

## **CYBER SECURITY AND ETHICAL HACKING**

### **WEEK -2 ASSIGNMENT**

#### **BASH SHELL BASICS**

**SUBMITTED BY,**

**NAME : NITHIYASRI M**

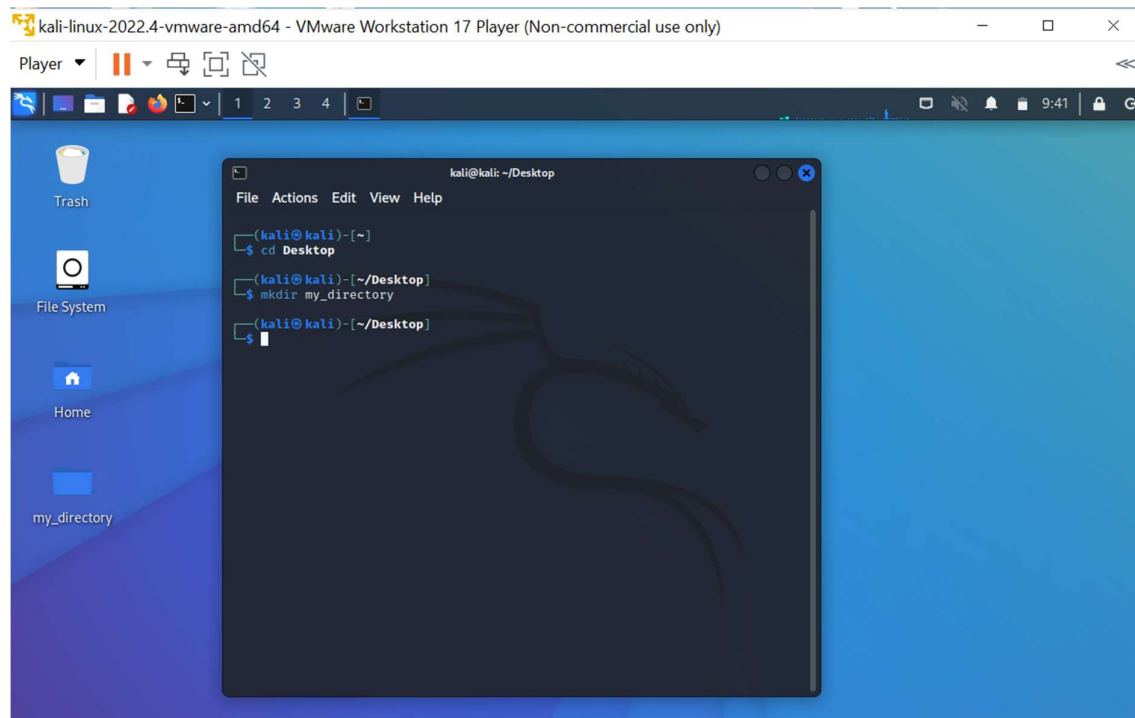
**REG\_NO: 20BCI0230**

**DATE : 28-05-2023**

## Task 1: File and Directory Manipulation

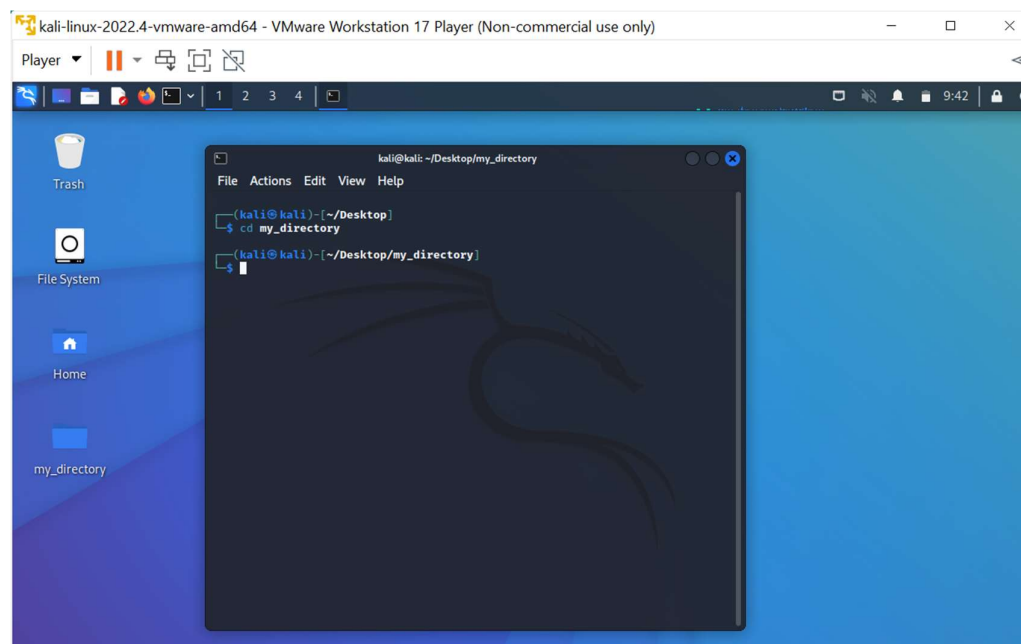
1. Create a directory called "my\_directory".

- `mkdir my_directory`



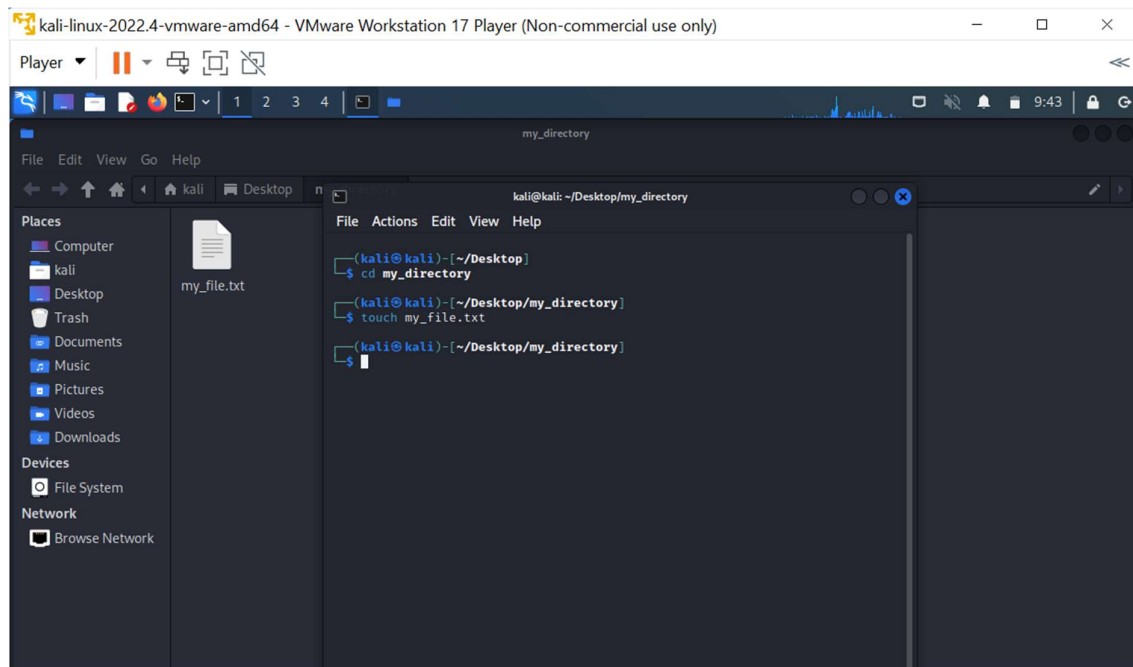
2. Navigate into the "my\_directory".

- `cd my_directory`



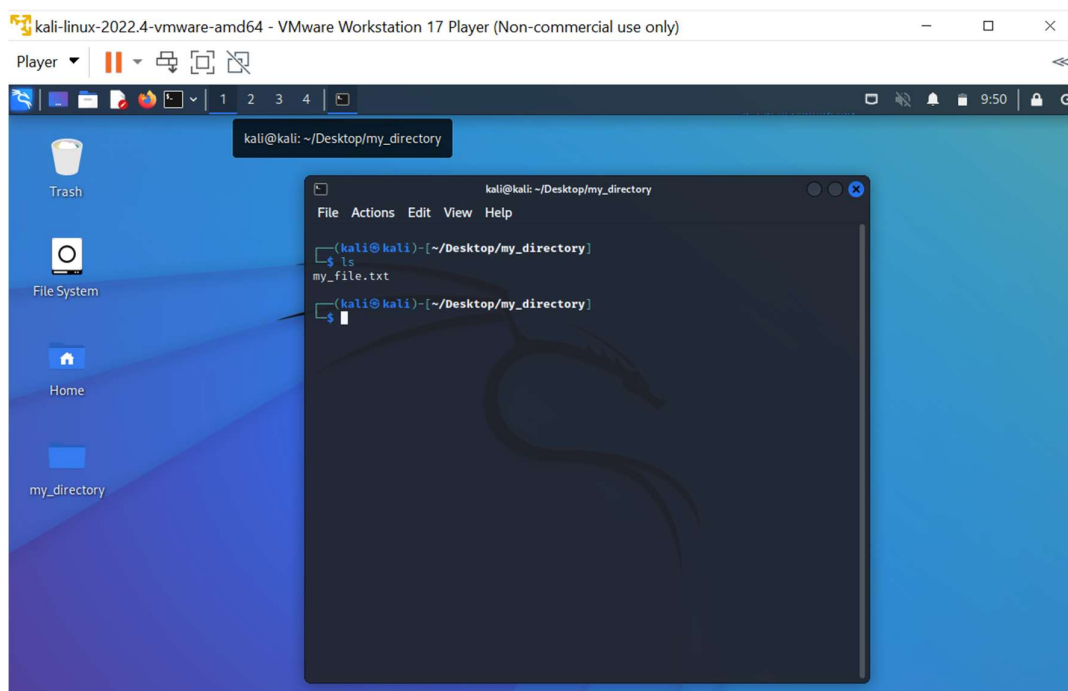
3. Create an empty file called "my\_file.txt".

- touch my\_file.txt



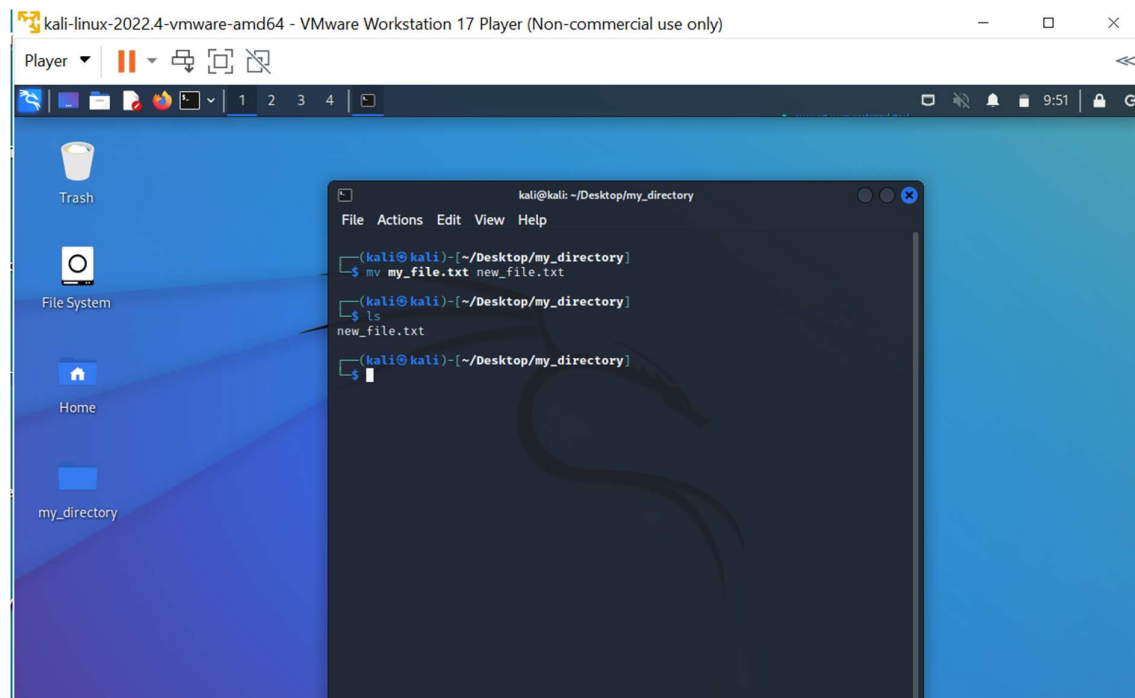
4. List all the files and directories in the current directory.

- ls



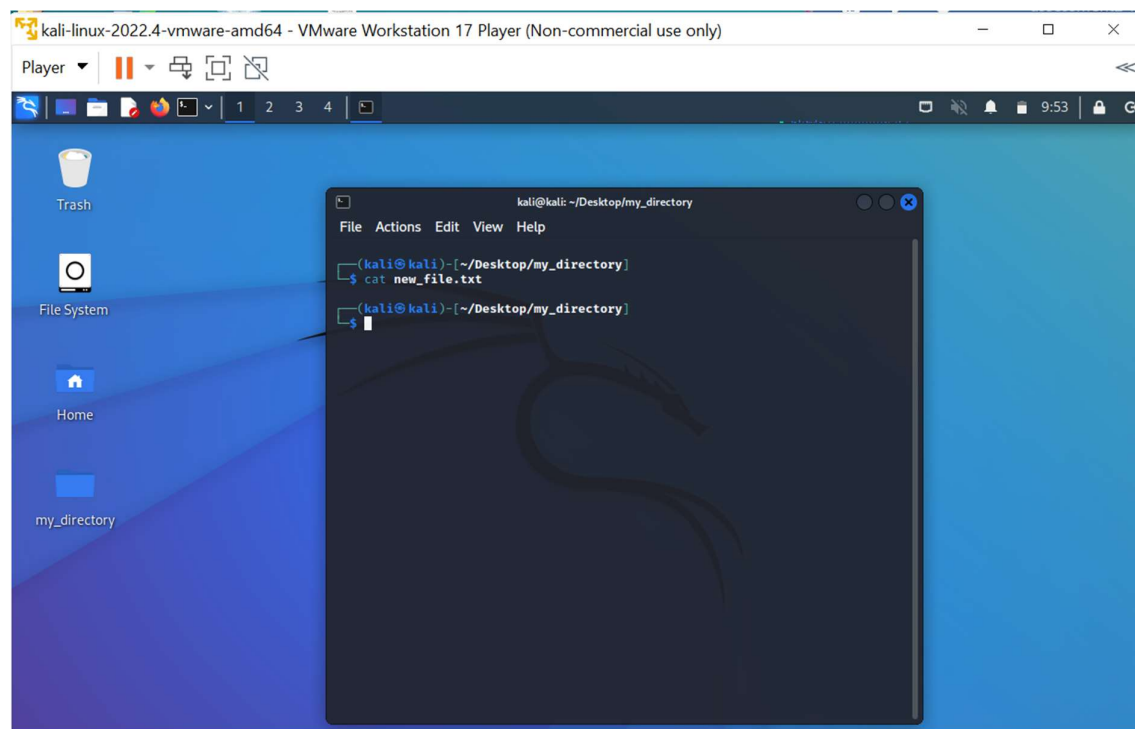
5. Rename "my\_file.txt" to "new\_file.txt".

- `mv my_file.txt new_file.txt`



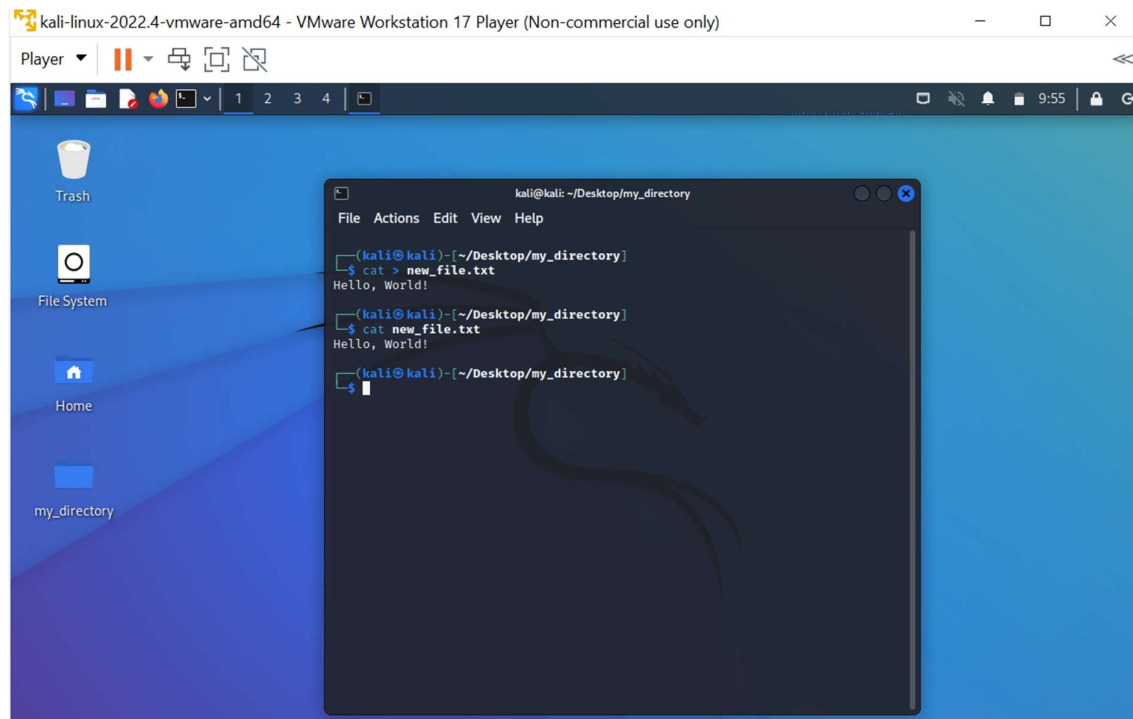
6. Display the content of "new\_file.txt" using a pager tool of your choice.

- `cat new_file.txt` (the file is empty)



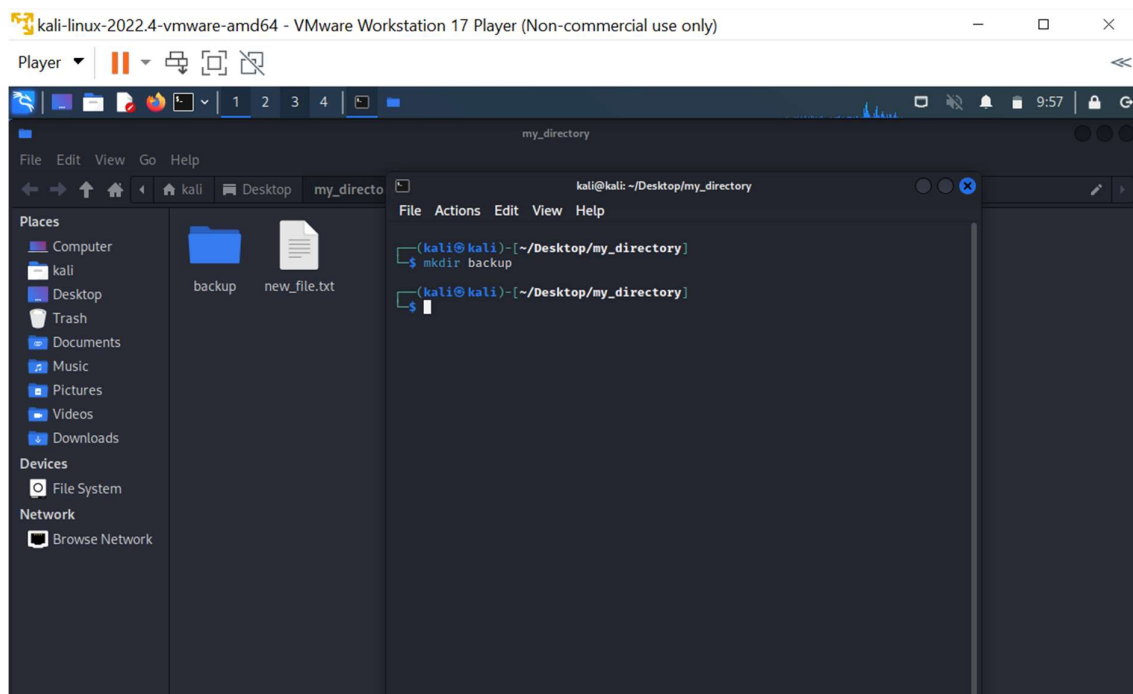
7. Append the text "Hello, World!" to "new\_file.txt".

- `cat > new_file.txt`



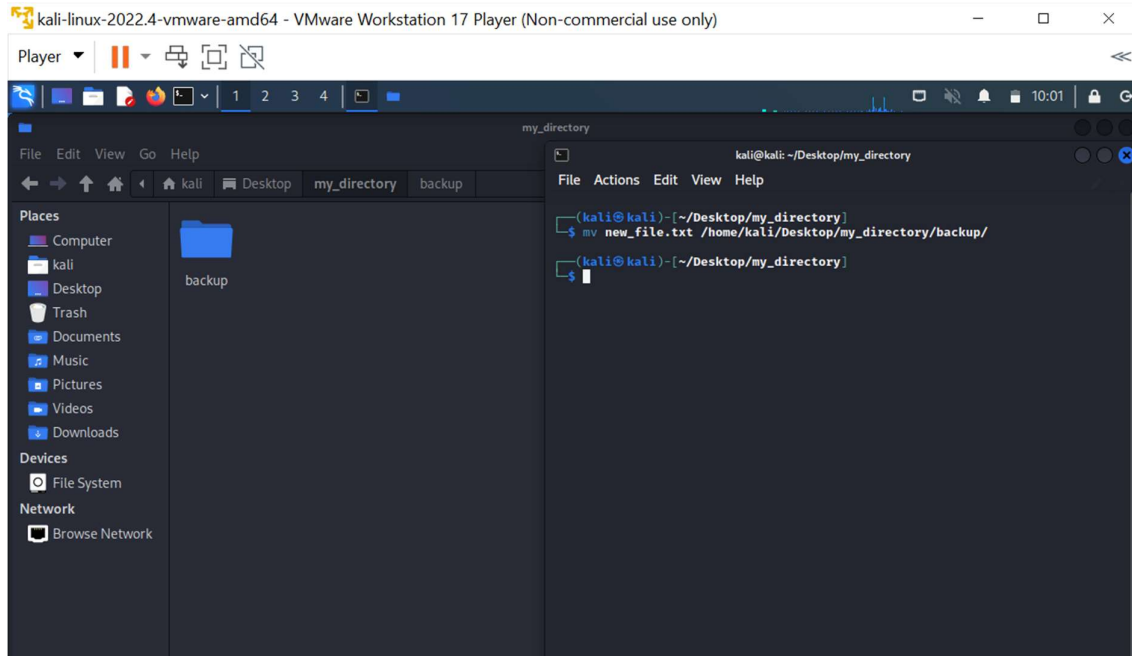
8. Create a new directory called "backup" within "my\_directory".

- `mkdir backup`



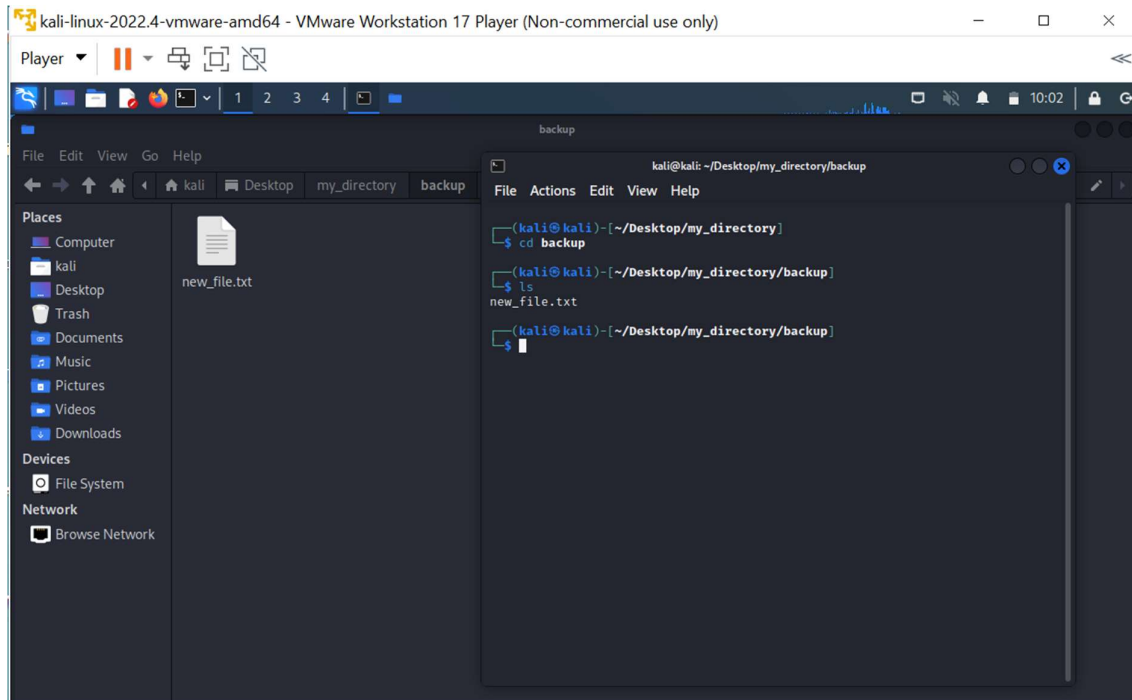
9. Move "new\_file.txt" to the "backup" directory.

- `mv new_file.txt /home/kali/Desktop/my_directory/backup`



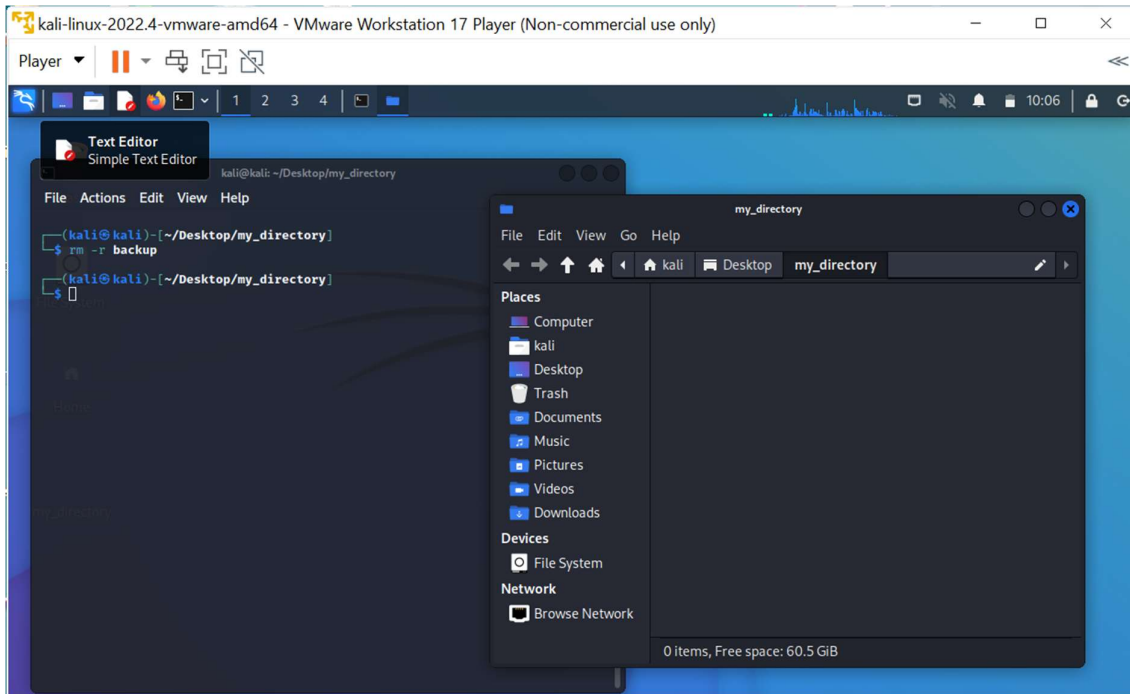
10. Verify that "new\_file.txt" is now located in the "backup" directory.

- `ls`



11. Delete the "backup" directory and all its contents.

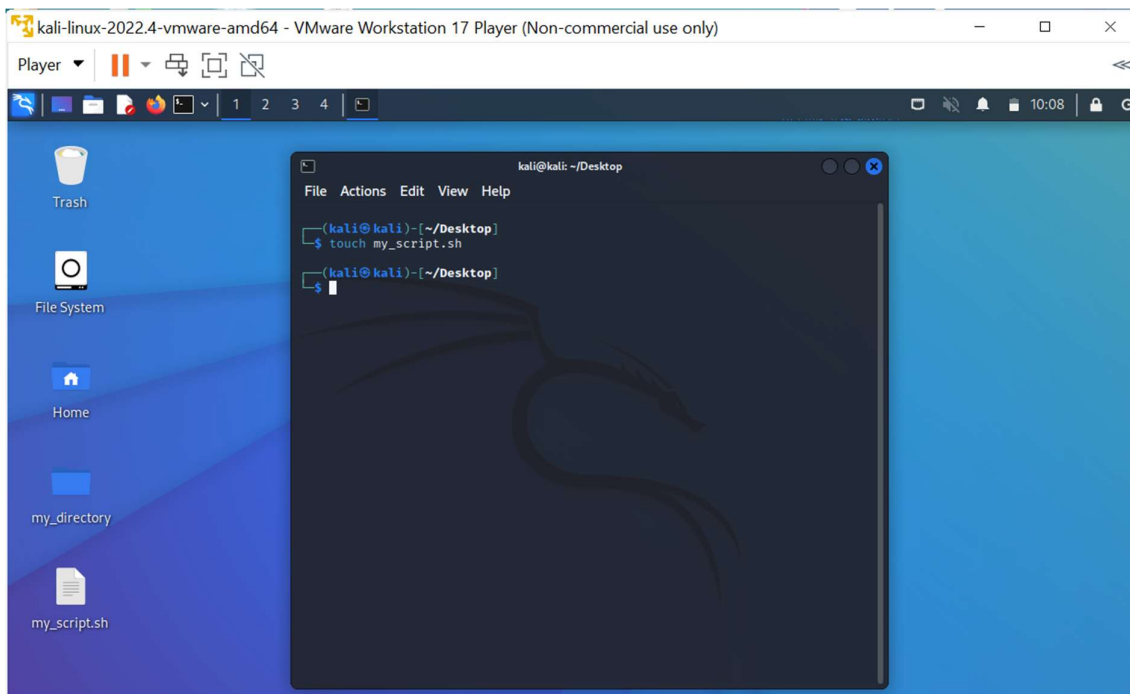
- `rm -r backup`



## Task 2: Permissions and Scripting

1. Create a new file called "my\_script.sh".

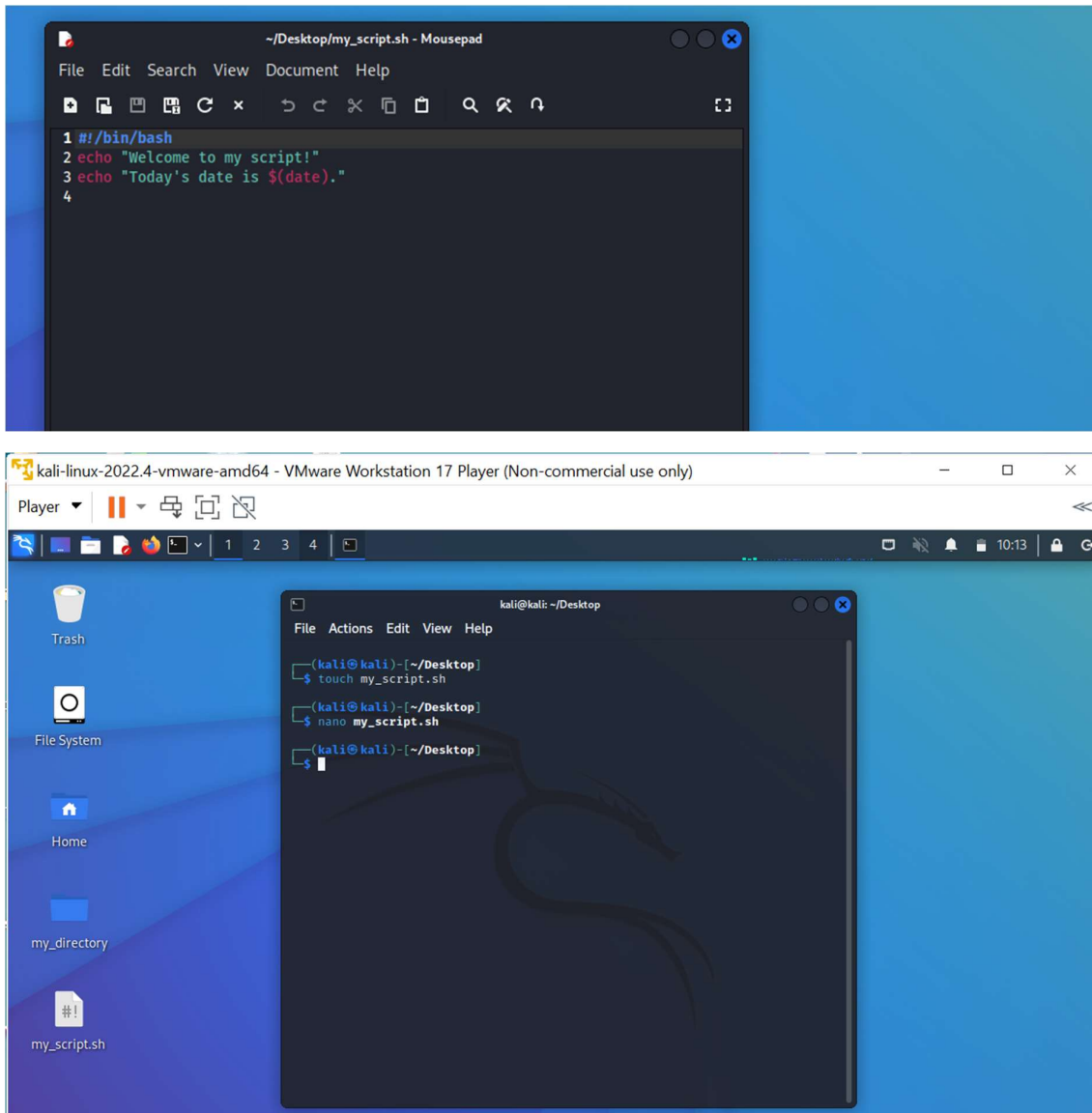
- `touch my_script.sh`



2. Edit "my\_script.sh" using a text editor of your choice and add the following lines: bash

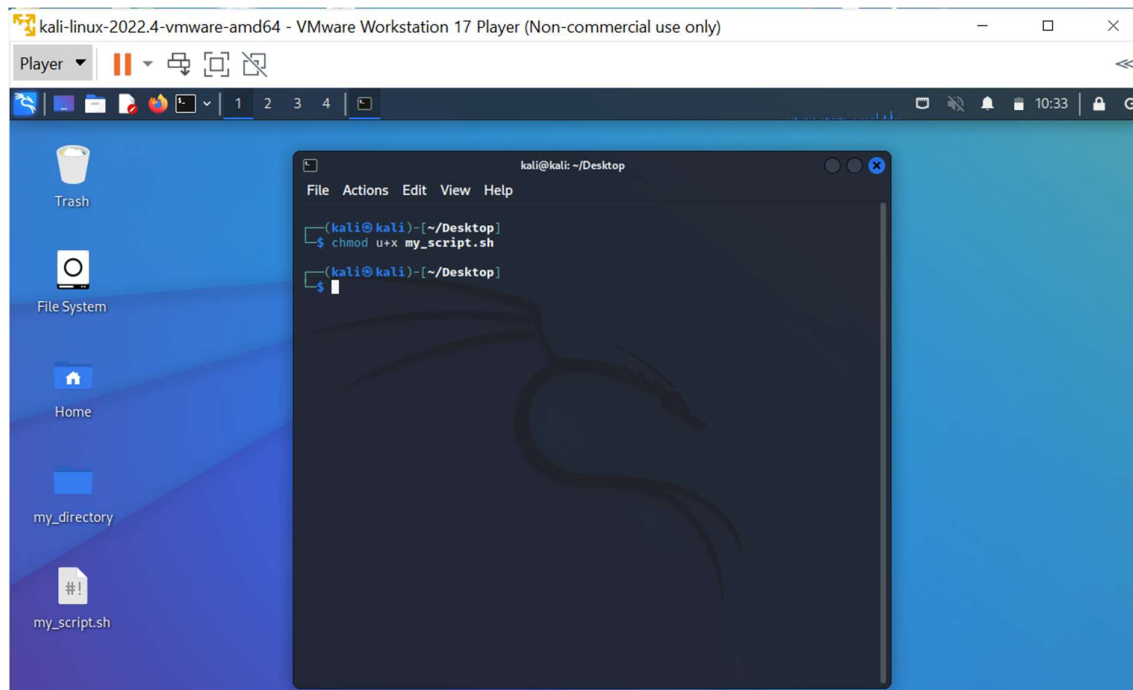
```
#!/bin/bash  
echo "Welcome to my script!"  
echo "Today's date is $(date)."  
Save and exit the file.
```

- nano my\_script.sh

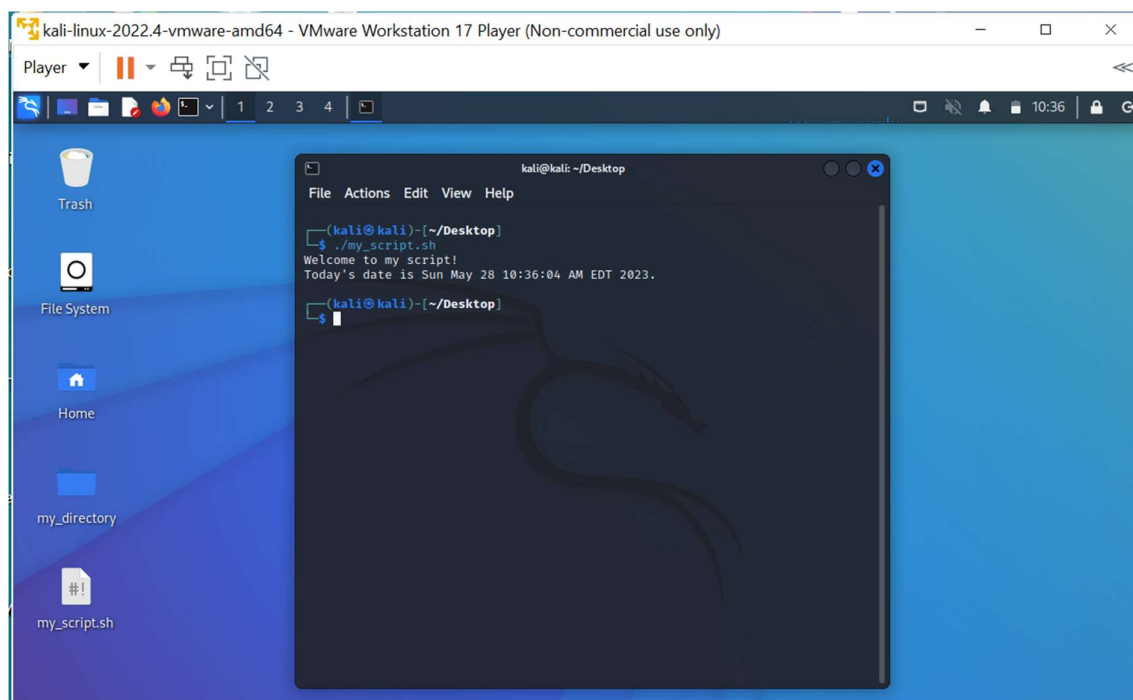




3. Make "my\_script.sh" executable.
  - `chmod u+x my_script.sh`

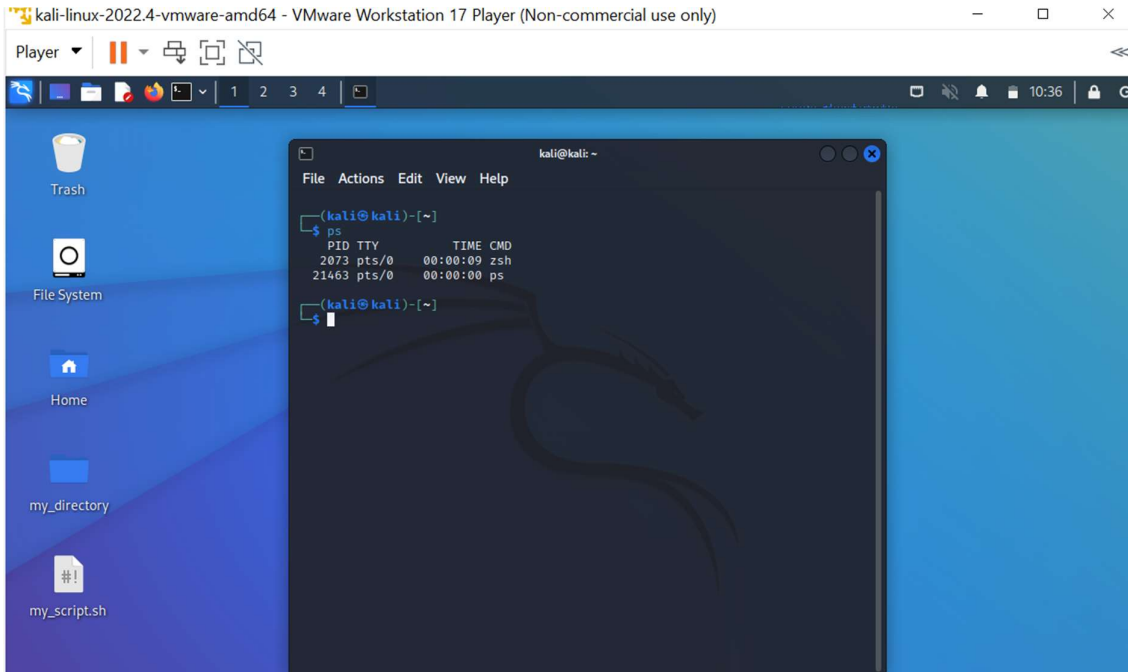


4. Run "my\_script.sh" and verify that the output matches the expected result.
  - `./my_script.sh`

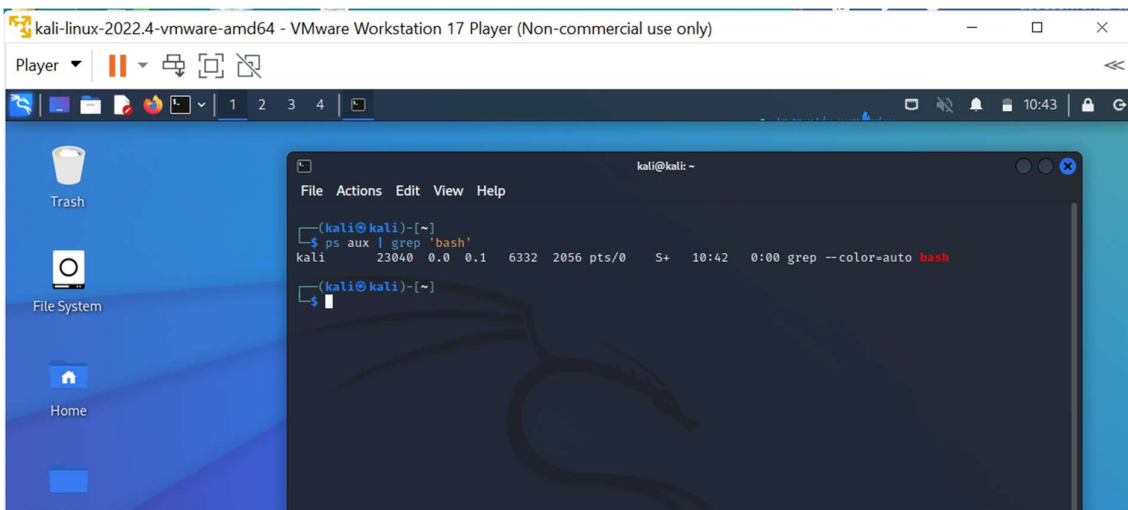


### Task 3: Command Execution and Pipelines

1. List all the processes running on your system using the "ps" command.
  - ps – this command lists the active processes and their PIDs

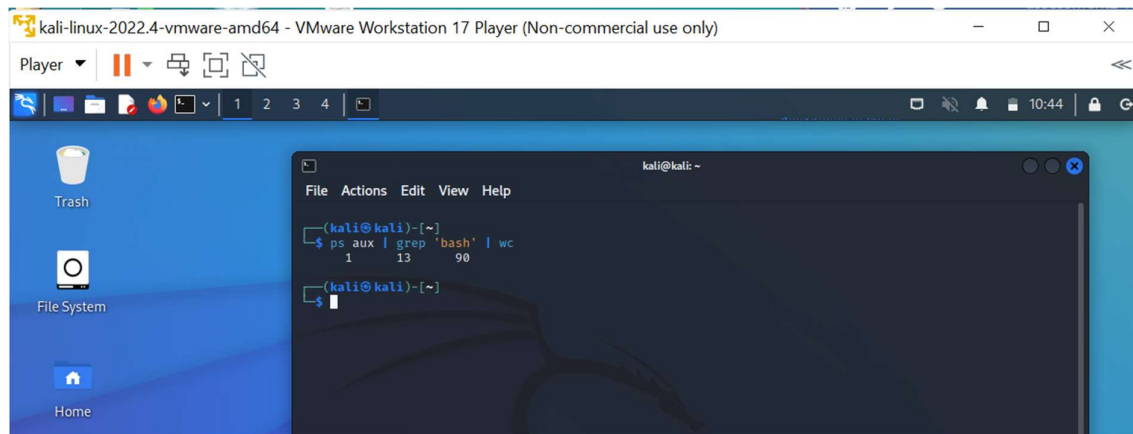


2. Use the "grep" command to filter the processes list and display only the processes with "bash" in their name.
  - ps aux | grep 'bash'



3. Use the "wc" command to count the number of lines in the filtered output.

- `ps aux | grep 'bash' | wc`



```
kali@kali: ~  
File Actions Edit View Help  
$ ps aux | grep 'bash' | wc  
1      13      90  
$
```