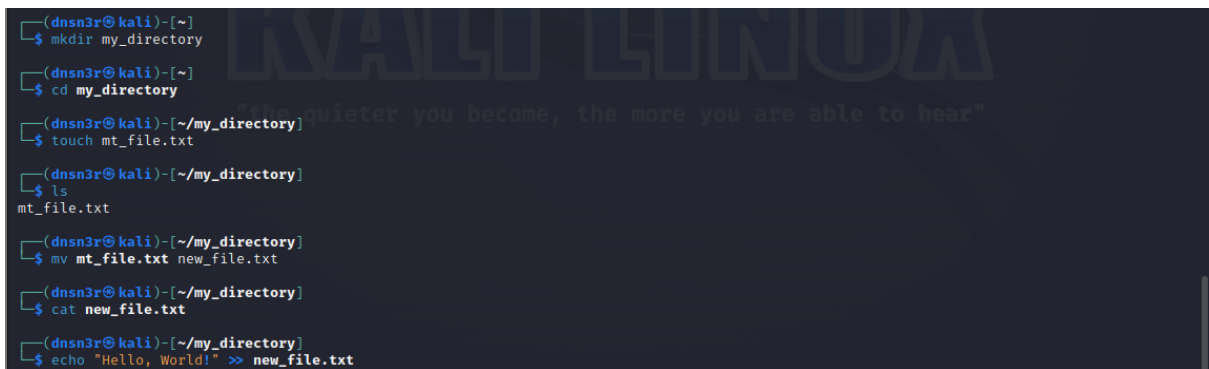


Assignment: Bash Shell Basics

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.tx"
`mv my_file.txt new_file.txt`



```
(dnsn3r@kali)-[~]
$ mkdir my_directory

(dnsn3r@kali)-[~]
$ cd my_directory

(dnsn3r@kali)-[~/my_directory]
$ touch mt_file.txt

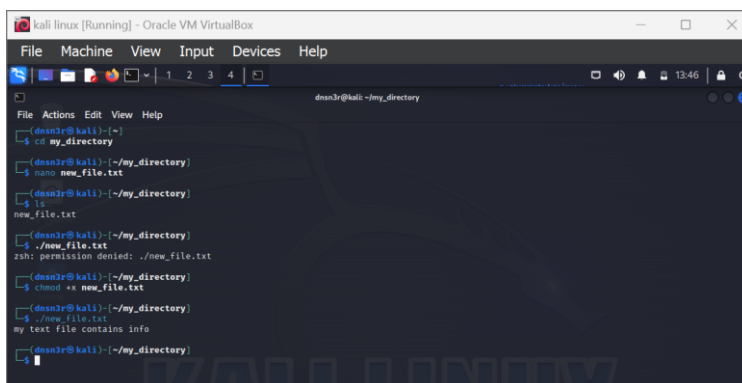
(dnsn3r@kali)-[~/my_directory]
$ ls
mt_file.txt

(dnsn3r@kali)-[~/my_directory]
$ mv mt_file.txt new_file.txt

(dnsn3r@kali)-[~/my_directory]
$ cat new_file.txt

(dnsn3r@kali)-[~/my_directory]
$ echo "Hello, World!" >> new_file.txt
```

6. Display the content of "new_file.txt" using a pager tool of your choice.
`cat new_file.txt`



```
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(dnsn3r@kali)-[~/my_directory]
$ cat new_file.txt
Hello, World!
```

7. Append the text "Hello, World!" to "new_file.txt".
`echo "Hello, World!" >> new_file.txt`

```
(dnsn3r@kali)-[~]
└─$ mkdir my_directory

(dnsn3r@kali)-[~]
└─$ cd my_directory

(dnsn3r@kali)-[~/my_directory]
└─$ touch mt_file.txt

(dnsn3r@kali)-[~/my_directory]
└─$ ls
mt_file.txt

(dnsn3r@kali)-[~/my_directory]
└─$ mv mt_file.txt new_file.txt

(dnsn3r@kali)-[~/my_directory]
└─$ cat new_file.txt

(dnsn3r@kali)-[~/my_directory]
└─$ echo "Hello, World!" >> new_file.txt
dquote>
dquote>
```

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 backup/
10. Verify that "new_file.txt" is now located in the "backup" directory.
ls backup/
11. Delete the "backup" directory and all its contents.
rm -r backup/

```
(dnsn3r@kali)-[~/my_directory]
└─$ mkdir backup

(dnsn3r@kali)-[~/my_directory]
└─$ mv new_file.txt backup/

(dnsn3r@kali)-[~/my_directory]
└─$ ls backup/
new_file.txt

(dnsn3r@kali)-[~/my_directory]
└─$ rm -r backup/

(dnsn3r@kali)-[~/my_directory]
└─$
```

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

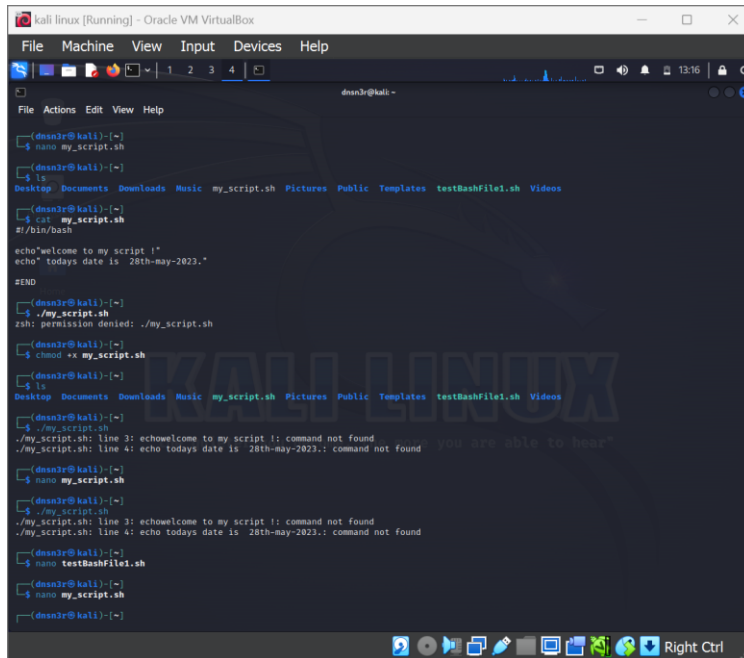
echo "Welcome to my script!"

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

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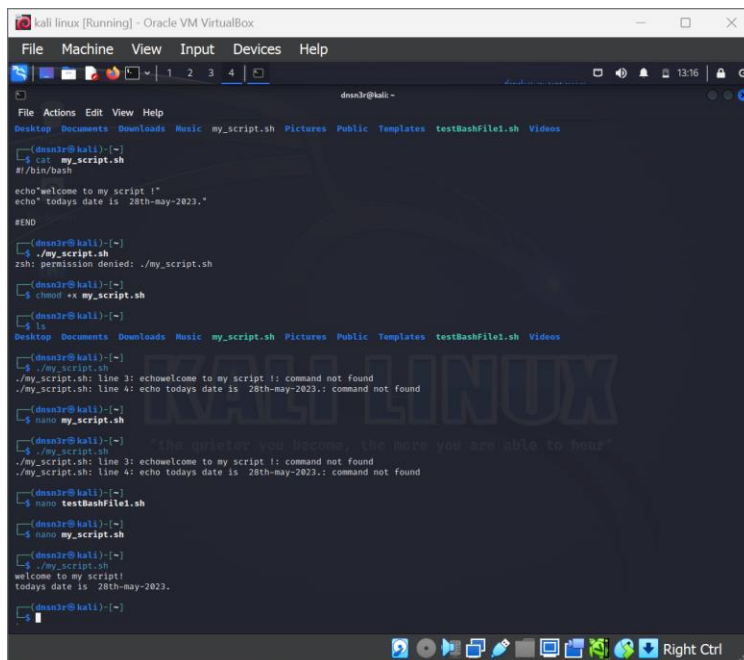
Save and exit the file.

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



```
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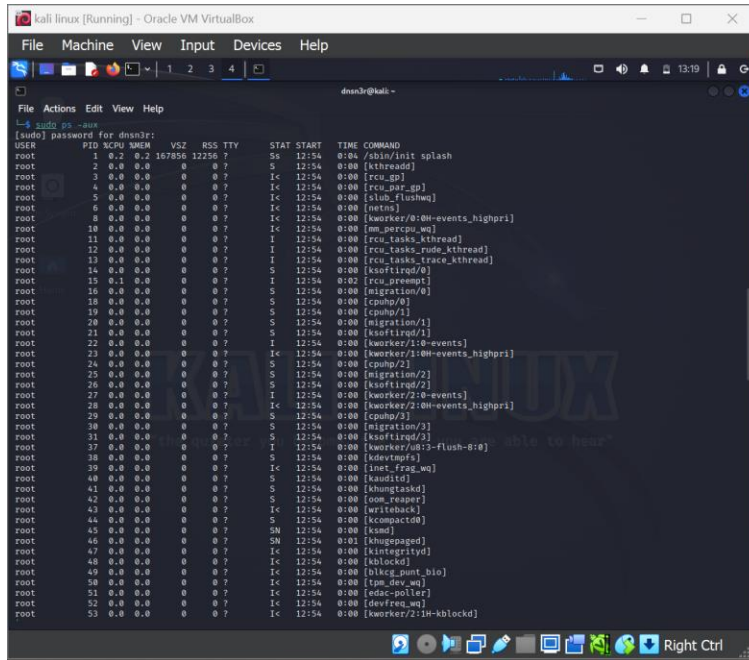
[dsan3r@kali]-[-]
$ nano my_script.sh
[dsan3r@kali]-[-]
$ ls
Desktop Documents Downloads Music my_script.sh Pictures Public Templates testBashFile1.sh Videos
[dsan3r@kali]-[-]
$ cat my_script.sh
#!/bin/bash
echo "welcome to my script !"
echo "today's date is 28th-may-2023."
#END
[dsan3r@kali]-[-]
$ ./my_script.sh
zsh: permission denied: ./my_script.sh
[dsan3r@kali]-[-]
$ chmod +x my_script.sh
[dsan3r@kali]-[-]
$ ls
Desktop Documents Downloads Music my_script.sh Pictures Public Templates testBashFile1.sh Videos
[dsan3r@kali]-[-]
$ ./my_script.sh
./my_script.sh: line 3: echo:welcome to my script !: command not found
./my_script.sh: line 4: echo today's date is 28th-may-2023.: command not found
[dsan3r@kali]-[-]
$ nano my_script.sh
[dsan3r@kali]-[-]
$ ./my_script.sh
./my_script.sh: line 3: echo:welcome to my script !: command not found
./my_script.sh: line 4: echo today's date is 28th-may-2023.: command not found
[dsan3r@kali]-[-]
$ nano testBashFile1.sh
[dsan3r@kali]-[-]
$ nano my_script.sh
[dsan3r@kali]-[-]
```



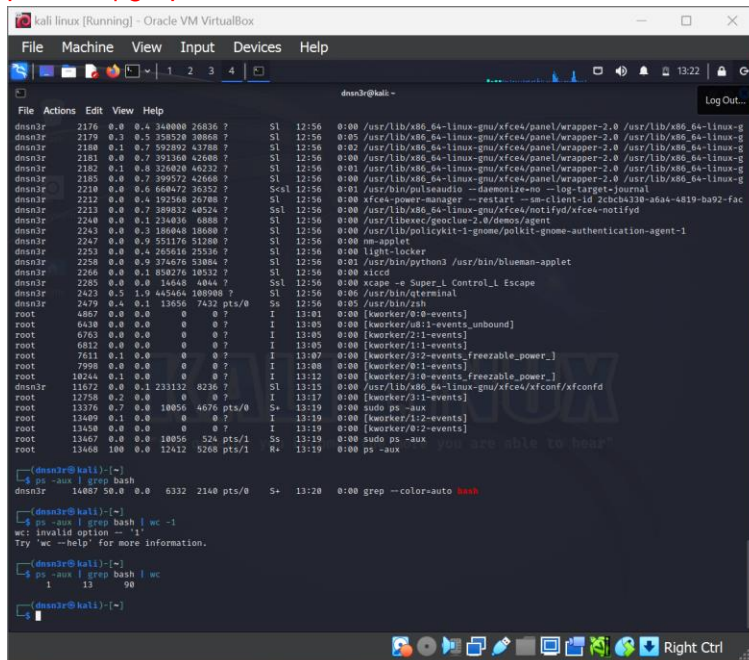
```
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[dsan3r@kali]-[-]
Desktop Documents Downloads Music my_script.sh Pictures Public Templates testBashFile1.sh Videos
[dsan3r@kali]-[-]
$ cat my_script.sh
#!/bin/bash
echo "welcome to my script !"
echo "today's date is 28th-may-2023."
#END
[dsan3r@kali]-[-]
$ ./my_script.sh
zsh: permission denied: ./my_script.sh
[dsan3r@kali]-[-]
$ chmod +x my_script.sh
[dsan3r@kali]-[-]
$ ls
Desktop Documents Downloads Music my_script.sh Pictures Public Templates testBashFile1.sh Videos
[dsan3r@kali]-[-]
$ ./my_script.sh
./my_script.sh: line 3: echo:welcome to my script !: command not found
./my_script.sh: line 4: echo today's date is 28th-may-2023.: command not found
[dsan3r@kali]-[-]
$ nano my_script.sh
[dsan3r@kali]-[-]
$ ./my_script.sh
./my_script.sh: line 3: echo:welcome to my script !: command not found
./my_script.sh: line 4: echo today's date is 28th-may-2023.: command not found
[dsan3r@kali]-[-]
$ nano testBashFile1.sh
[dsan3r@kali]-[-]
$ nano my_script.sh
[dsan3r@kali]-[-]
$ ./my_script.sh
welcome to my script!
today's date is 28th-may-2023.
[dsan3r@kali]-[-]
```

- ```
sudo ps -aux
```



- ```
ps -aux | grep bash
```



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

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```
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dmsn3r@kali ~
Log Out...

File Actions Edit View Help

dmsn3r 2176 0.0 0.4 340000 26836 ? S1 12:56 0:00 /usr/lib/x86_64-linux-gnu/xfce4/panel/wrapper-2.0 /usr/lib/x86_64-linux-g
dmsn3r 2179 0.3 0.5 350570 30868 ? S1 12:56 0:05 /usr/lib/x86_64-linux-gnu/xfce4/panel/wrapper-2.0 /usr/lib/x86_64-linux-g
dmsn3r 2180 0.1 0.7 352092 43780 ? S1 12:56 0:02 /usr/lib/x86_64-linux-gnu/xfce4/panel/wrapper-2.0 /usr/lib/x86_64-linux-g
dmsn3r 2181 0.0 0.7 391360 42608 ? S1 12:56 0:00 /usr/lib/x86_64-linux-gnu/xfce4/panel/wrapper-2.0 /usr/lib/x86_64-linux-g
dmsn3r 2182 0.1 0.8 320620 46232 ? S1 12:56 0:01 /usr/lib/x86_64-linux-gnu/xfce4/panel/wrapper-2.0 /usr/lib/x86_64-linux-g
dmsn3r 2185 0.0 0.7 390572 42660 ? S1 12:56 0:00 /usr/lib/x86_64-linux-gnu/xfce4/panel/wrapper-2.0 /usr/lib/x86_64-linux-g
dmsn3r 2210 0.0 0.6 668472 36352 ? Sec1 12:56 0:01 /usr/bin/pulseaudio --daemonize=no --log-target=journal
dmsn3r 2212 0.0 0.4 192300 20700 ? S1 12:56 0:00 xfce4-power-manager --restart --sm-client-id 82c8b230-a6a4-4819-ba92-fac
dmsn3r 2213 0.0 0.7 389832 40524 ? S1 12:56 0:00 /usr/lib/x86_64-linux-gnu/xfce4/notifyd/xfce4-notifyd
dmsn3r 2240 0.0 0.1 234036 6888 ? S1 12:56 0:00 /usr/libexec/gnomeclue-2.0/demos/agent
dmsn3r 2243 0.0 0.3 180040 10600 ? S1 12:56 0:00 /usr/lib/policykit-1-gnome/polkit-gnome-authentication-agent-1
dmsn3r 2247 0.0 0.9 551176 51200 ? S1 12:56 0:00 nm-applet
dmsn3r 2253 0.0 0.4 265616 25536 ? S1 12:56 0:00 light-locker
dmsn3r 2298 0.0 0.9 374076 53004 ? S1 12:56 0:01 /usr/bin/python3 /usr/bin/blueman-applet
dmsn3r 2266 0.0 0.1 850276 10532 ? S1 12:56 0:00 xiccd
dmsn3r 2285 0.0 0.0 14648 4804 ? S1 12:56 0:00 xcape -m Super_L Control_L Escape
dmsn3r 2423 0.5 1.9 445464 100900 ? S1 12:56 0:06 /usr/bin/terminal
dmsn3r 2479 0.4 0.1 13655 7432 pts/0 Ss 12:56 0:05 /usr/bin/zsh
root 4867 0.0 0.0 0 0 ? I 13:01 0:00 [kworker/0:0-events]
root 6430 0.0 0.0 0 0 ? I 13:05 0:00 [kworker/u6:0-events:unbound]
root 6763 0.0 0.0 0 0 ? I 13:05 0:00 [kworker/2:1-events]
root 6812 0.0 0.0 0 0 ? I 13:05 0:00 [kworker/1:1-events]
root 7611 0.1 0.0 0 0 ? I 13:07 0:00 [kworker/3:2-events:freezable.power_]
root 7998 0.0 0.0 0 0 ? I 13:08 0:00 [kworker/0:1-events]
root 10244 0.1 0.0 0 0 ? I 13:12 0:00 [kworker/3:0-events:freezable.power_]
dmsn3r 11672 0.0 0.1 231132 8236 ? S1 13:15 0:00 /usr/lib/x86_64-linux-gnu/xfce4/xfconf/xfconfd
root 12758 0.2 0.0 0 0 ? I 13:17 0:00 [kworker/3:1-events]
root 13276 0.7 0.8 10056 4670 pts/0 Ss 13:19 0:00 sudo ps -aux
root 13409 0.1 0.0 0 0 ? I 13:19 0:00 [kworker/1:2-events]
root 13450 0.0 0.0 0 0 ? I 13:19 0:00 [kworker/0:2-events]
root 13467 0.0 0.0 10056 524 pts/2 Ss 13:19 0:00 sudo ps -aux
root 13468 100 0.0 12412 5208 pts/1 R+ 13:19 0:00 ps -aux

[dmsn3r@kali]~$
4 ps -aux | grep bash
dmsn3r 14087 50.0 0.0 6332 2140 pts/0 S+ 13:20 0:00 grep --color=auto bash

[dmsn3r@kali]~$
4 ps -aux | grep bash | wc -l
wc: invalid option -- 'l'
Try 'wc --help' for more information.

[dmsn3r@kali]~$
4 ps -aux | grep bash | wc
1 13 90

[dmsn3r@kali]~$
```