Operating System (01CE1401)

Lab Manual 24-25

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Class: 4 EC5

Lab	Program	Marks	Signature
1.	Demonstrate different commands of Linux (minimum 15 commands)		
2.	a) Write a shell script with basic commands like echo and read b) Write a shell script to display addition of given two numbers		
3.	Write a shell script to display multiplication table of given number		
4.	Write a shell script to generate marksheet of a student. Take 3 subjects, calculate and display total marks, percentage and Class obtained by the student.		
5.	Write a shell script to check entered string is palindrome or not.		
6.	Write a shell script to find factorial of given number n.		
7.	Write a shell script which will accept a number b and display whether it is prime numbers or not.		
8.	Write a shell script which will generate first n Fibonacci numbers like: 1, 1, 2, 3, 5, 13, …		
9.	Write a menu driven shell script which will print the following menu and execute the given task. a. Display calendar of current month b. Display today's date and time c. Display usernames those are currently logged in the system d. Display your name at given x, y position e. Display your terminal number		
10.	Write a shell script to concatenate two strings		
11.	Write a shell script to read n numbers as command arguments and sort them in descending order.		
12.	Write a program using function, which convert each word in a given text into capital.		
13.	Write a shell script to display all Executable Files, Directories And Zero sized files from current directory		
14.	Write a Shell programming using filters (including grep, egrep, fgrep)		

Practical 1 : Demonstrate different commands of Linux (min. 15 commands).

1. **ls**: Lists the files and directories in the current directory.
2. **cd**: Changes the current directory to a specified one.
3. **mkdir**: Creates a new directory with the given name.
4. **touch**: Creates an empty file or updates the timestamp of an existing file.
5. **cat**: Displays the contents of a file or concatenates files

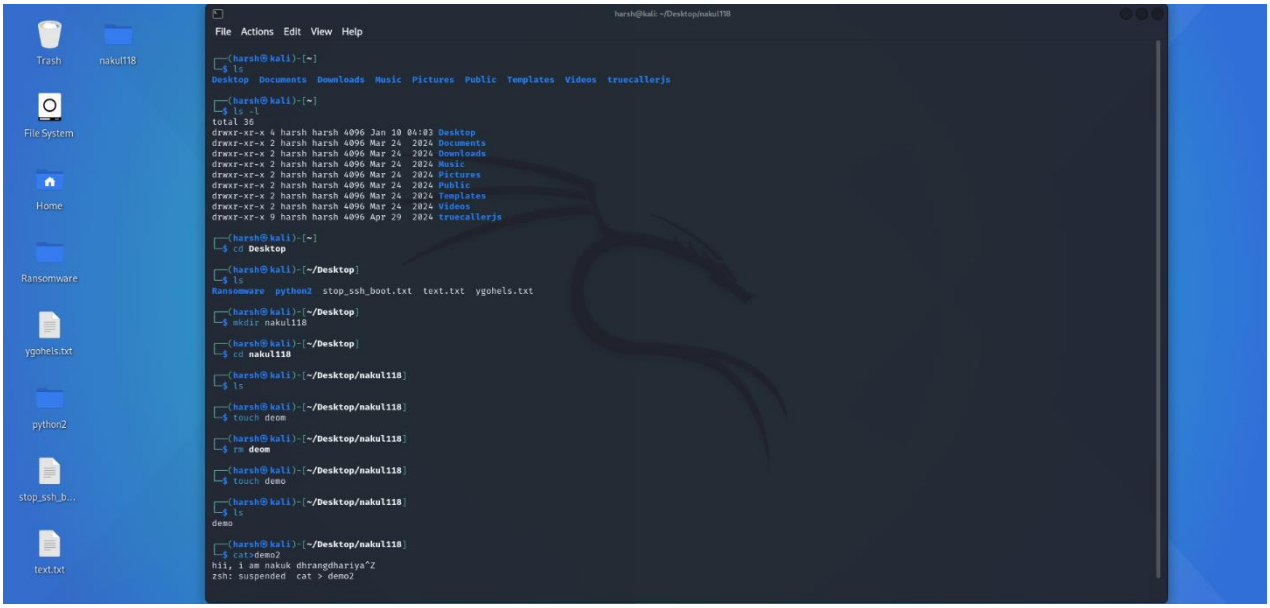

Figure 1.1 : commands used listed above

6. **ping**: Sends ICMP packets to check the connectivity to a network host.
7. **pwd**: Prints the current working directory path.
8. **ls -la**: Lists all files and directories, including hidden ones, in long format.

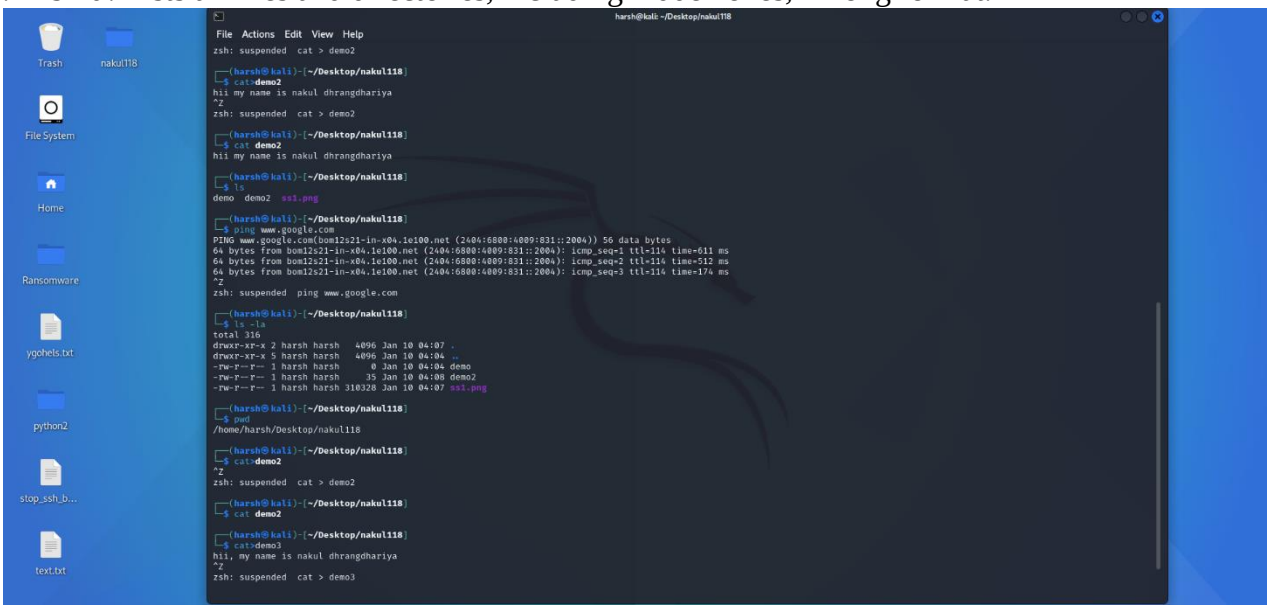

Figure 1.2 : commands used listed above

9. **cp**: Copies files or directories to a specified location.
10. **mv**: Moves or renames files or directories.

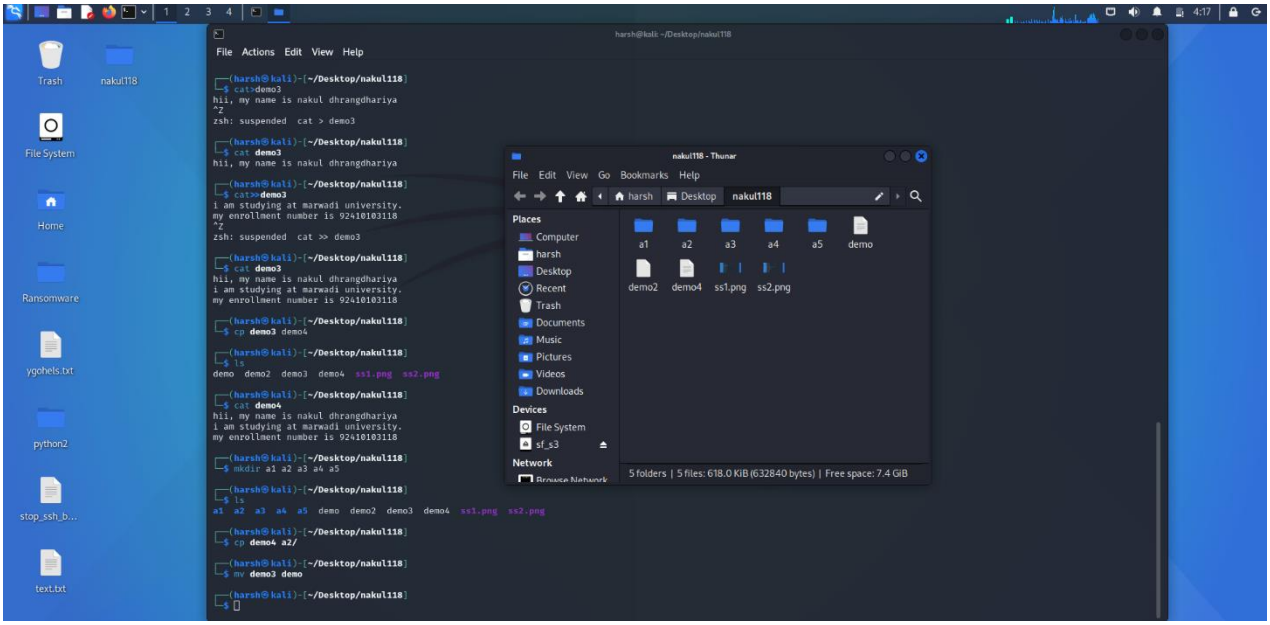

Figure 1.3: commands used listed above

11. **rmdir**: Deletes an empty directory
12. **hostname**: Displays or sets the system's hostname.
13. **zip**: Creates a compressed archive of files and directories in .zip format. Example: zip archive.zip file1 file2.
14. **unzip**: Extracts files from a .zip archive. Example: unzip archive.zip.
15. **sudo apt-get**: Installs, updates, or removes software packages on Debian-based systems.

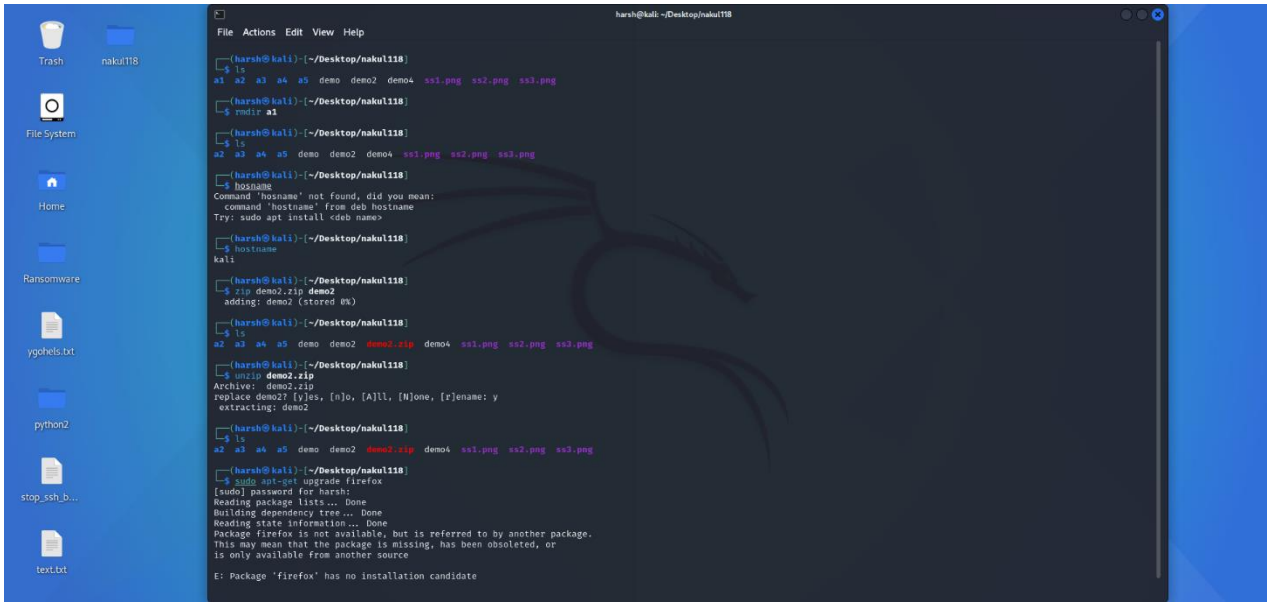

Figure 1.4 : commands used listed above

16. **passwd**: Changes the password of a user account.
17. **chmod**: Modifies file or directory permissions.

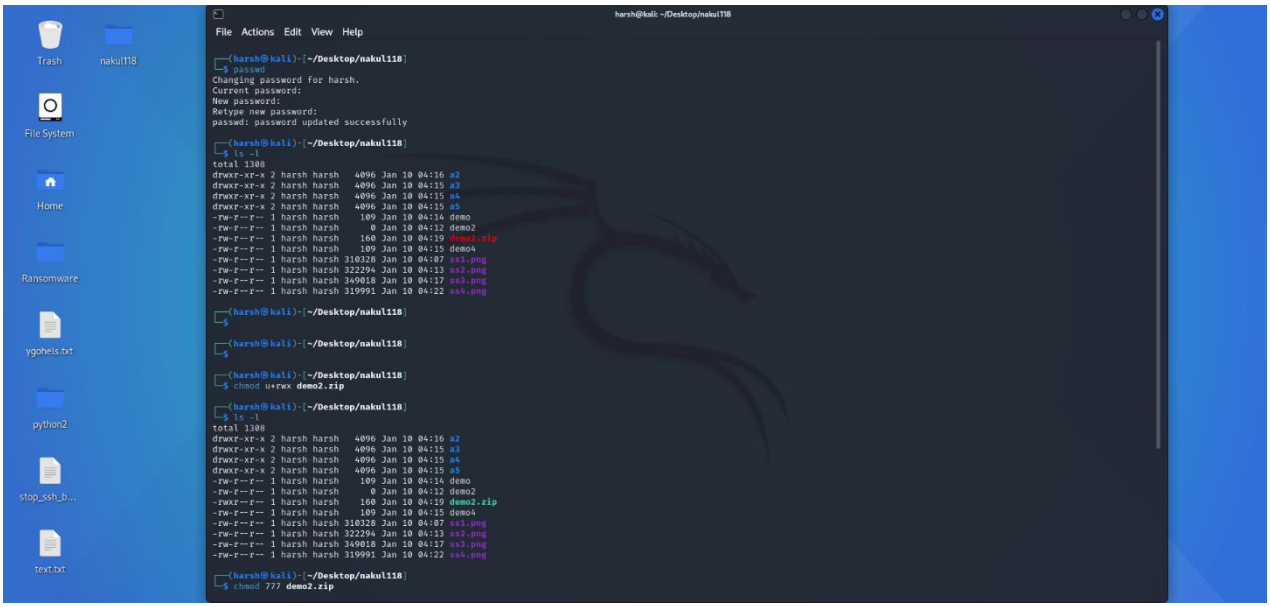

Figure 1.5: commands used listed above

18. **su root**: Switches to the root user account (requires the root password

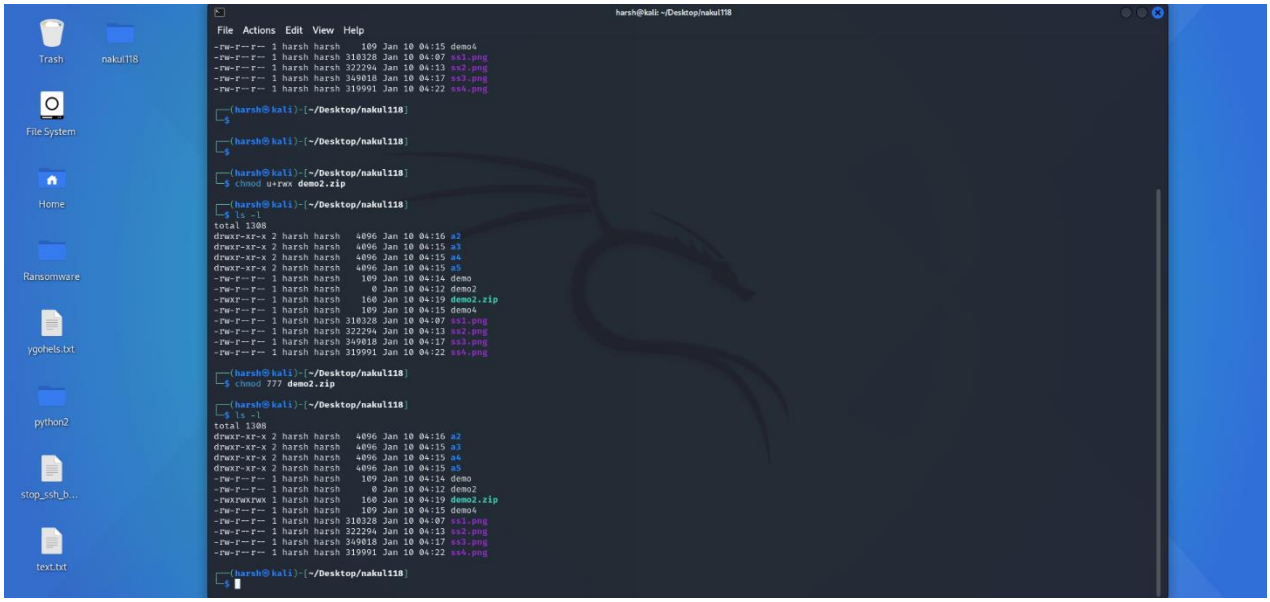

Figure 1.6 : commands used listed above