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LAB ASSIGNMENT NO -02

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1. INTRODUCTION OF INTERNAL AND EXTERNAL COMMANDS.

Ans. Internal commands are built-in commands that are directly integrated into the shell or command interpreter. These commands are executed within the shell itself, without invoking any external programs. Internal commands are typically simple and perform basic

operations. Examples of internal commands include echo, cd, pwd, and help. These

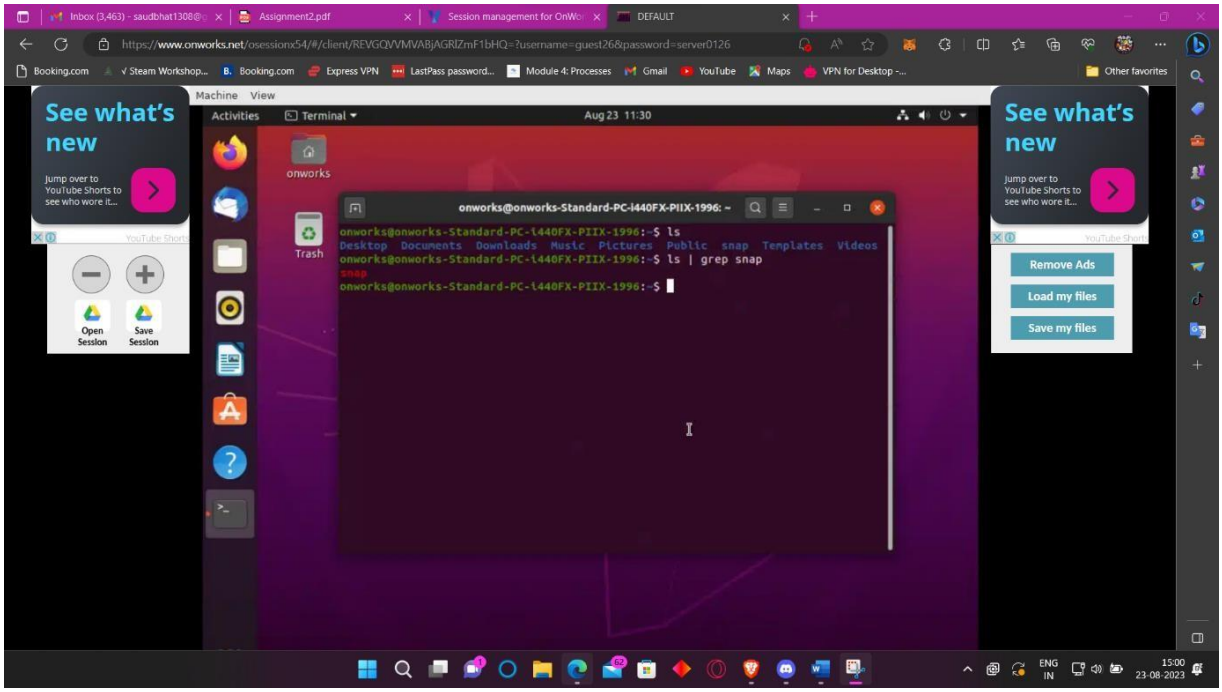
commands are usually faster and more efficient than external commands because they do not require the overhead of creating a new process.

External commands, on the other hand, are separate executable programs or scripts that are stored in separate files on the system. These commands are not built into the shell and need to be invoked as separate processes. External commands are more complex and can perform a wide range of operations. Examples of external commands include ls, grep, mkdir, and rm.

When an external command is executed, the shell creates a new process to run the command, which requires additional system resources.

2. FEEDING OUTPUT OF ONE COMMAND TO ANOTHER COMMAND BY PIPELINING.

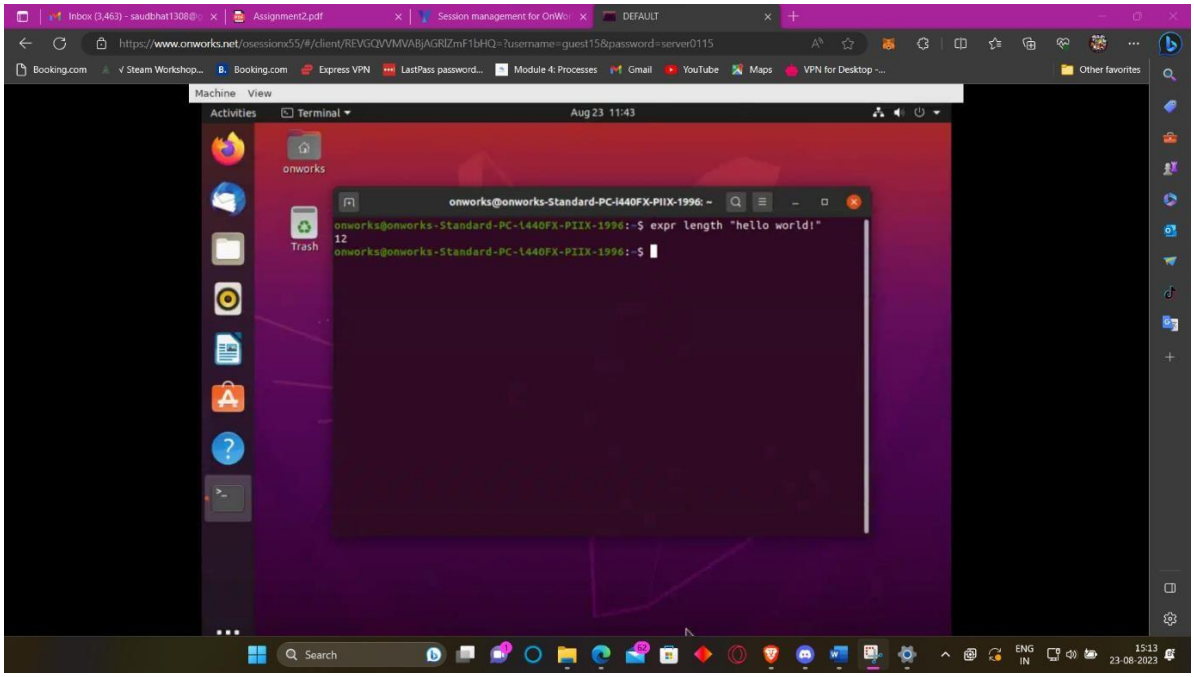
Ans. To feed the output of one command to another command by pipelining in Unix-like operating systems, you can use the pipe symbol (|). The pipe symbol acts as a connector between commands, allowing the output of one command to serve as the input for another command.



In this example, ls lists all the files in the current directory, and the output is then passed as input to the grep command. The grep command searches for the specified filename within the list of files generated by ls.

3. EXPR, LOCATING COMMAND

Ans. In Unix-like operating systems, the expr command is used to evaluate and perform arithmetic or string operations. It can be used to perform mathematical calculations, compare values, manipulate strings, and more.

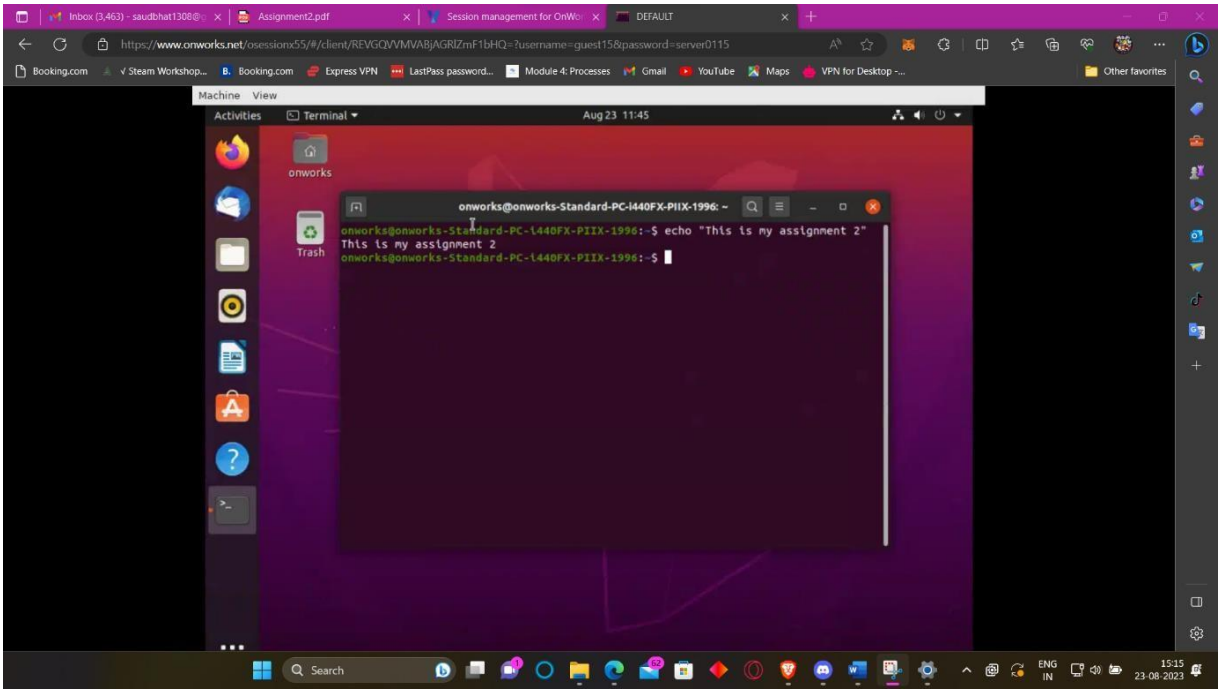


- The locating command mentioned in your question is not a specific command in Unix-like systems. It might be a typo or a misinterpretation. If you are referring to

  locating files or directories, you can use the find command or the locate command.

4. ECHO COMMAND

Ans. The echo command is a commonly used command in Unix-like operating systems that is used to display text or variables on the terminal.

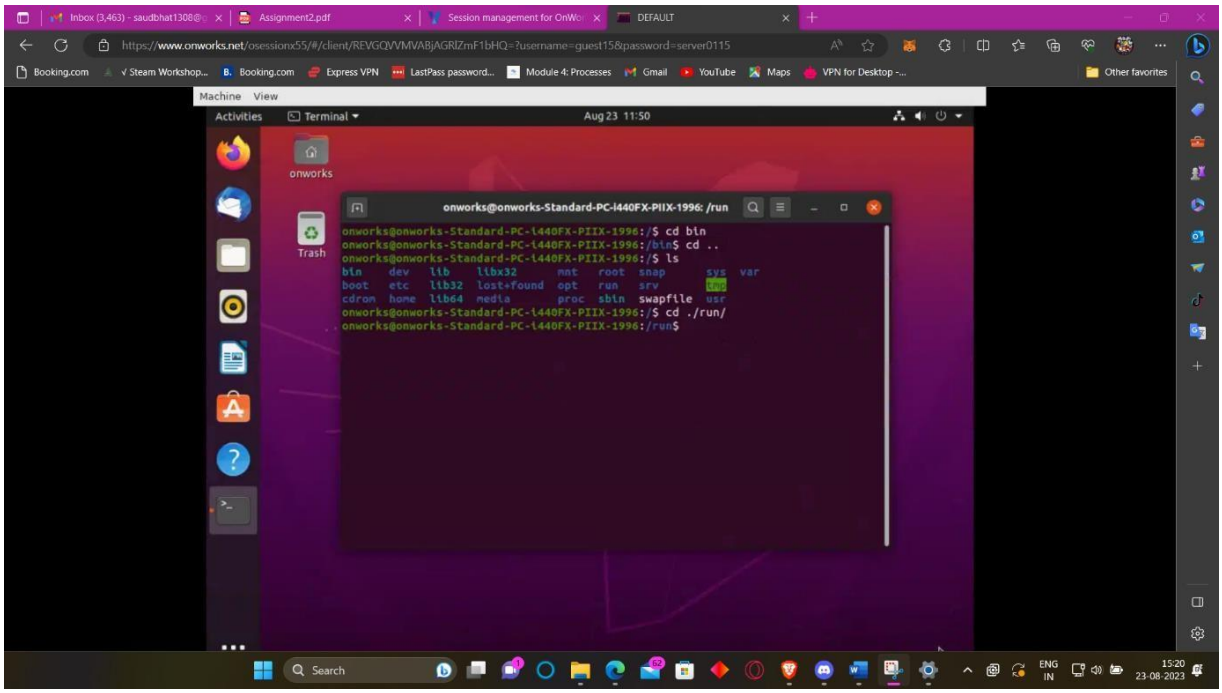


5. USING . AND ..

Ans.

- . (dot): The . (dot) represents the current directory. It is used to refer to the current working directory in file paths or commands.

- .. (dot dot): The .. (dot dot) represents the parent directory. It is used to refer to the directory one level ab



ove the current directory.

6. WAYS FOR SIGNING OFF FROM LINUX.

Ans. There are several ways to sign off or log out from a Linux system. Here are some common methods:

Using the "exit" command: You can simply type "exit" in the terminal and press Enter. This will log you out of the current session and return you to the login screen.

Using the "logout" command: Similar to the "exit" command, you can use the "logout" command to sign off from the current session. Just type "logout" in the terminal and press Enter.

Using the keyboard shortcut: On most Linux distributions, you can use the keyboard shortcut Ctrl+D to sign off from the current session. Pressing Ctrl+D will have the same effect as using the "exit" or "logout" command.

Using the "shutdown" command: If you want to sign off and shut down the system completely, you can use the "shutdown" command with the appropriate options. For

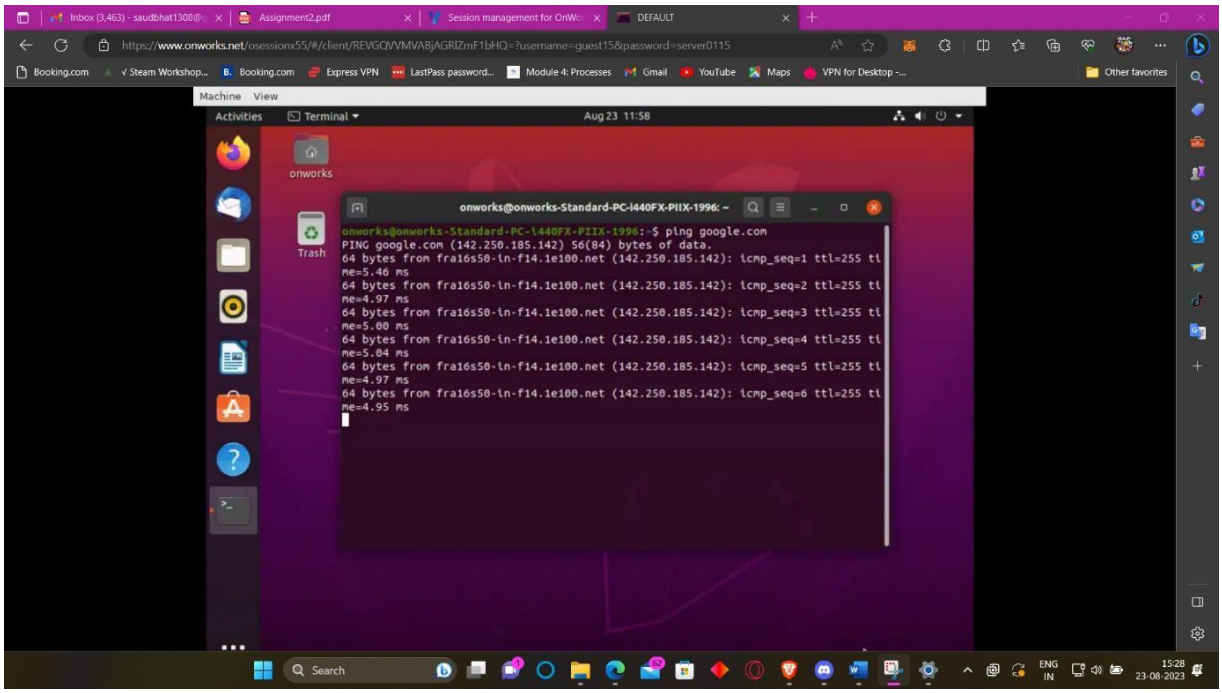
example, to shut down the system immediately, you can use the command "sudo shutdown

-h now". This will log you out and power off the system.

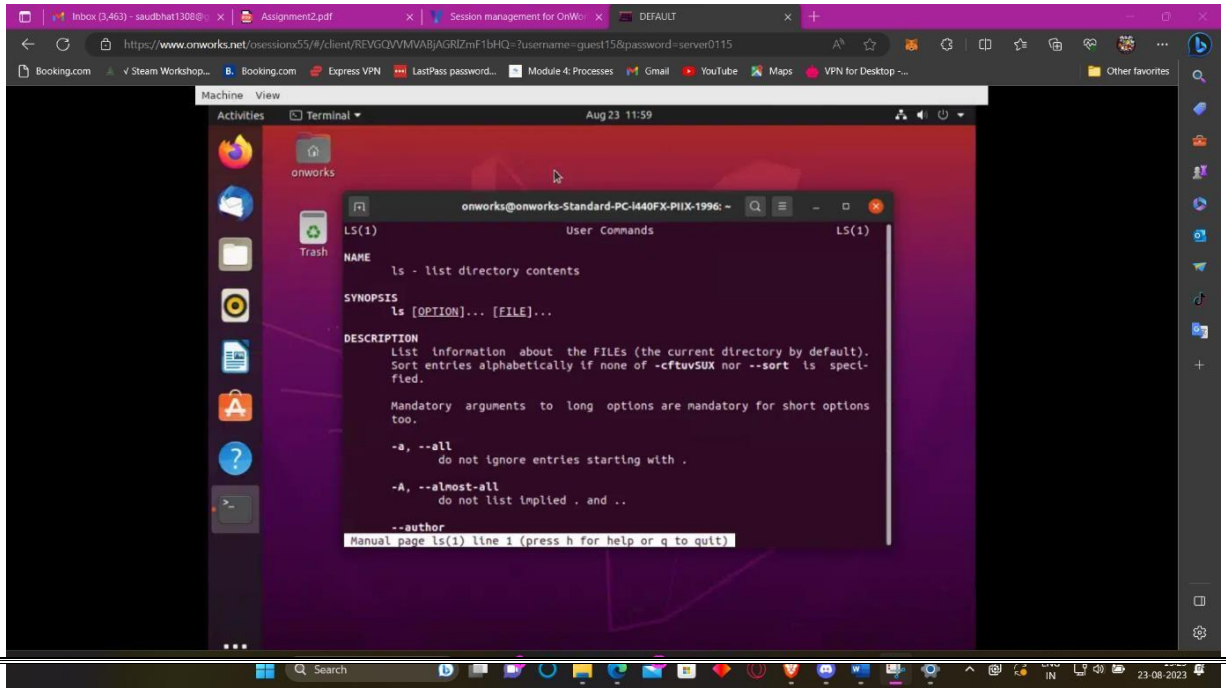
7. PING, MAN AND HELP COMMAND.

Ans. The ping command is used to test the connectivity between two network devices. It sends ICMP echo request packets to a specified IP address or domain name and waits for

ICMP echo reply packets to measure the round-trip time and packet loss. The ping command is commonly used to

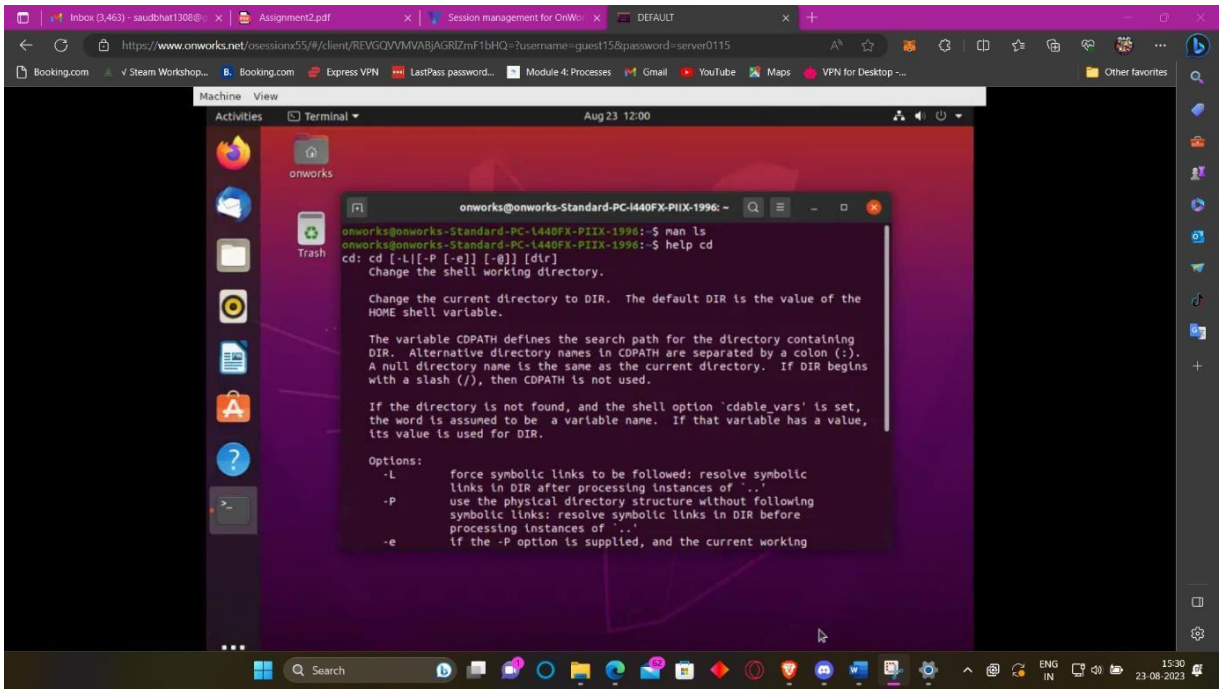


troubleshoot network connectivity issues.



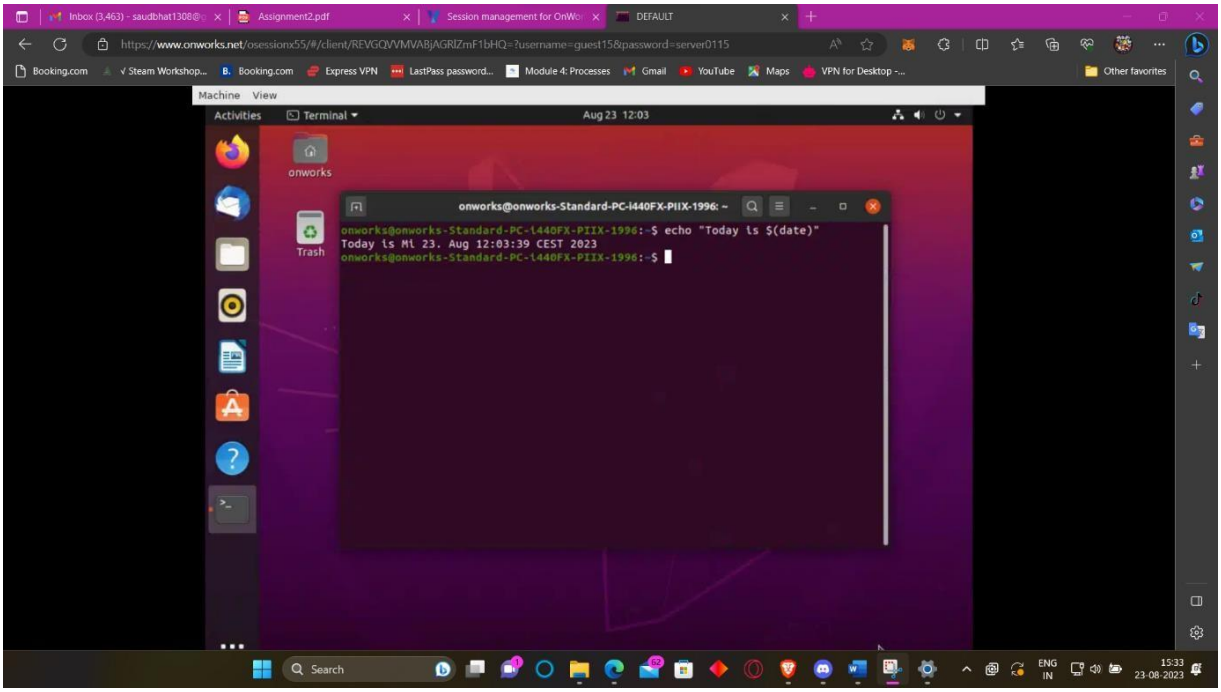
- The man command is used to display the manual pages for a specific command or topic. It provides detailed information about the usage, options, and examples of a command.

- The help command is a built-in command in the shell that provides information about the built-in commands and their usage. It displays a list of available commands and their brief descriptions.



COMBINING THE COMMANDS.

Ans. Combining commands in Unix-like operating systems allows you to perform complex operations by chaining multiple commands together.

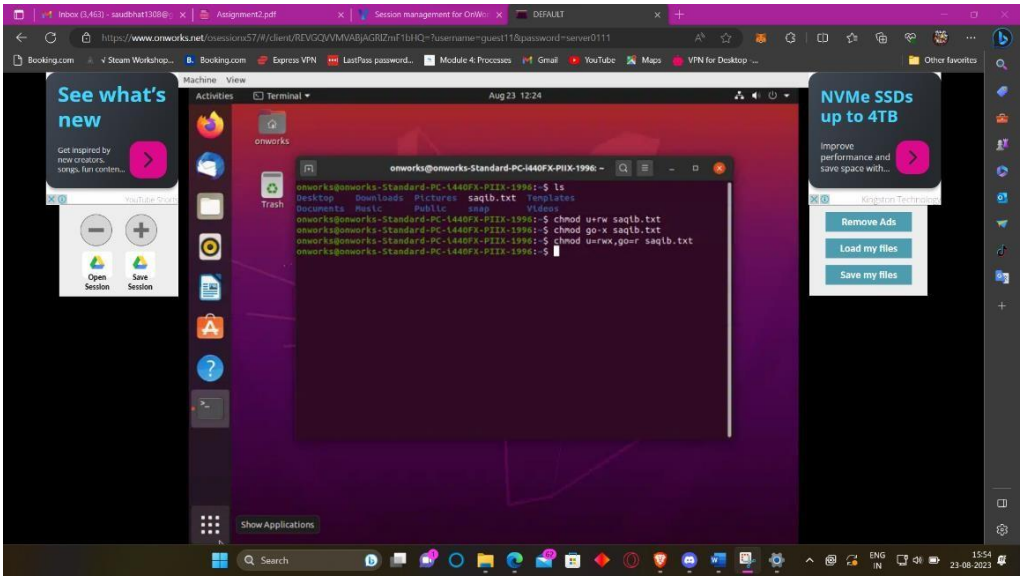


1. FILE PERMISSIONS AND CHANGING THE ACCESS RIGHTS (CHMOD).

Ans. File permissions are a crucial aspect of computer security that determine who can access, modify, or execute a file. In Unix-like operating systems, such as Linux, file

permissions are managed using the chmod command.

The chmod command allows users to change the access rights of a file or directory. It can be used to grant or revoke permissions for the owner of the file, the group associated with the file, and other users.



2. VI EDITOR AND ITS BASICS: WRITE A SMALL PARAGRAPH USING VI EDITOR.

Ans. The vi editor is a powerful and widely used text editor in Unix-like operating systems. It provides a range of features and commands that allow users to efficiently edit and

manipulate text files. One of the key features of vi is its modal editing mode, which allowsusers to switch between different modes for different tasks.