Module Code & Module Title

Level 5 – CT5052 Network Operating System

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Logbook -6

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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.

Table of Contents

Table of Figures

1. Introduction

The main program which maintains computer hardware and software features that provides important services that are needed for application to operate. This process is known as operating System. Operating System includes Linux, mac OS and Windows. In 1970, Unix Operating System which is strong, multiuser and perform multiple tasks was introduced and implemented.

Unix OS is commonly used in work places, mainframes and computer system and it is widely recognized because of its reliability, safety and creativity. It provides a base and inspiration for various new technologies because it is simple to understand, light weight and highly efficient. The key objectives of Unix Operating System are mentioned below:

i. Portability: Unix OS is also more accessible over many kinds of hardware because it is designed in the C programming language

ii. Stability: The security and stability of Unix operating system are widely recognized. A lot of computers having Unix based operating system don't have to updated and restarted several years or months.

iii. Security: Unix is a dependable operating system for important and basic projects as it provides excellent protections while accessing the file, security of data and authorization of users.

iv. Networking: Unix OS developed networking functions that offers reliable communications between systems. It is important for organizations as well as enterprise systems.

v. Modularity: The main concept of Unix set a important value on modularity, that lets all applications to carryout a single operation properly. It works together with many applications to achieve higher level skills.

Kali Linux (Kali) is a Linux Distribution system that was developed with a focus on the penetration testing task. Previously, Kali Linux was known as Back track, which itself is a merger between three different live Linux penetration testing distribution: IWHAX, WHOPPIX, and auditor. (Lee Allen, Apr 7, 2014)

2. Workshop 6

1. Type script a1script at the prompt. That's the digit one (1) after the letter "a"—this is assignment one, not assignment el. The system will respond with

   - Inserting script a1script at the command prompt to see what it responds.

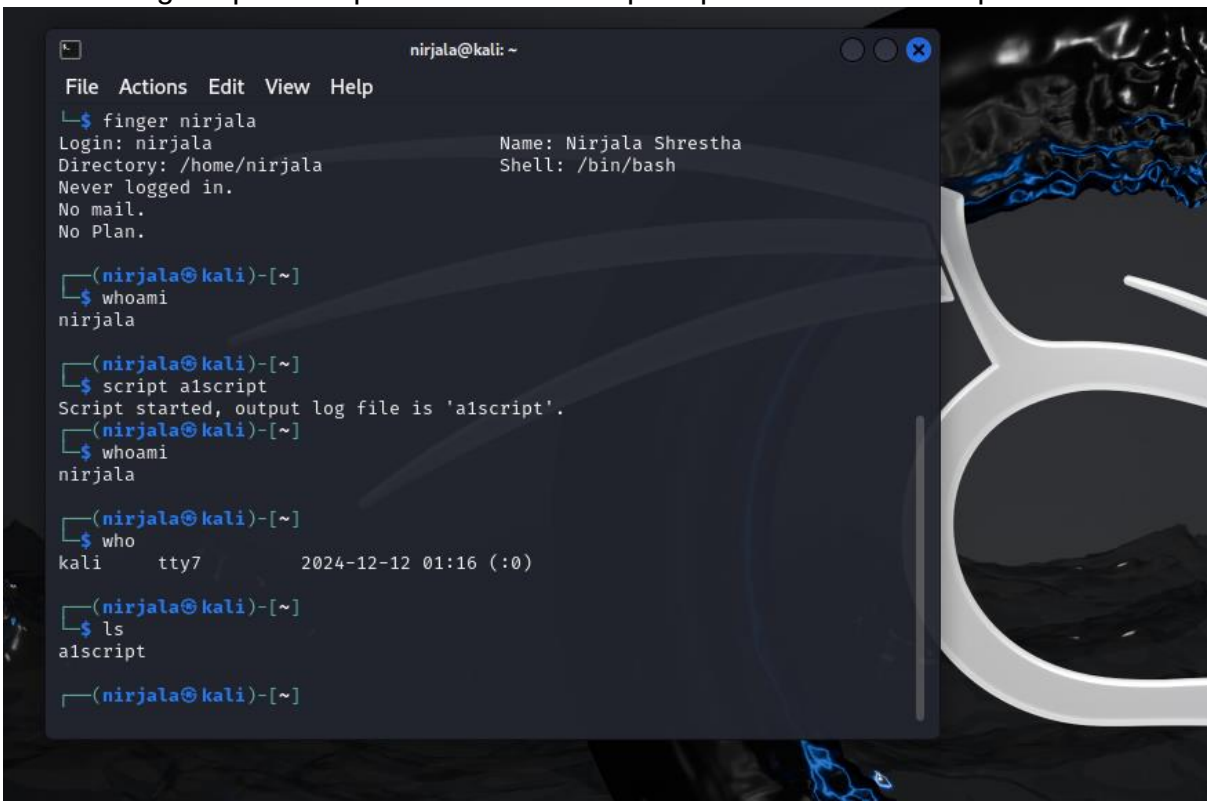

Figure 1: Inserting script a1script

2. Type whoami to see your username.
   -Inserting whoami command to see username.

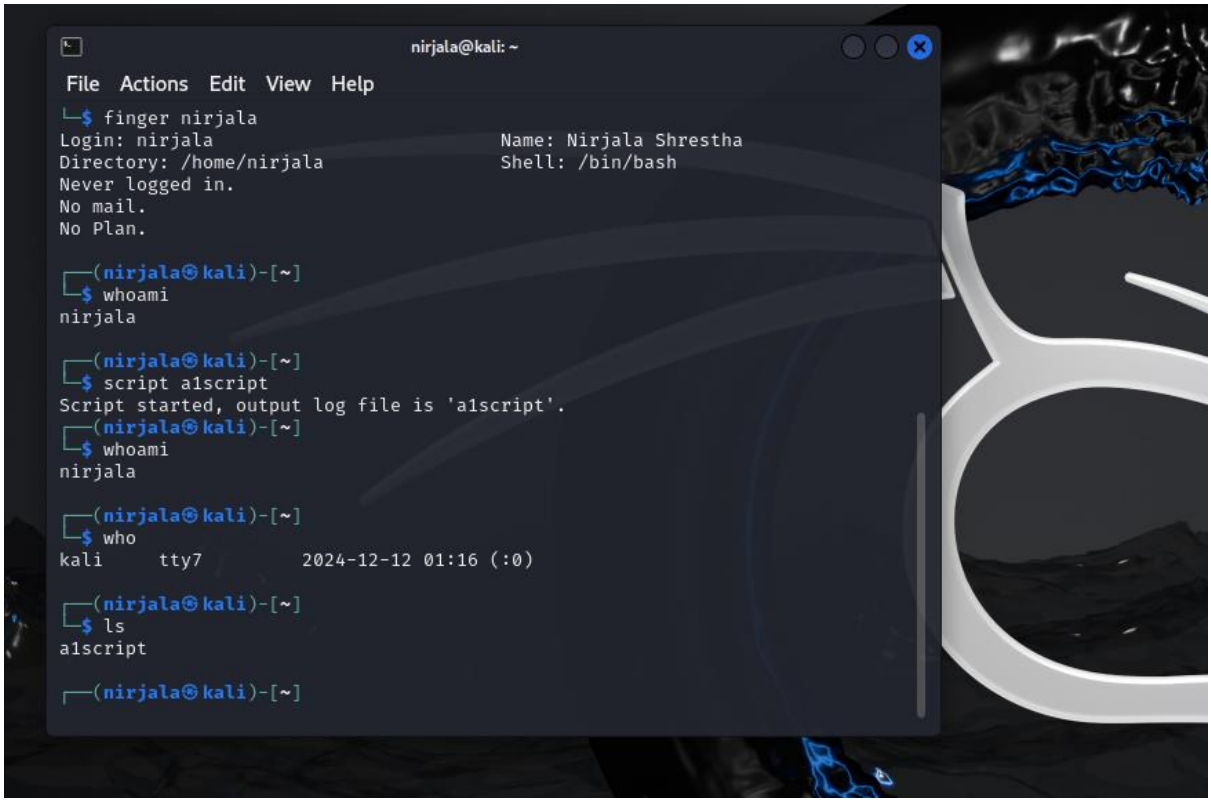

Figure 2: Inserting who am I to see username

3. Type who to see a list of everyone on the system.
   - Inserting who to see a list of everyone on system.

Figure 3: Inserting who to see a list

4. Type finger linuxnnn, (where linuxnnn is your username) to see more information about your account.
   - Inserting finger Nirjala to see more account information

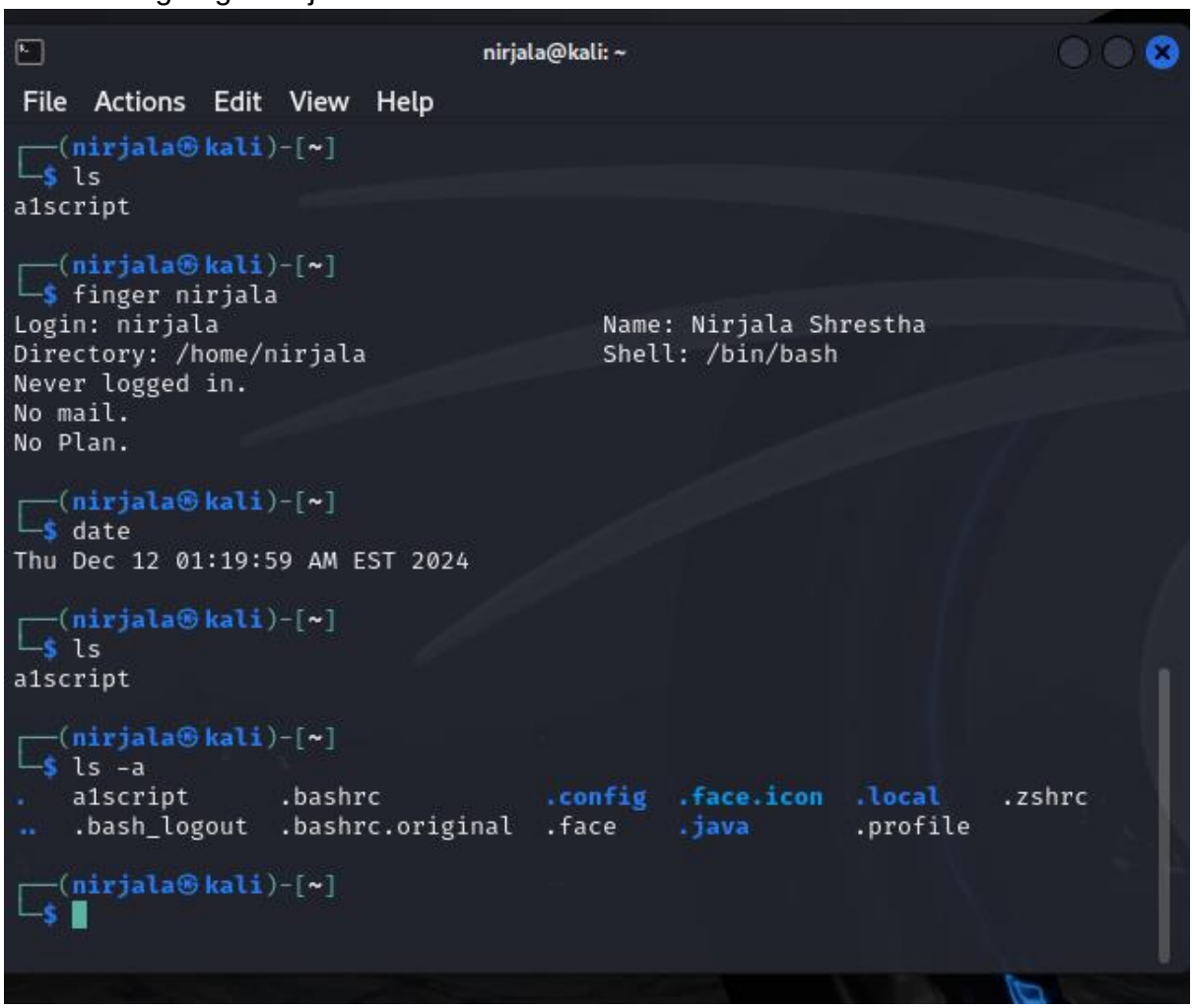

Figure 4: Inserting finger linuxnn

5. Type date, to see today's date and the current time.
   - Typing date to see current date and time.

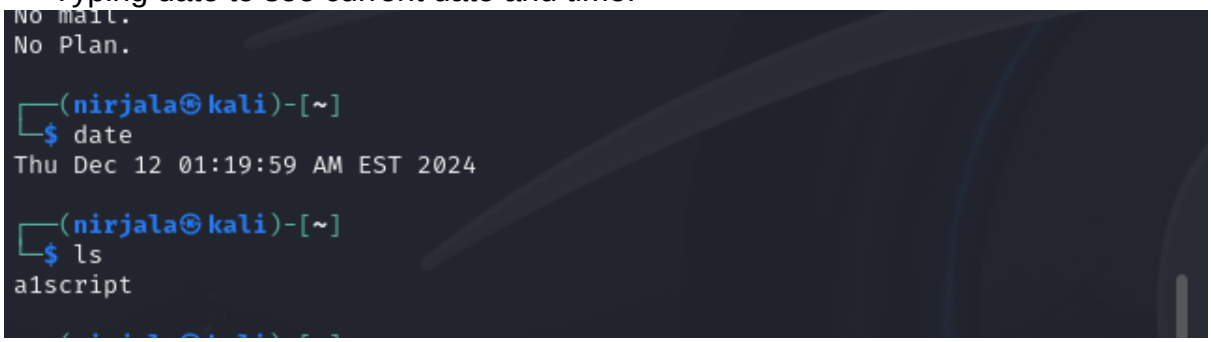

Figure 5: Inserting data to see date and current time

6. What files do you have? Type these three commands. Each one produces different output.
   ls
   ls -a
   ls -a -l

   What's the difference?

- The difference is in ls: gives only a list of files and folders of file system.
- ls -a: list all of the files and folders, which also consists files that are hidden (that are denoted by. dot)
- ls -a -l: lists every files and folders also the one that are hidden and provide full instructions on every one of them. It also combines -a -l.

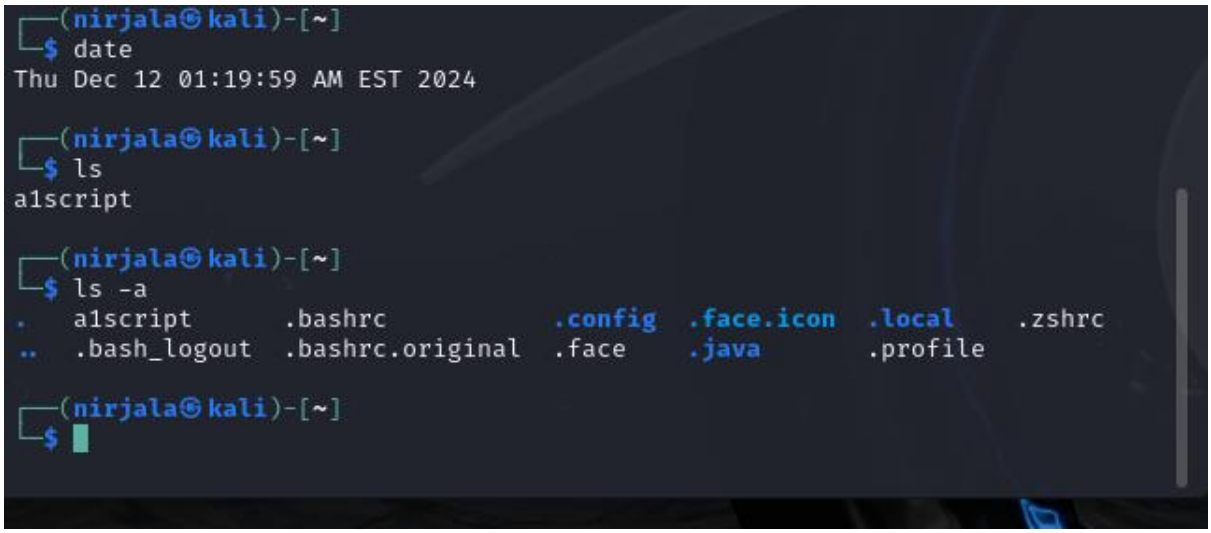

Figure 6: Output of ls

Figure 7: Output of ls -a

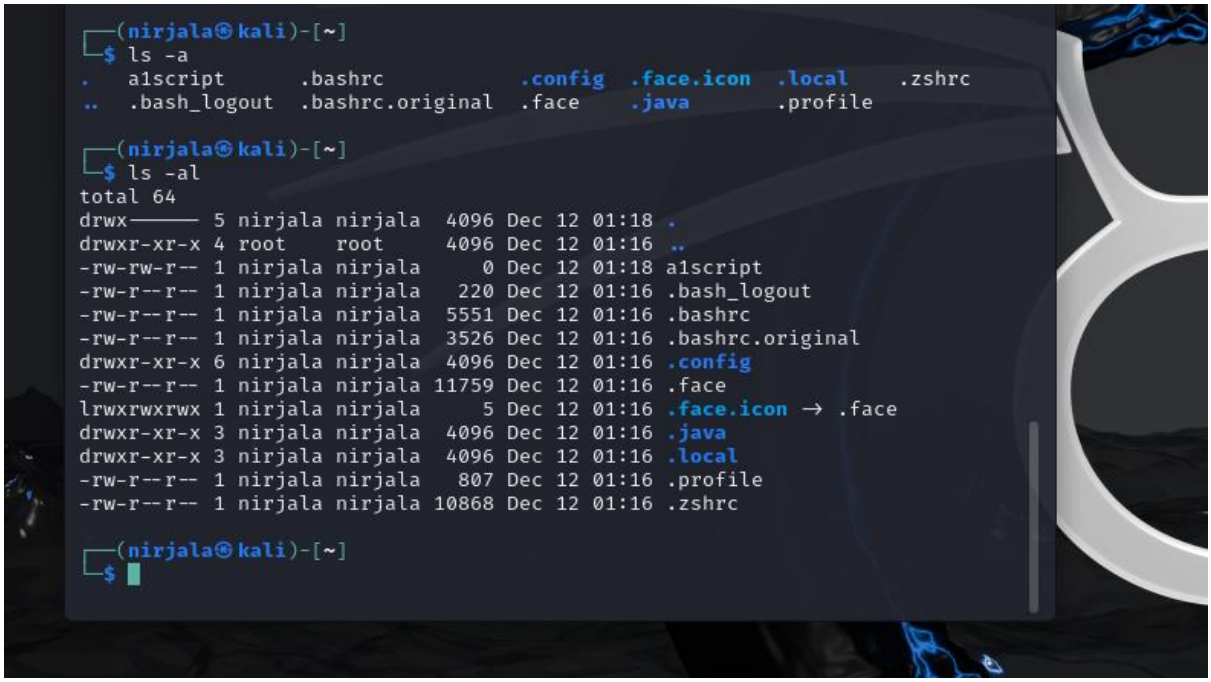

Figure 8: Output of ls -a -l

7. What's in a file? Type below commands.
   cat /etc/passwd

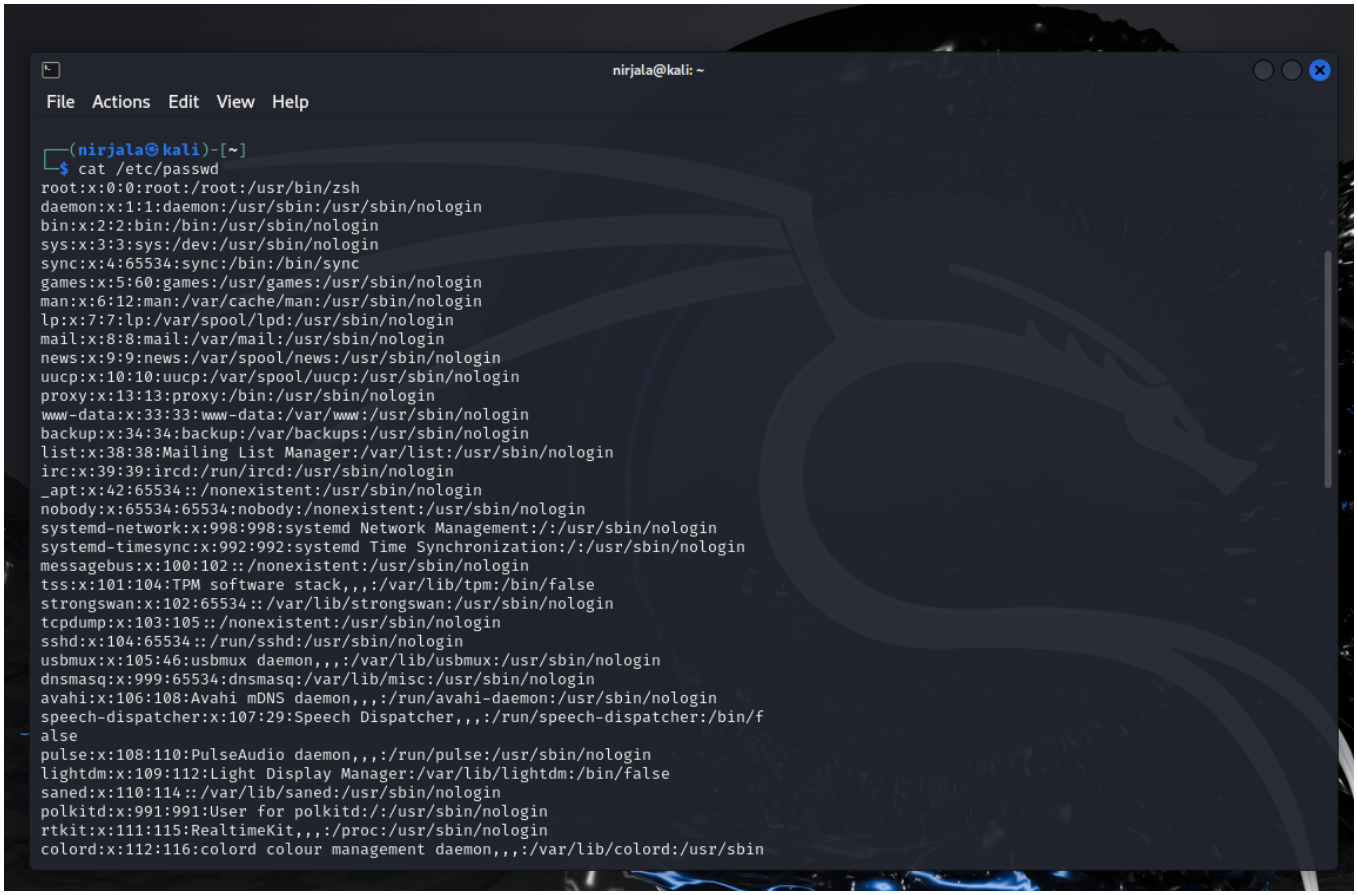

Figure 9: Inserting cat/etc/passwd

Figure 10: Inserting cat/ etc/passwd

8. Create a file named test1 by typing this:

echo "This is a one-line file" > test1

- Generating a file named test1 that includes "This is a one-line file"

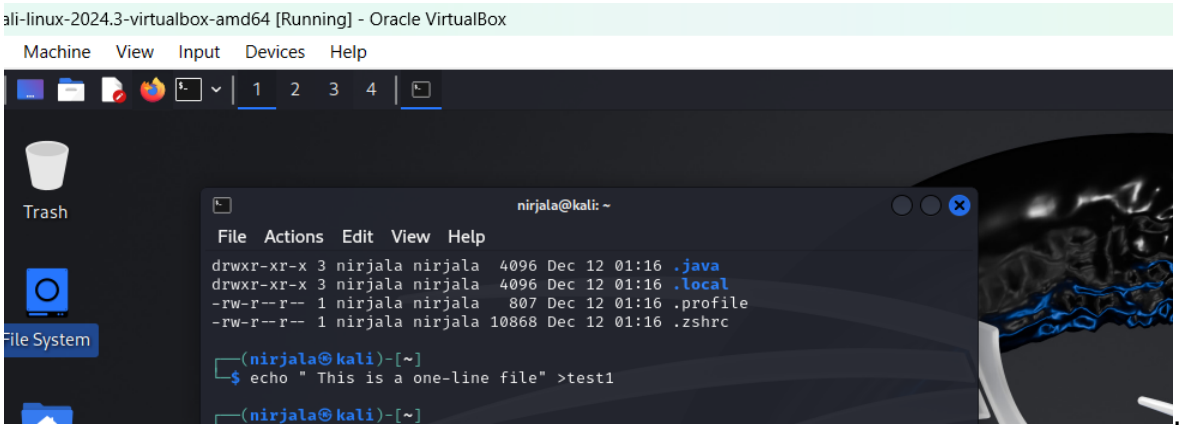

Figure 11: Creating a file named test1

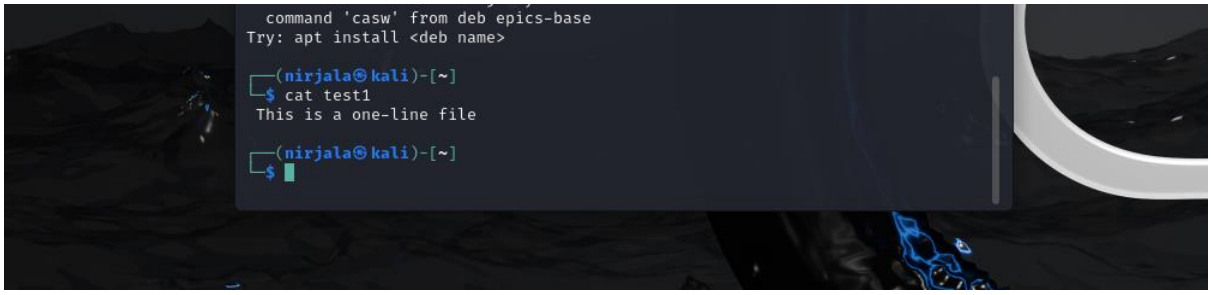

Figure 12: Output of test 1

9. Create another file by typing the following; where ^D means CTRL-D.
   cat > test2
   This is file two.
   It has several lines.
   Three lines, in fact.
   ^D

- Generating another file named test2 with providing some information.

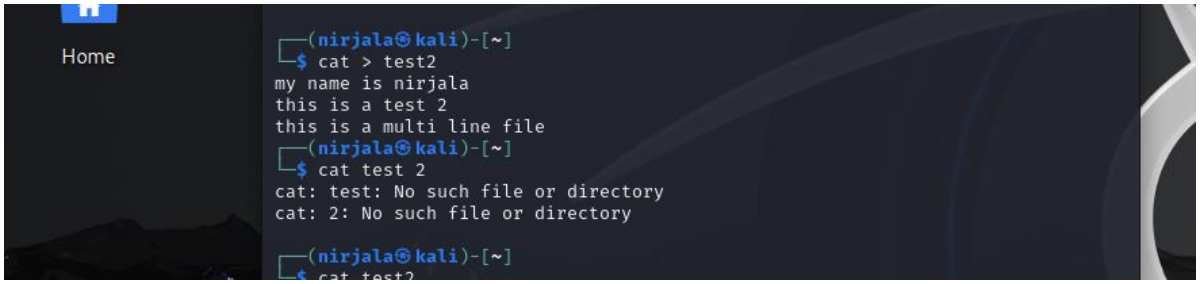

Figure 13: Creating file test 2

10. Show that the file exists, and what it contains.

- Output of the test2 .

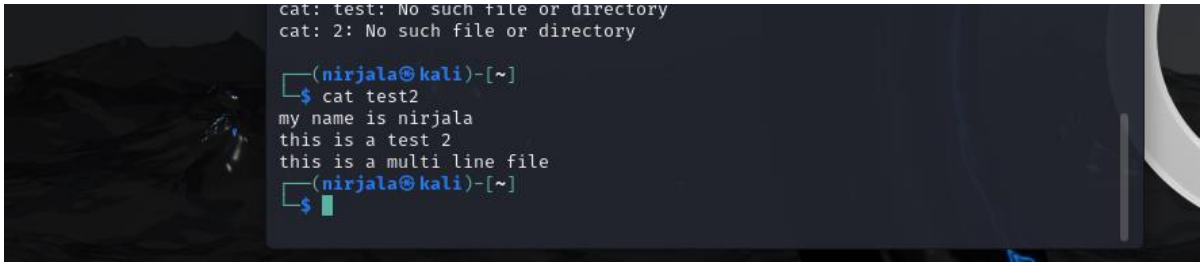

Figure 14: Output of test 2

11. Combine test1 and test2 file.
- Combining both test1 and test2 to see the result.

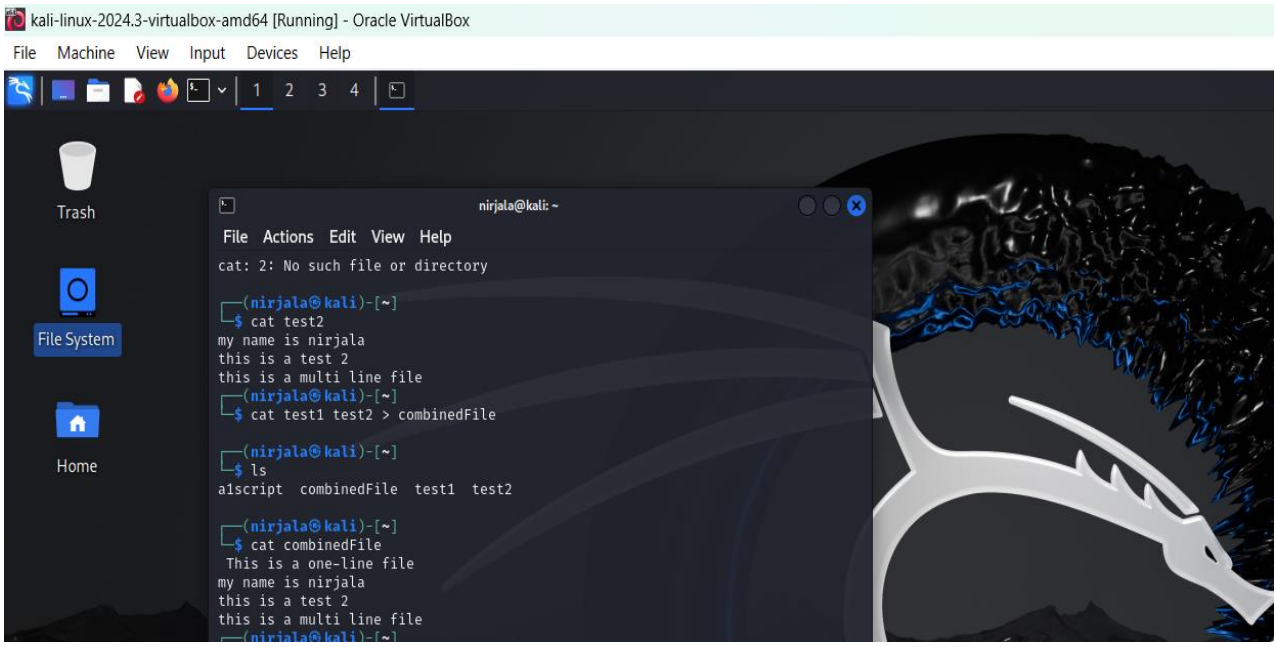

Figure 15: Combining test1 and test2

12. Exit the script
- Exiting the script.

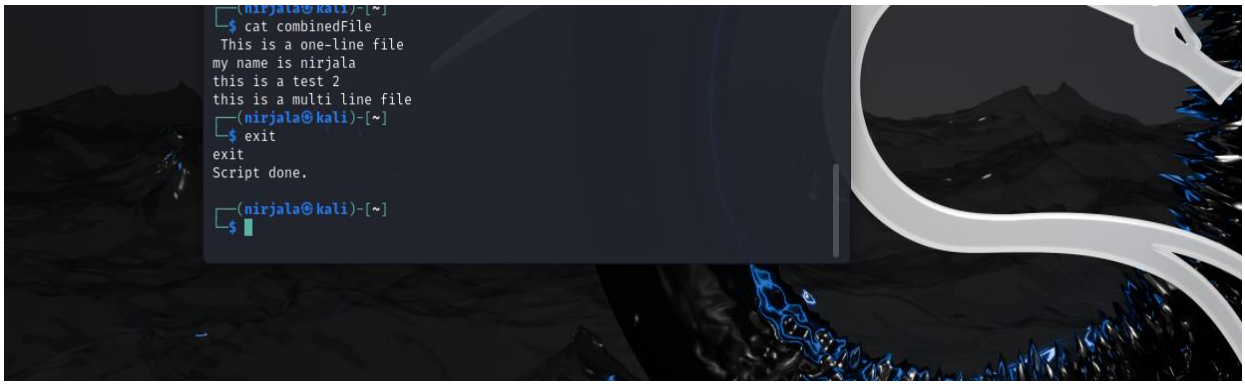

Figure 16: Exiting the script

3. References

Lee Allen, T. H. (Apr 7, 2014). *Kali Linux – Assuring Security by Penetration Testing.* UK: Lee Allen, Tedi Heriyanto, Shakeel Ali.

4. Conclusion

Kali Linux is a secure and flexible operating system which is developed just for security researchers, legal hackers, security professionals. Kali Linux is an excellent option for training and performing cyber security since it is easily accessible and free project. Despite this, modern technology needs to be carried out constantly wisely and properly for legal and moral values. In conclusion, Kali Linux is an effective operating system that allows users to properly secure as well as learn advanced computer system.