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*I confirm that I understand my coursework needs to be submitted online via Google Classroom under the relevant module page before the deadline in order for my assignment to be accepted and marked. I am fully aware that late submissions will be treated as non-submission and a mark of zero will be awarded.*

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## 1. Introduction

Linux is an unix-like open source OS. It provides robust environments for developers and users. Kali Linux is Debian based linux which is designed for testing, cybersecurity, penetration and ethical hacking. The CLI of Kali Linux interact directly with the OS.

Commands like whoami and who provides information about users of the system and finger provides more detailed information. Command like date display current date and other command like ls, cat, echo are used for list files and directories display file content and print and write file.

## 2. Objective

The workshop tends to provide us the experience regarding the fundamental of file or directory management using linux terminal.

## 3. Tools and Software used

- i. Virtual Box  
Virtual box is a free cross-platform virtualization tool which helps to run multiple operating systems on single device. It is mostly used by developers to efficiently test and deploy applications. (What is in Oracle VM VirtualBox Enterprise)
- ii. Kali linux  
It is a debian based OS mainly used for the purpose of cyber security. Terminal directly interacts with OS which makes it powerful to be used for doing security tasks and management of files. (KALI)

## 4. Steps

### 4.1 Creating the structure of directory and navigating the directories

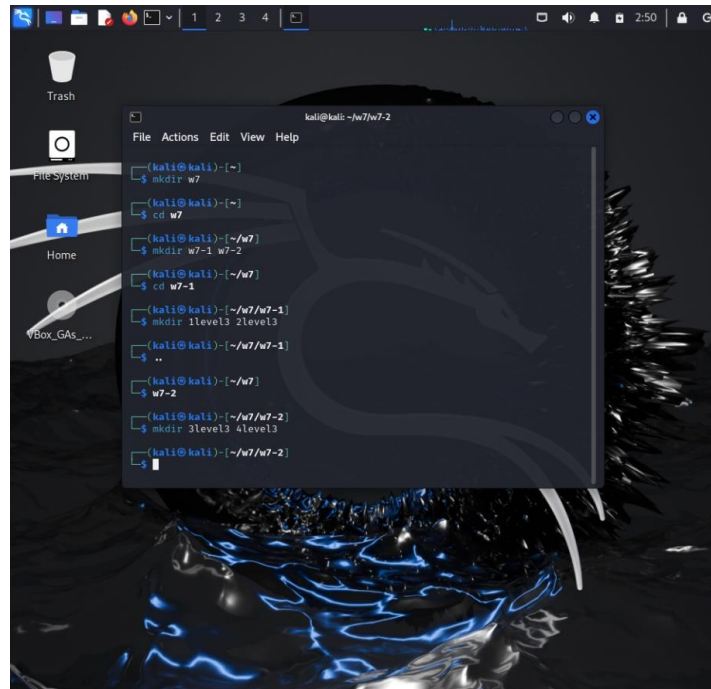


Figure 2: Directory structure created with no option

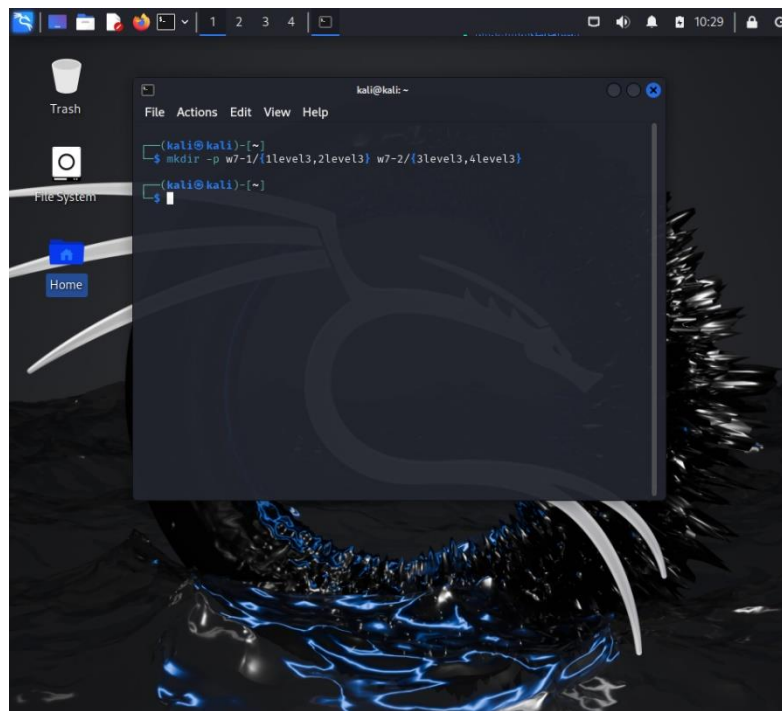


Figure 1: directory created using -p option

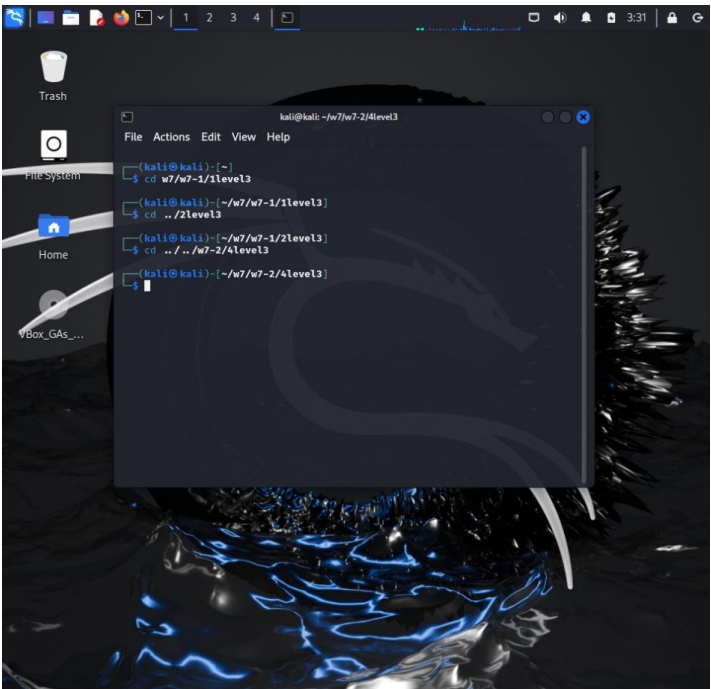


Figure 4: navigating using pathname

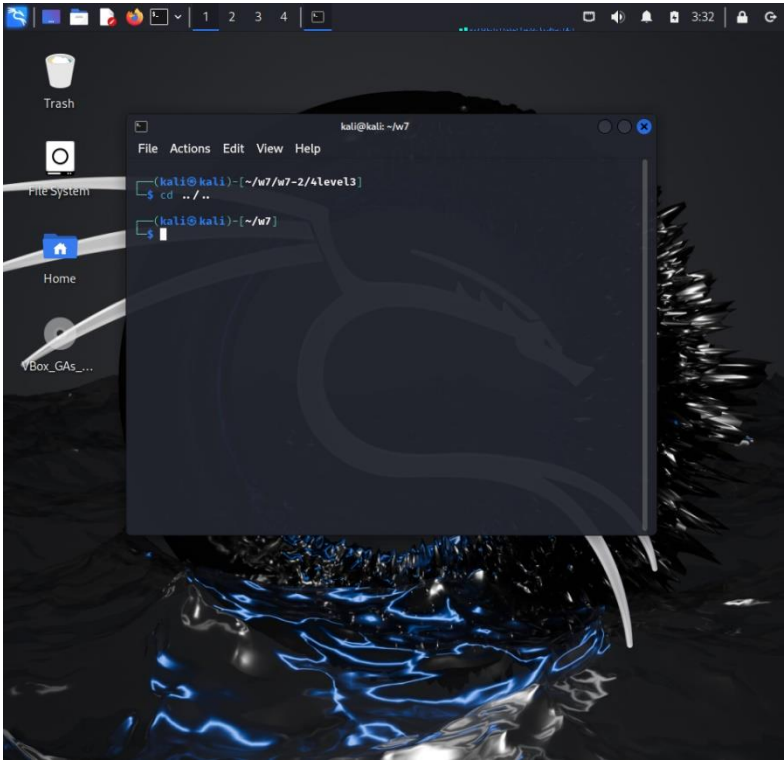


Figure 3: navigating to w7

## 4.2 Creating , copying and moving the file

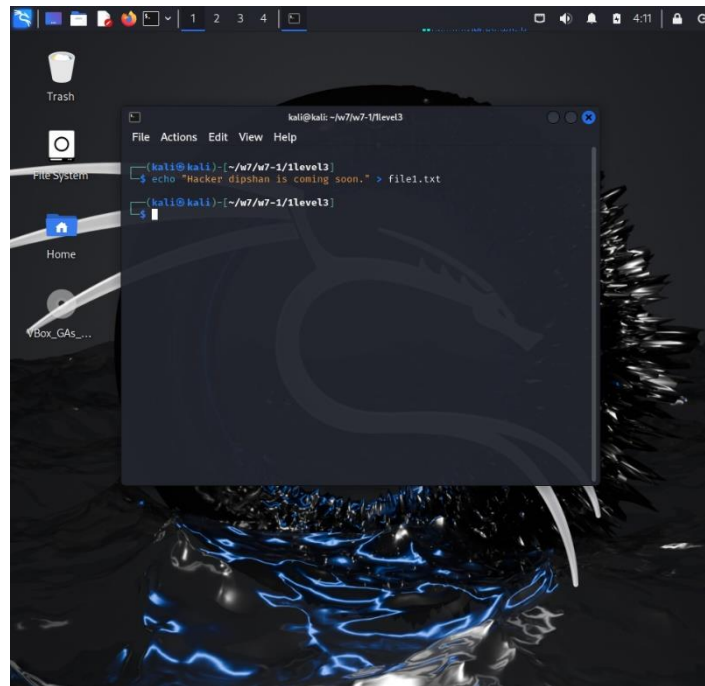


Figure 5: Creating file

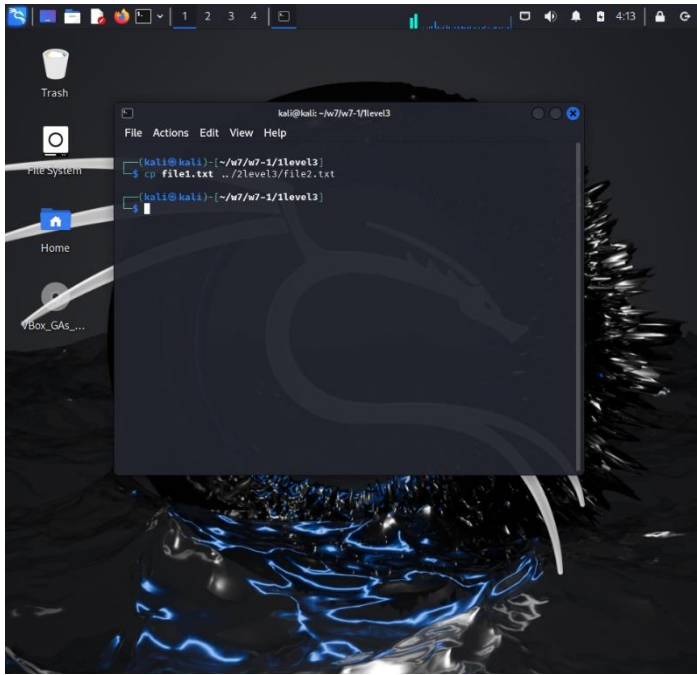


Figure 6: copying file

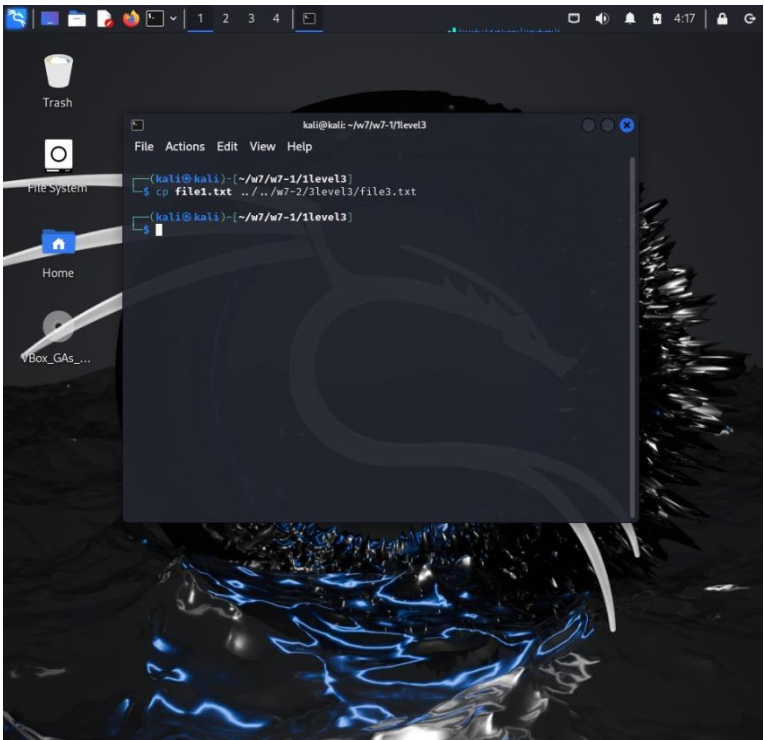


Figure 7: Copying the file



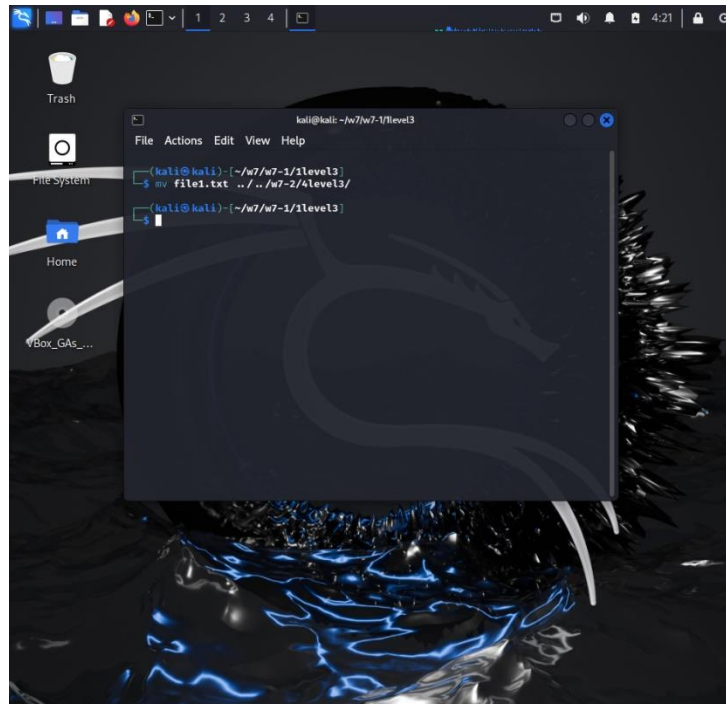


Figure 8: Moving the file

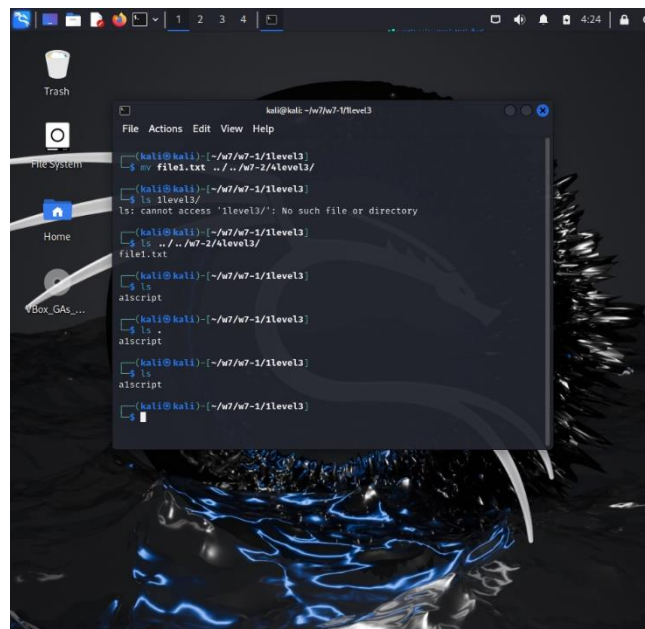
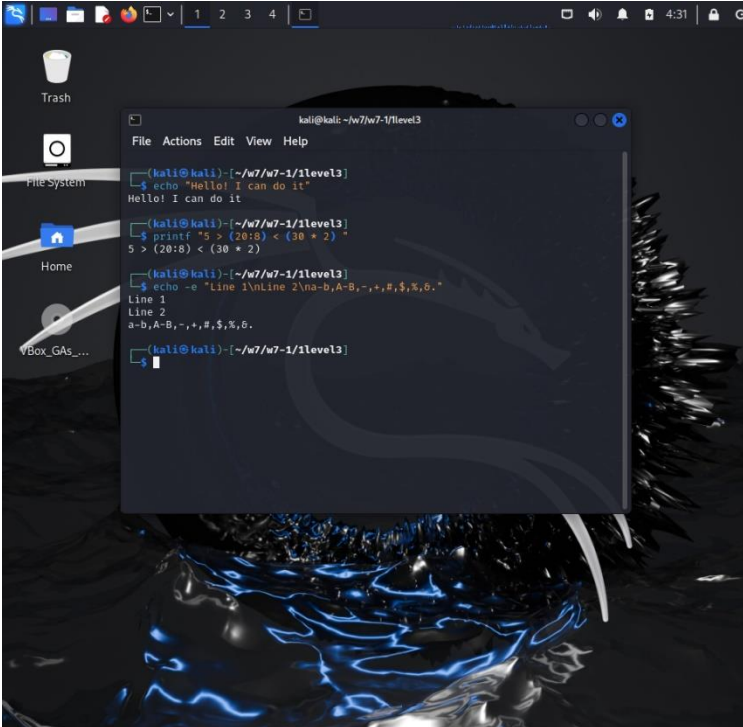


Figure 9: showing that there is file in 4level3



```

kali@kali: ~/w7/w7-1/level3
File Actions Edit View Help
(kali@kali)-[~/w7/w7-1/level3]
$ echo "Hello! I can do it"
Hello! I can do it
(kali@kali)-[~/w7/w7-1/level3]
$ printf "5 > (20:8) < (30 * 2) "
5 > (20:8) < (30 * 2)
(kali@kali)-[~/w7/w7-1/level3]
$ echo -e "Line 1\nLine 2\na-b,A-B,-,+,#,,$%,6."
Line 1
Line 2
a-b,A-B,-,+,#,,$%,6.
(kali@kali)-[~/w7/w7-1/level3]
$

```

Figure 10: Printing the given texts

### 4.3 Understanding the command ls with and without its options

ls lists all the files and directories in the current directory, -a It lists all the files including the hidden files, -d displays directory name without the content, -l displays the file detailed including its creation date, permissions, size and ownership and -g gives long format listing without ownership information.

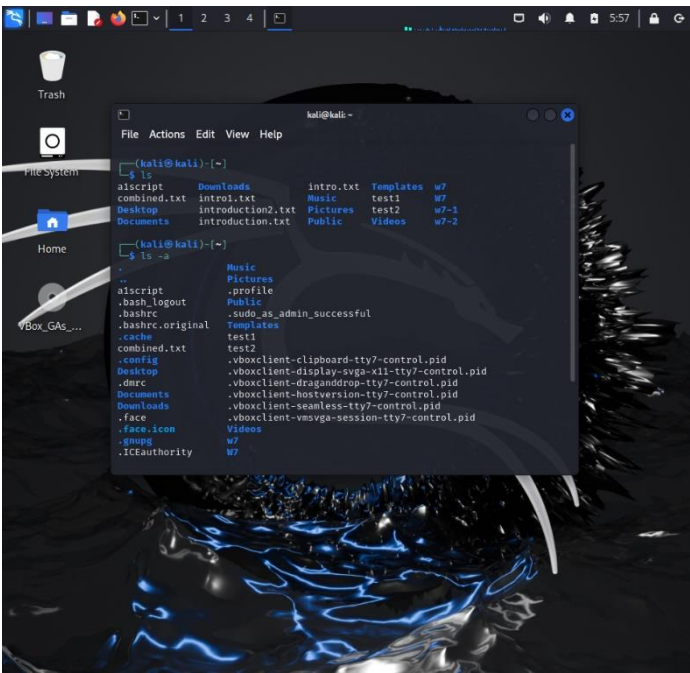


Figure 11: In home directory using ls command with options and without options

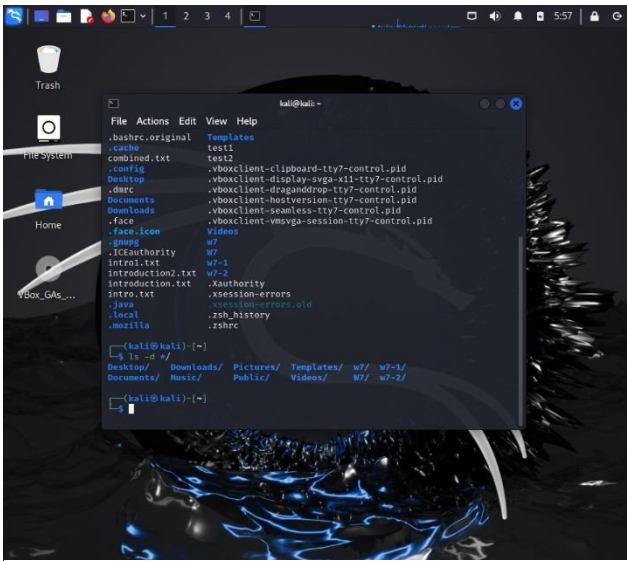


Figure 12: In home directory using ls command with options

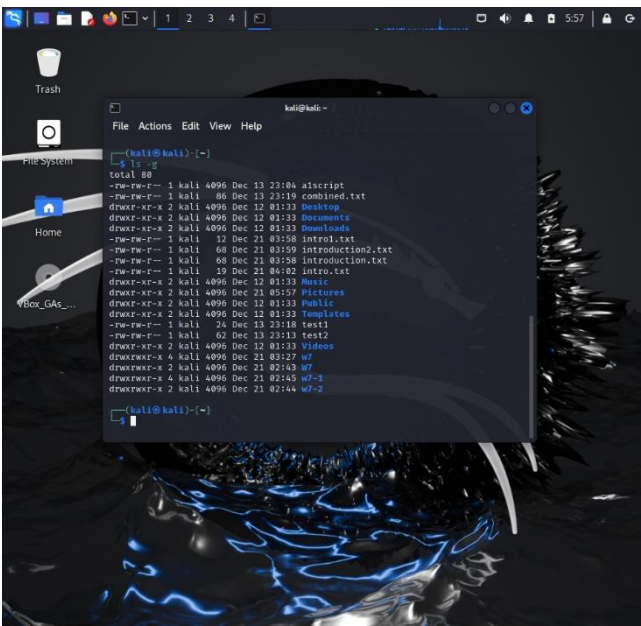


Figure 13: In home directory using ls command with options

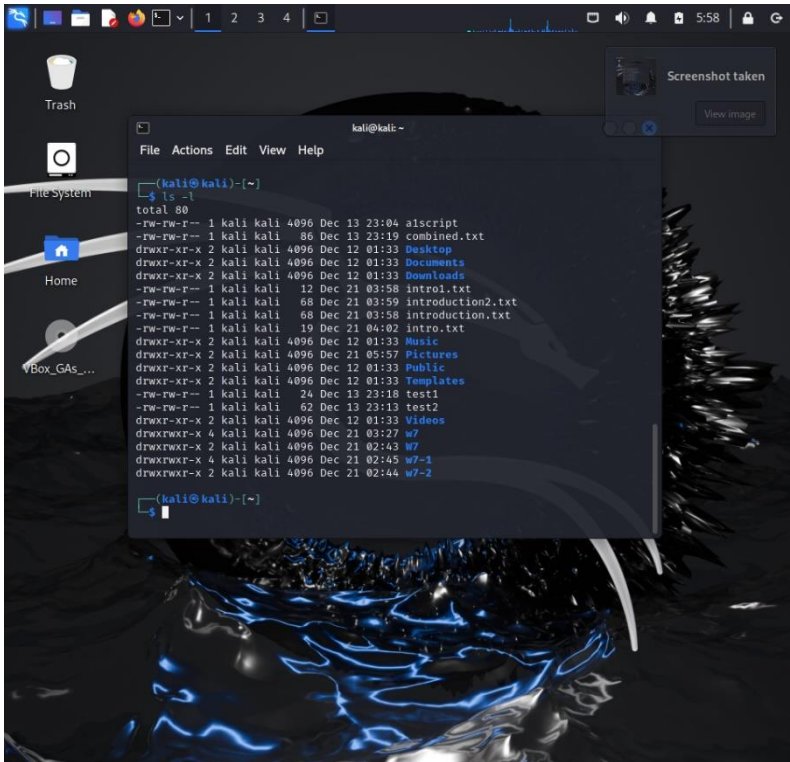


Figure 14: In home directory using ls command with options

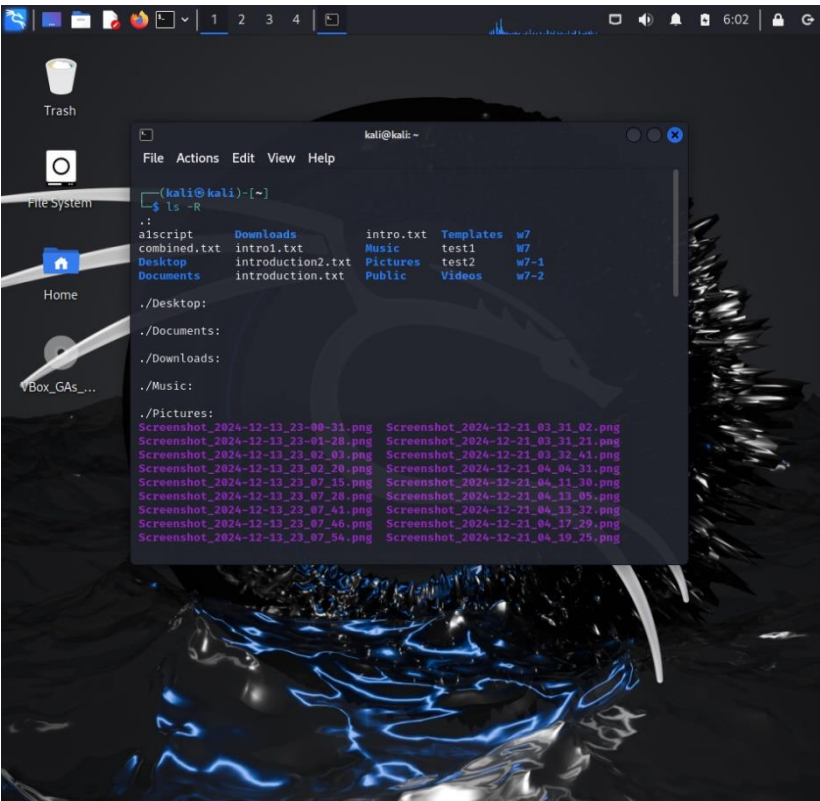


Figure 15: In home directory using ls command with options

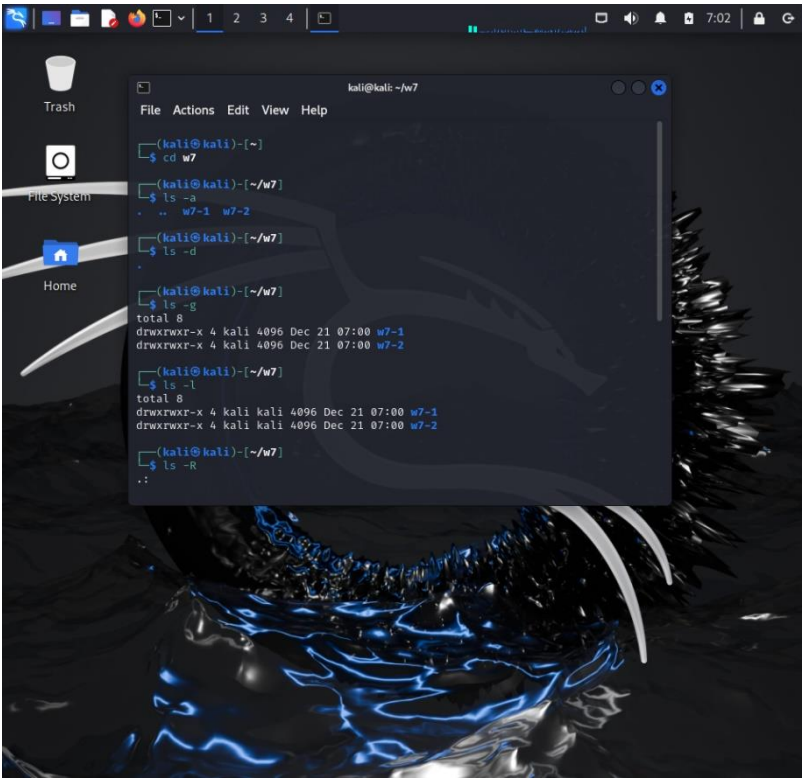


Figure 16: In w7 directory using ls command with options



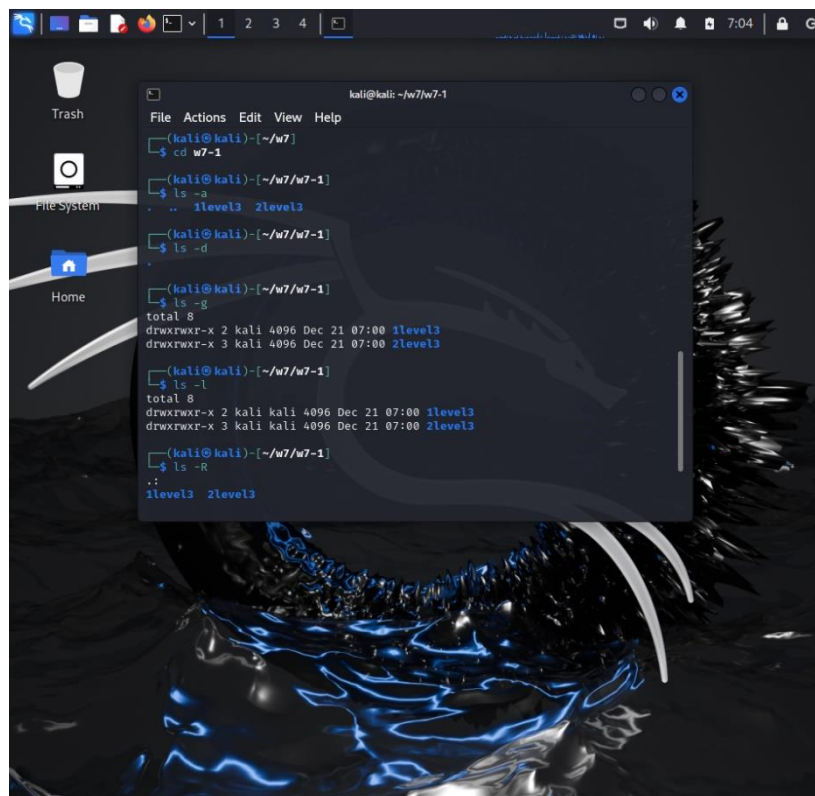


Figure 17: In w7 directory using ls command with options

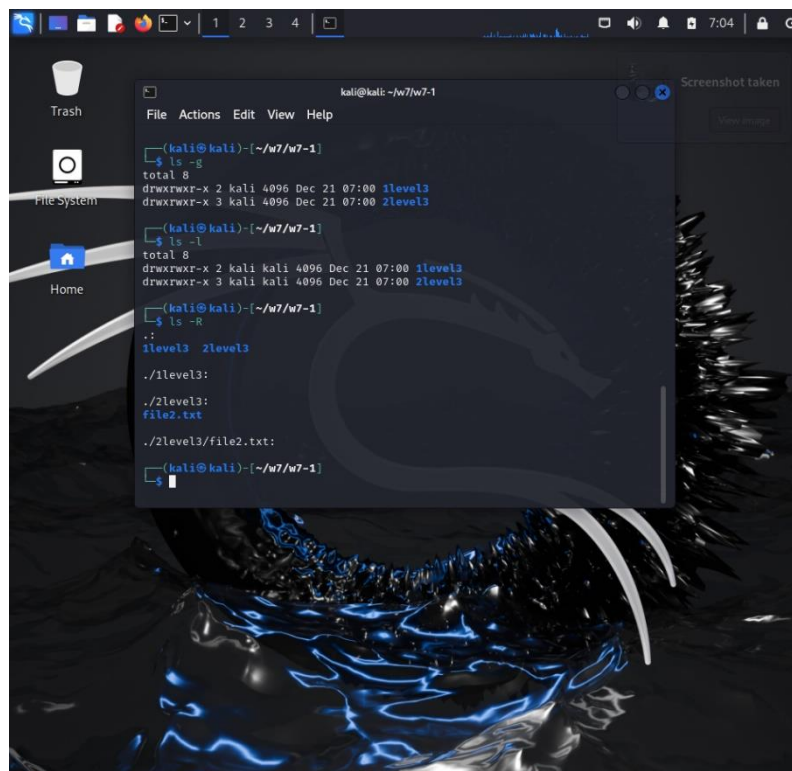


Figure 18: w7-1 directory using ls command with options

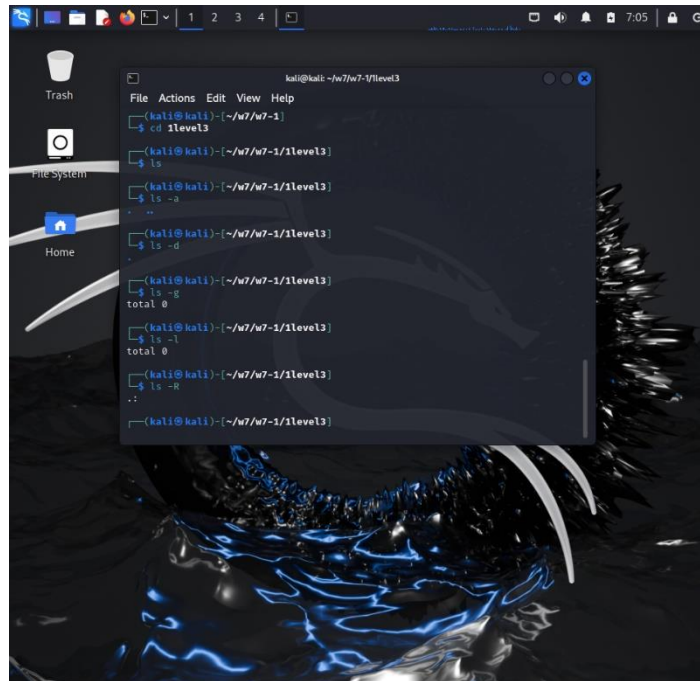


Figure 19: In 1level3 using ls command with options

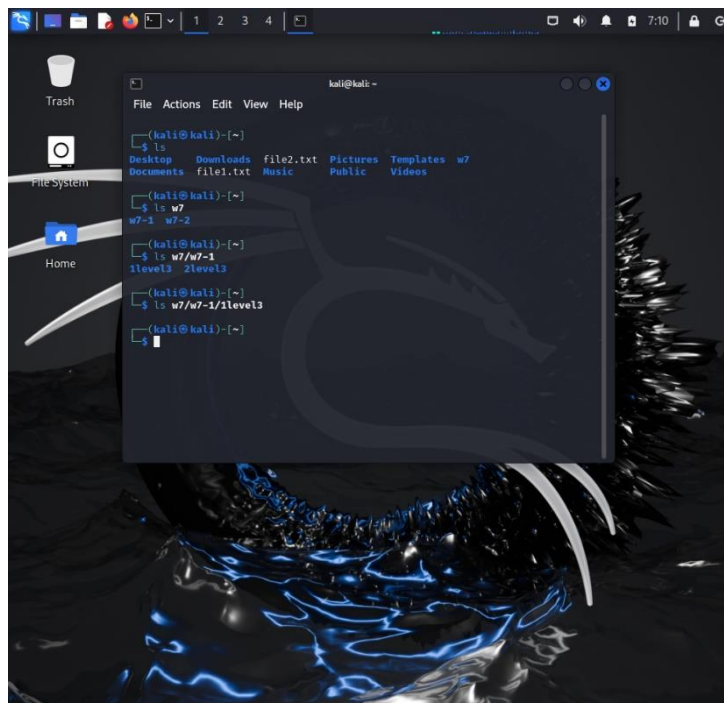


Figure 20: For home, w7,w7-1 and 1level3 using ls command without options

## 4.4 Removing files and directories

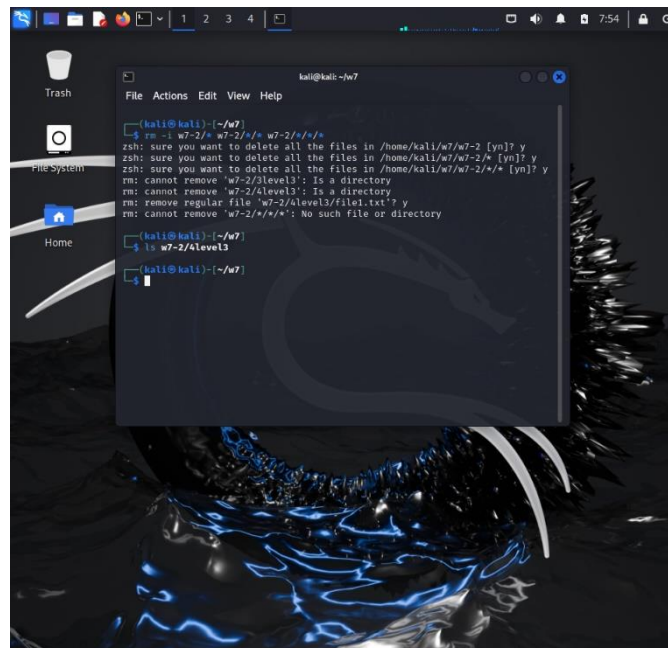


Figure 21: Removing all the files inside w7-2 directory and checking if the moved files has been removed or not

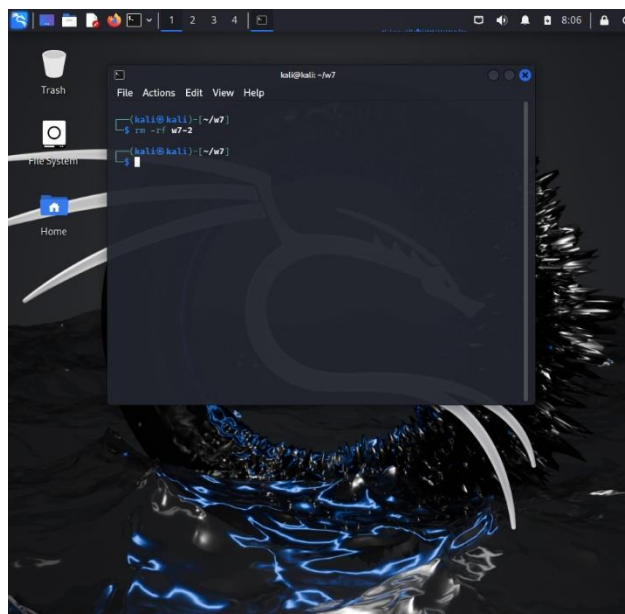


Figure 22: Since -i is not supported in our terminal, removing the directories forcefully



## 4.5 Permission management

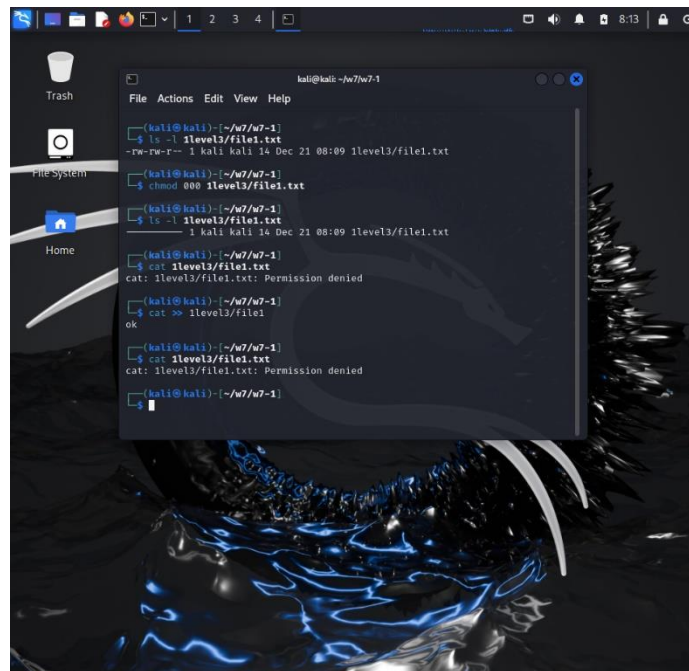


Figure 23: Checking the permissions of file1 in 1level3

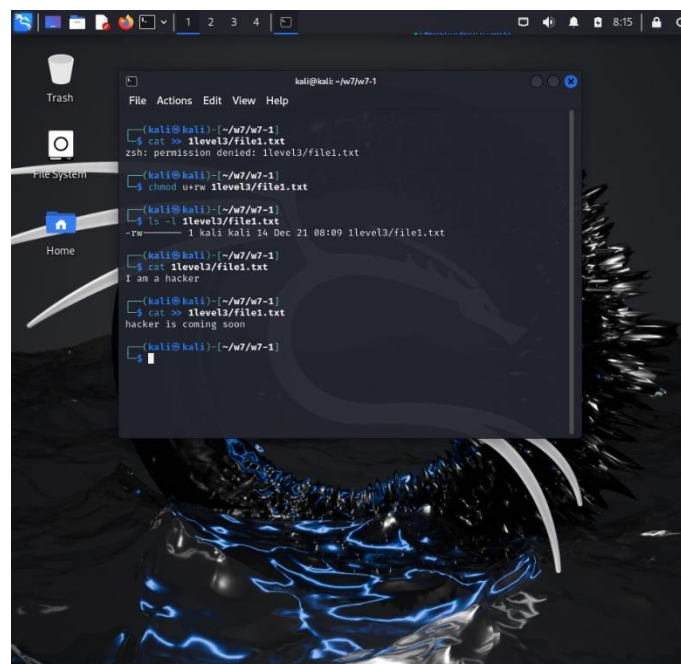


Figure 24: Modifying the permission of file and again checking it

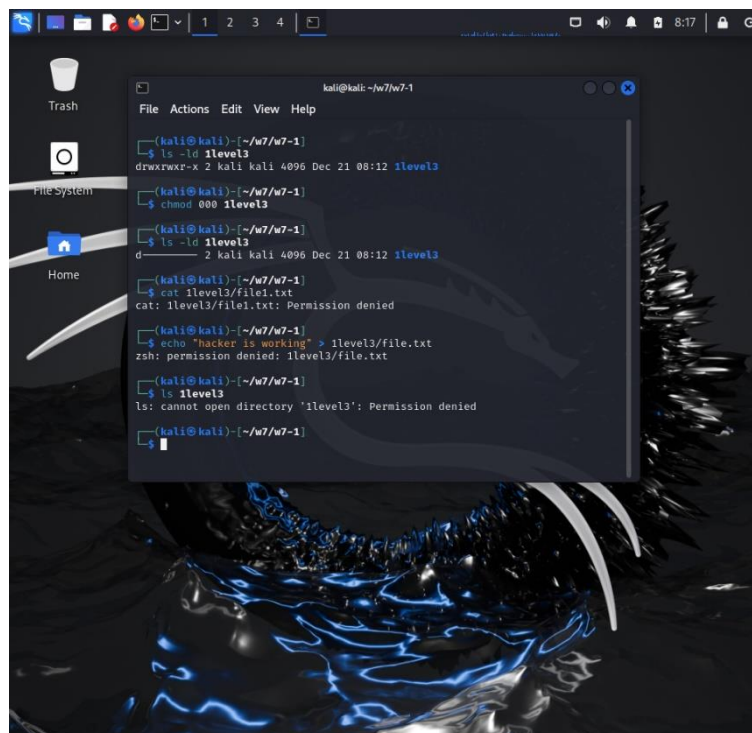


Figure 25: Checking the permission for directory 1level3

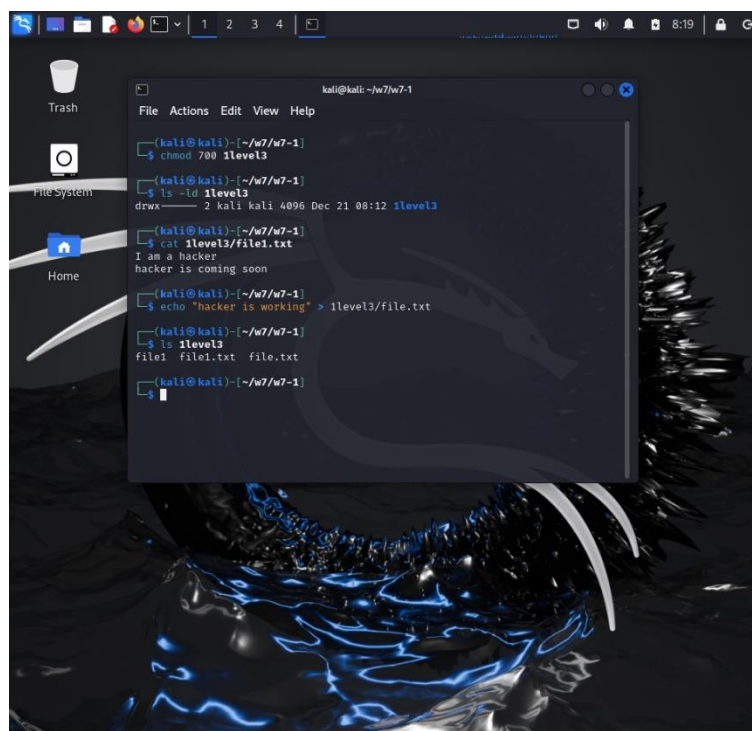


Figure 26: Modifying the permission of directory 1level3 and again checking it

## 5. Conclusion

This workshop has enhanced the skill regarding managing files, permissions and managing the directories using the unix command in kali linux terminal.

## 6. References

(KALI)

(What is in Oracle VM VirtualBox Enterprise)