ASSESSMENT-2

Animikha Sinha | Cyber Security and Ethical Hacking

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.

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 filie.

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

```
animikha@LAPTOP-PUGUNFUJ:~/my_directory$ touch my_script.sh
animikha@LAPTOP-PUGUNFUJ:~/my_directory$ vim my_script.sh
animikha@LAPTOP-PUGUNFUJ:~/my_directory$ chmod u+x my_script.sh
animikha@LAPTOP-PUGUNFUJ:~/my_directory$ bash my_script.sh
Welcome to my script!
Today's date is Sun May 28 18:38:45 IST 2023.
animikha@LAPTOP-PUGUNFUJ:~/my_directory$
```

animikha@LAPTOP-PUGUNFUJ: ~/my_directory

```
#!/bin/bash
echo "Welcome to my script!"
echo "Today's date is $(date)."
~
~
~
~
```

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.

```
animikha@LAPTOP-PUGUNFUJ:~/my_directory$ ps aux
USER        PID %CPU %MEM    VSZ    RSS TTY       STAT START   TIME COMMAND
root          1  0.0  0.0   1816   1184 ?         Sl   13:43   0:00 /init
root        560  0.0  0.0   1816     96 ?         Ss   17:53   0:00 /init
root        561  0.0  0.0   1816     96 ?         R    17:53   0:00 /init
animikha    562  0.0  0.1  10168   5092 pts/0     Ss   17:53   0:00 -bash
animikha    609  0.0  0.0   8164    716 pts/0     T    18:44   0:00 grep --color=auto bash
animikha    615  0.0  0.0   7244    576 pts/0     T    18:48   0:00 wcanimikha    630  0.0  0.0  10616  3292 pts/0    R+   18:54   0:00 ps aux
animikha@LAPTOP-PUGUNFUJ:~/my_directory$ ps aux | grep "bash"
animikha    562  0.0  0.1  10168   5092 pts/0     Ss   17:53   0:00 -bash
animikha    609  0.0  0.0   8164    716 pts/0     T    18:44   0:00 grep --color=auto bash
animikha    632  0.0  0.0   8164    656 pts/0     S+   18:54   0:00 grep --color=auto bash
animikha@LAPTOP-PUGUNFUJ:~/my_directory$ ps aux | grep "bash" >> newfile2.txt
animikha@LAPTOP-PUGUNFUJ:~/my_directory$ wc newfile2.txt
  3  37 247 newfile2.txt
animikha@LAPTOP-PUGUNFUJ:~/my_directory$ 
```