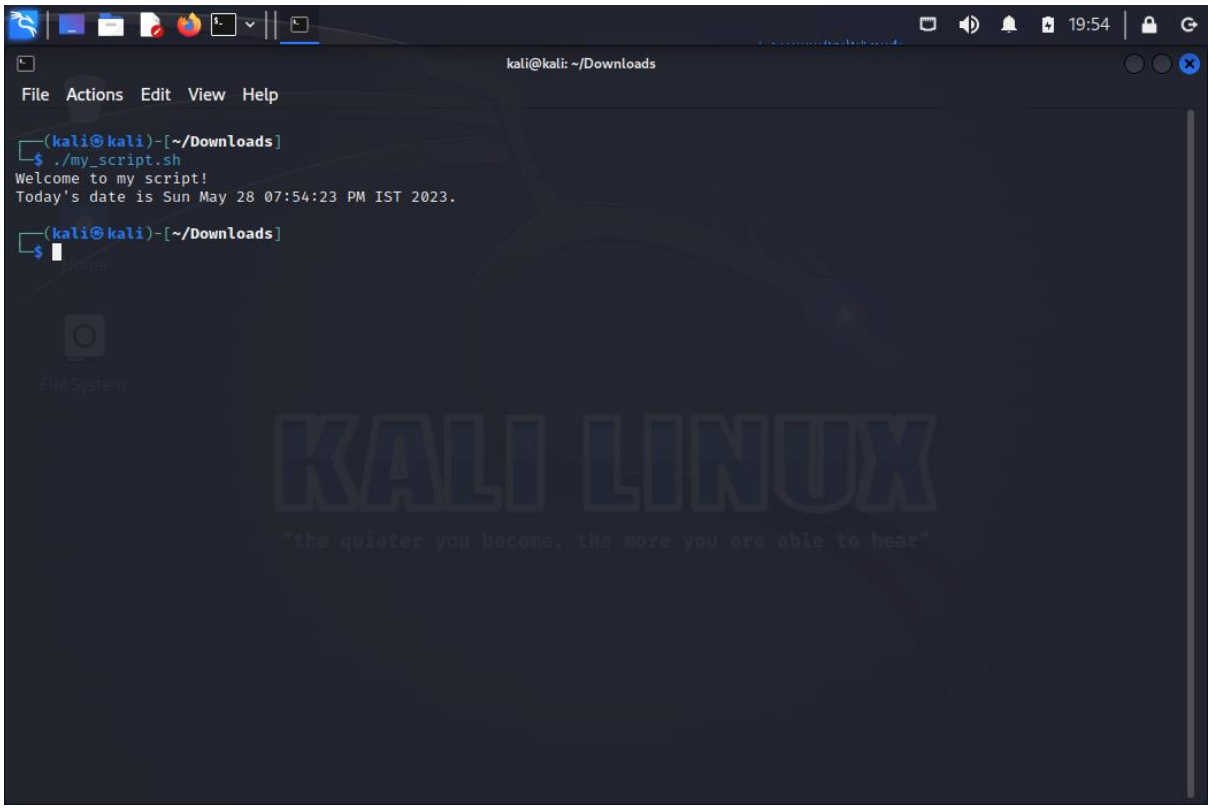
echo "Today's date is $(date)."

Save and exit the file.

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

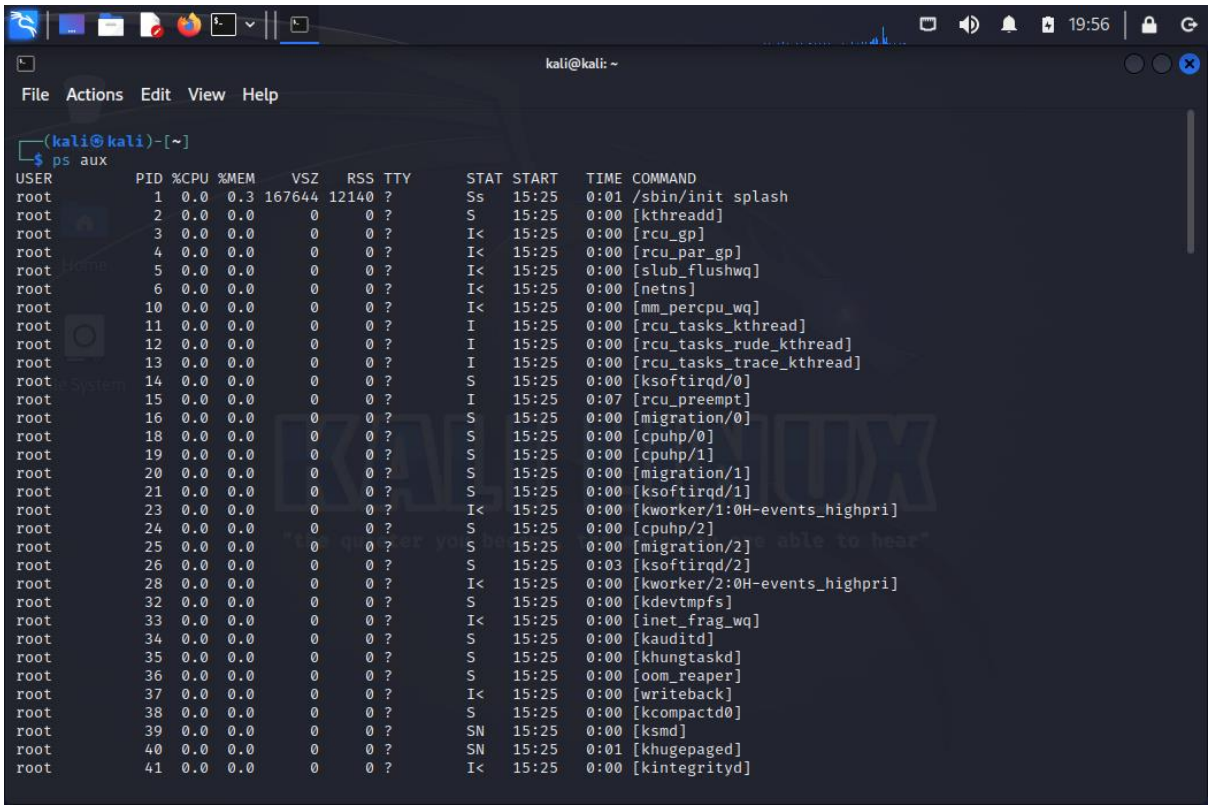


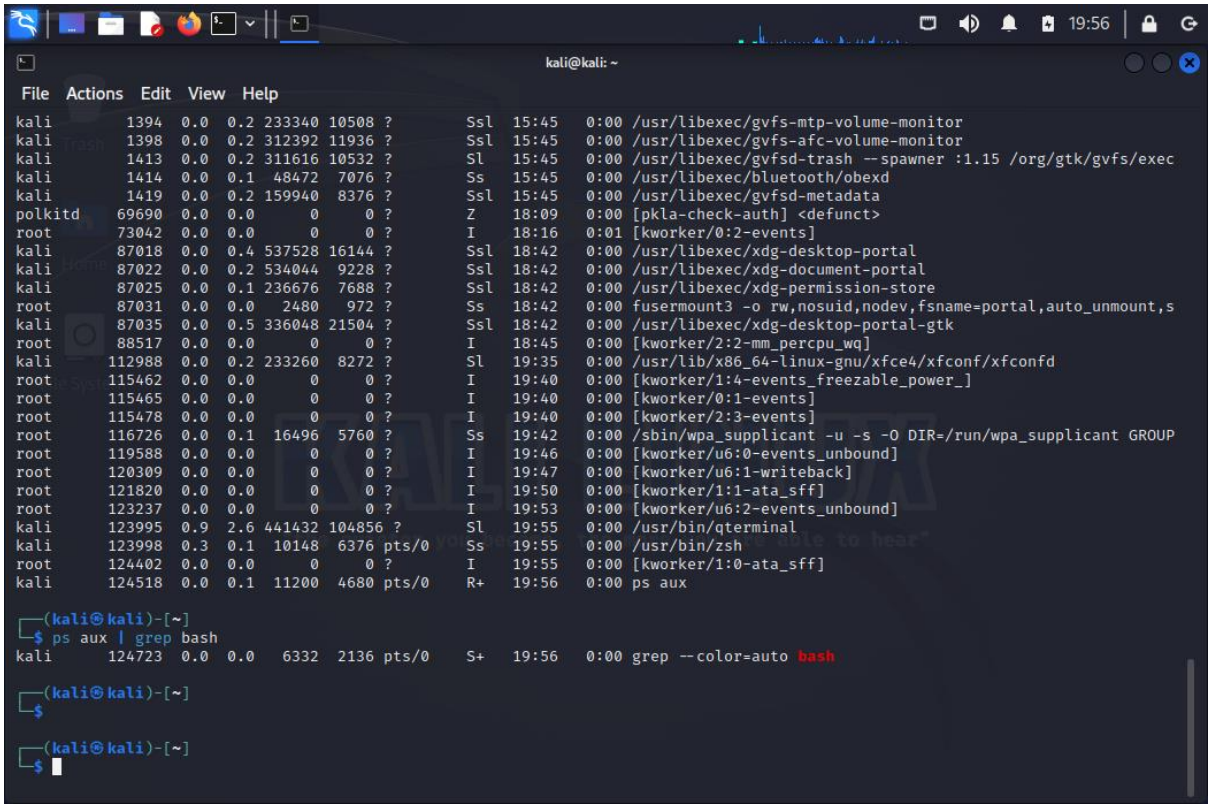

19:53
kali@kali: ~/Downloads
File Actions Edit View Help
GNU nano 7.2 my_script.sh *
#!/bin/bash
echo "Welcome to my script!"
echo "Today's date is $(date)."
^G Help ^O Write Out ^W Where Is ^K Cut ^T Execute ^C Location M-U Undo M-A Set Mark
^X Exit ^R Read File ^\ Replace ^U Paste ^J Justify ^/ Go To Line M-E Redo M-6 Copy


19:54
kali@kali: ~/Downloads
File Actions Edit View Help
(kali㉿kali)-[~/Downloads]
$ ./my_script.sh
Welcome to my script!
Today's date is Sun May 28 07:54:23 PM IST 2023.
(kali㉿kali)-[~/Downloads]
$

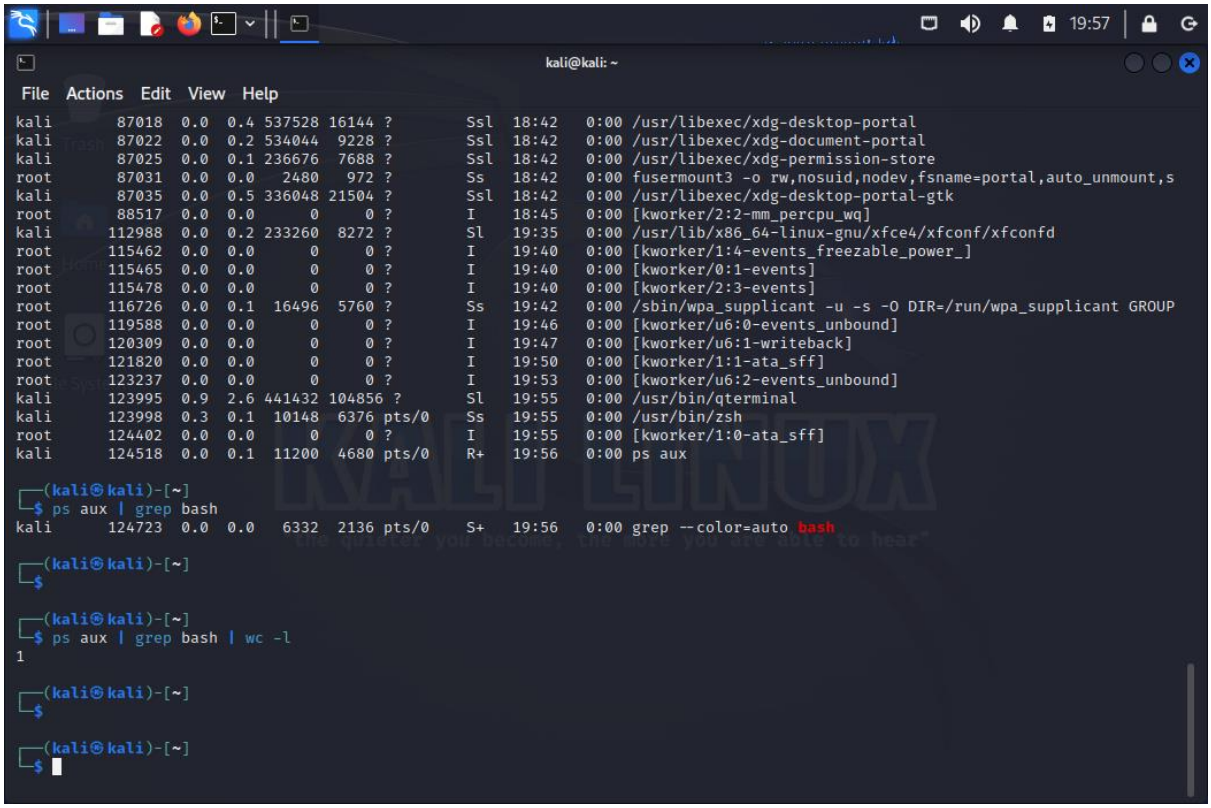
Task 3: Command Execution and Pipelines

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





This command uses the pipe symbol (|) to send the output of the **ps aux** command as input to the **grep** command. The **grep** command filters the list and displays only the processes that have "bash" in their name.



This command adds another pipe symbol (|) to send the filtered output from the previous command as input to the **wc** command. The **wc -l** option counts the number of lines in the input and displays the result.