**Shantanu Nimat (**[**shantanurajesh.nimat2020@vitstudent.ac.in**](mailto:shantanurajesh.nimat2020@vitstudent.ac.in)**)**

**20BCE1345**

**Assignment -1**

**Kali**

**Title: Linux Command List Assessment**

**Instructions: -**

The following assessment aims to test your understanding and practical knowledge of various Linux commands. Perform the tasks given below using the appropriate commands. Write down the command(s) used to complete each task. You can use any Linux distribution or command-line interface of your choice. Ensure that you provide the correct output or results for each task.

Note: It is recommended to perform this assessment on a Linux machine or virtual environment.

**File and Directory Operations:**

ls: List files and directories

cd: Change directory

pwd: Print working directory

mkdir: Make directory

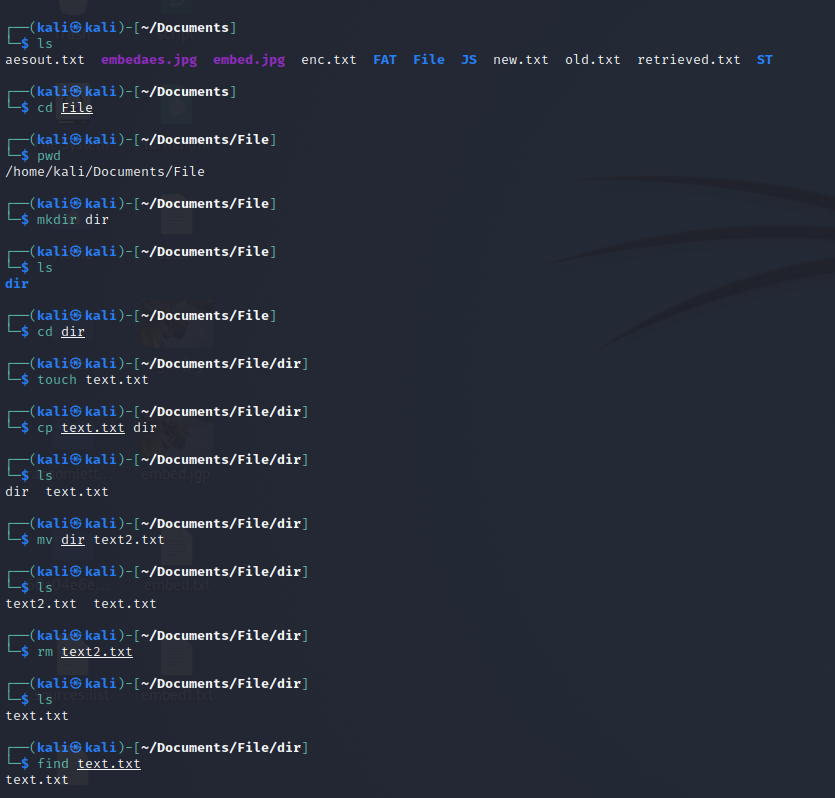
touch: Create an empty file

cp: Copy files and directories

mv: Move or rename files and directories

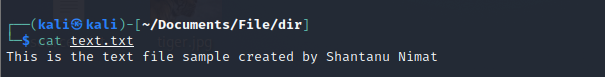
rm: Remove files and directories

find: Search for files and directories

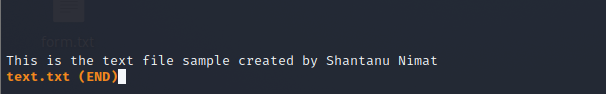


**File Viewing and Editing:**

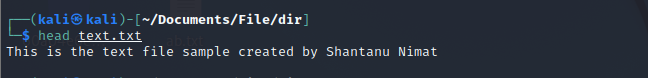
cat: Concatenate and display file content

****

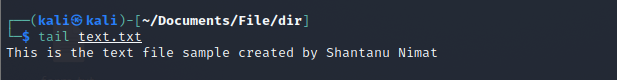
less: View file content with pagination



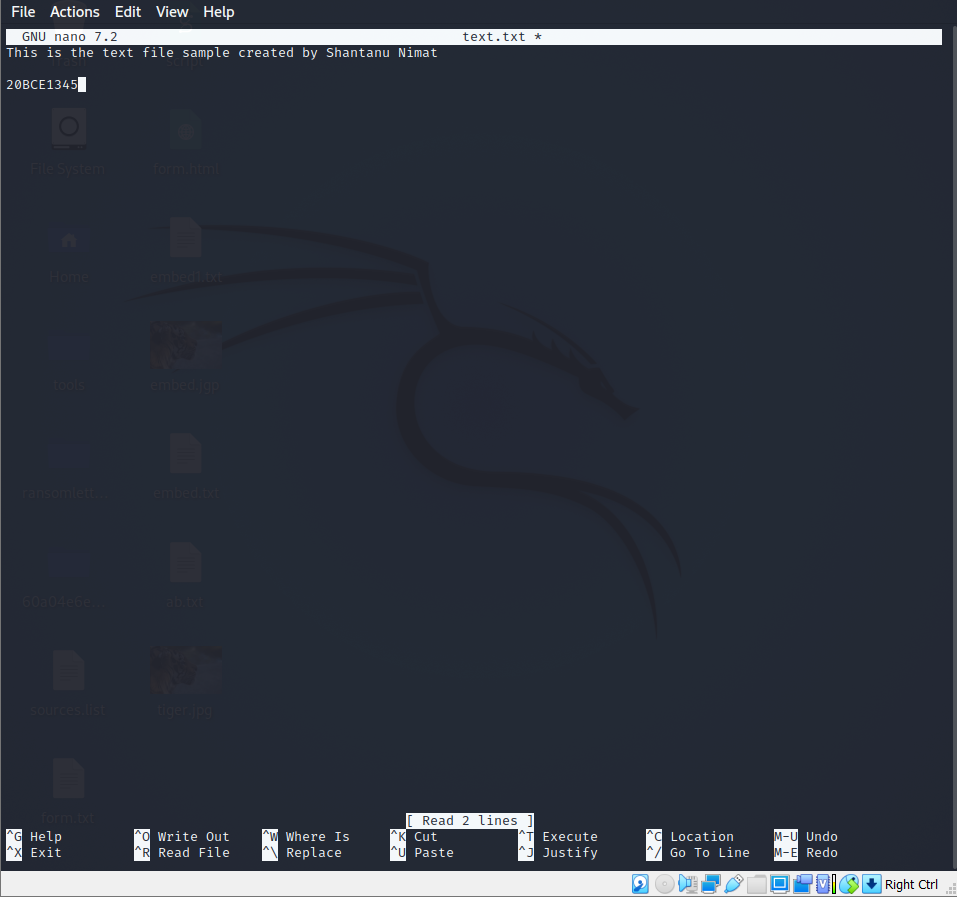
head: Display the beginning of a file



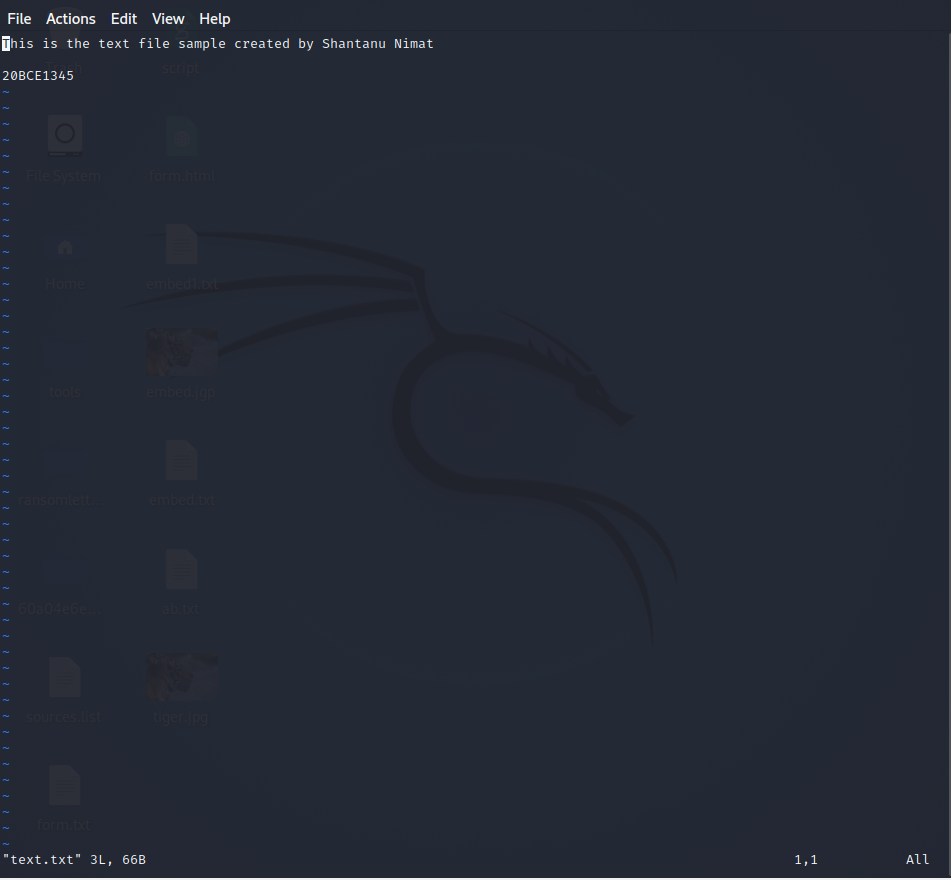
tail: Display the end of a file



nano: Text editor for creating and editing files



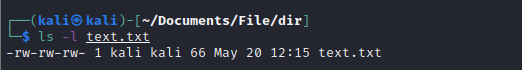
vi/vim: Powerful text editor for experienced users



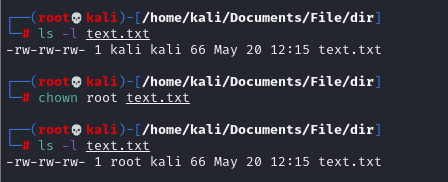
**File Permissions:**

chmod: Change file permissions

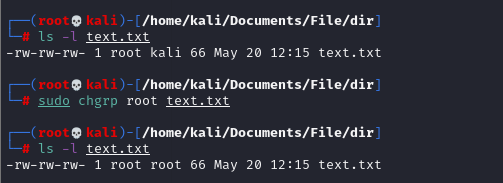
It will set the read and write permission for other users of the text files



chown: Change file owner

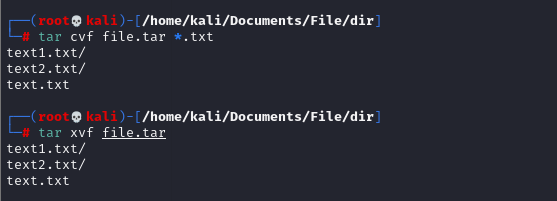


chgrp: Change file group

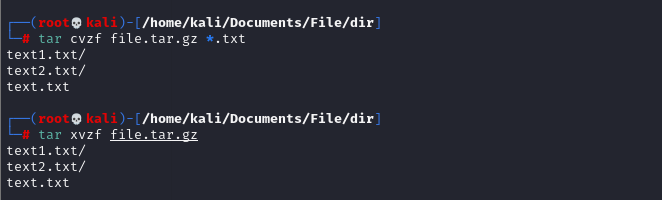


**File Compression and Archiving:**

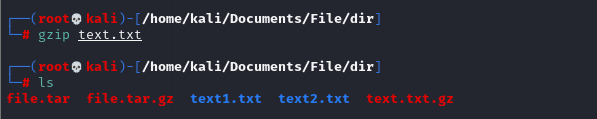
tar: Archive files



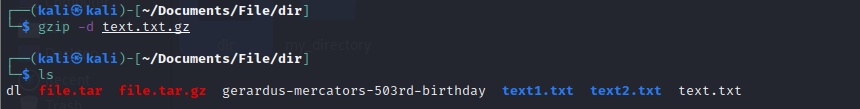
Compressed



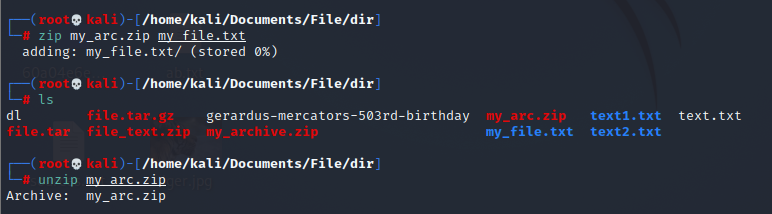
gzip: Compress files



Unzip gzip

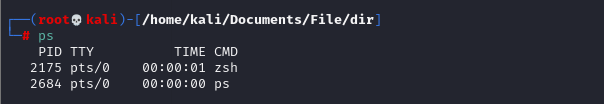


Zip and unzip: Extract files from a ZIP archive

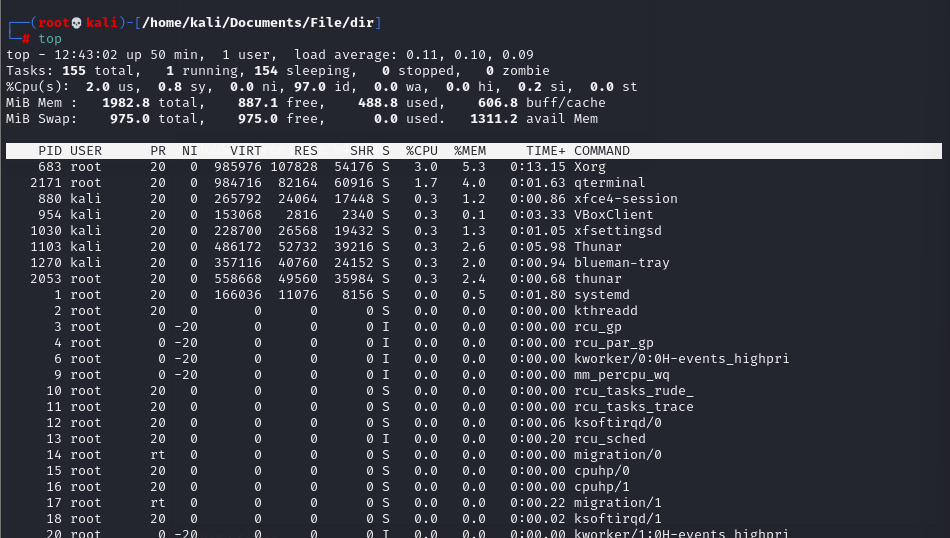


**Process Management:**

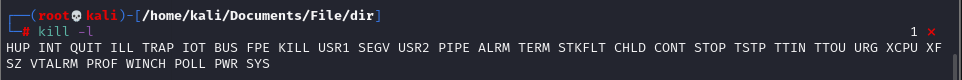
ps: List running processes



top: Display real-time system information and processes



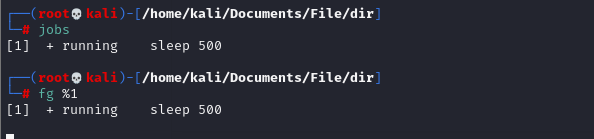
kill: Terminate processes



bg: Run processes in the background



fg: Bring background processes to the foreground



**System Information:**

uname: Print system information

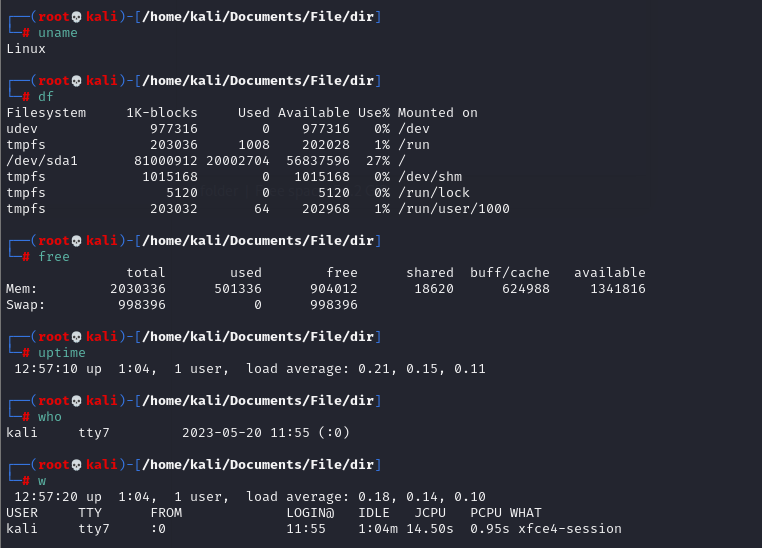
df: Display disk space usage

free: Display memory usage

uptime: Show system uptime

who: Display logged-in users

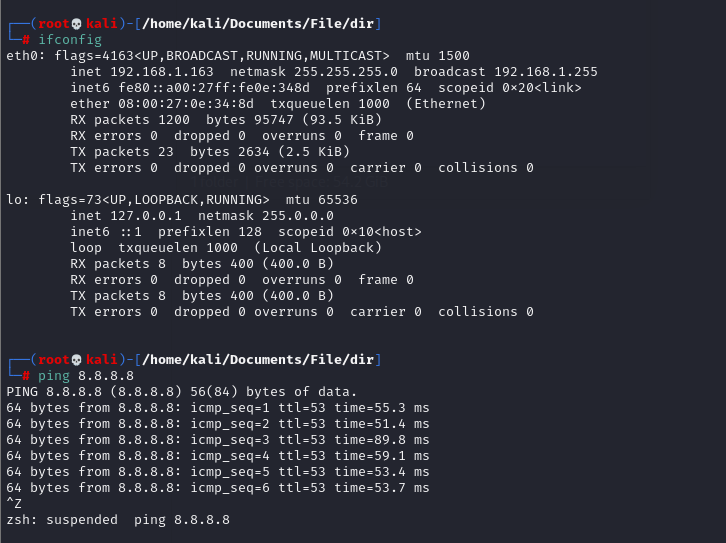
w: Display logged-in users and their activities



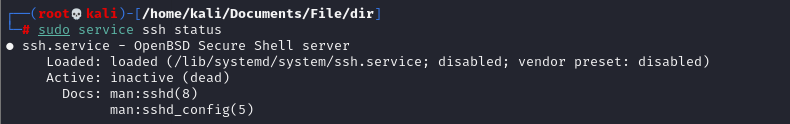
**Networking:**

ifconfig: Configure network interfaces

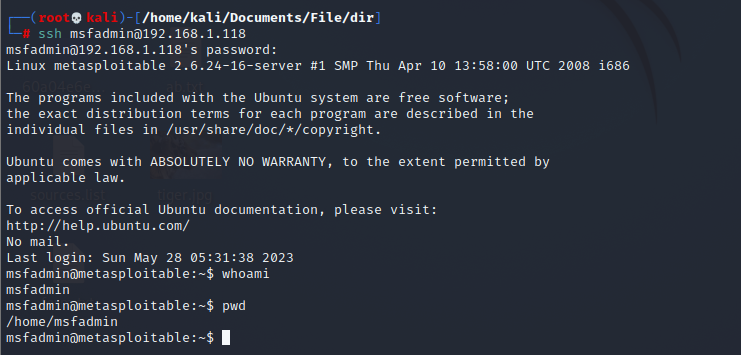
ping: Send ICMP echo requests to a network host

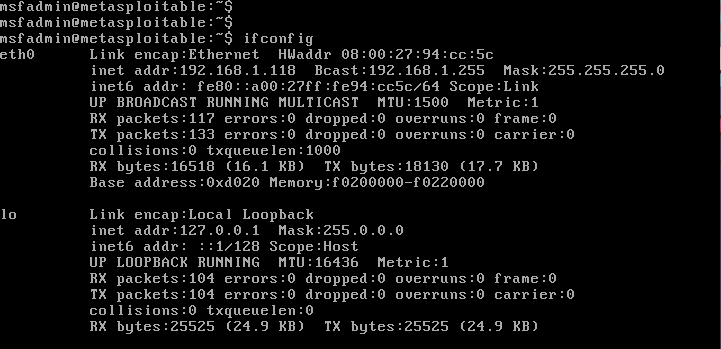


ssh: Securely connect to a remote system

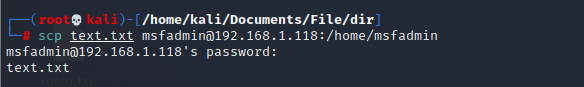


connecting to Metasploitable 2 using ssh

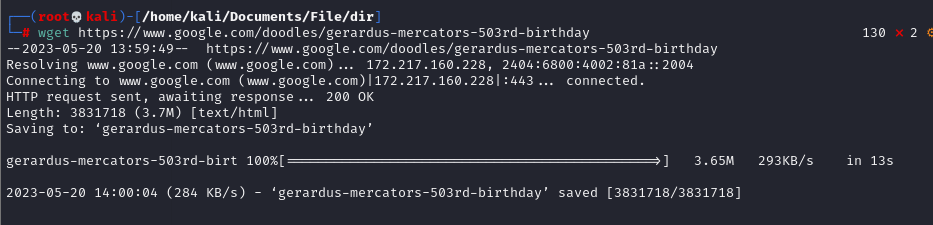




scp: Securely copy files between systems



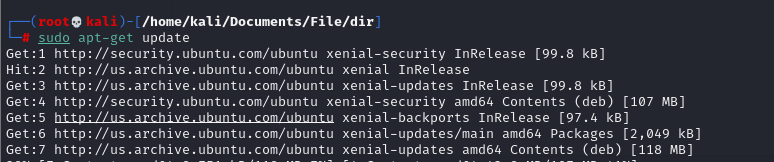
wget: Download files from the web



**System Administration:**

sudo: Execute commands with superuser privileges

apt-get: Package management for Debian-based distributions



yum: Package management for Red Hat-based distributions

It is used for installing, updating, and managing software packages on the system. Here are some commonly used commands with yum:

Install a package:

sudo yum install <package\_name>

Update all installed packages:

sudo yum update

Search for a package:

yum search <keyword>

List installed packages:

yum list installed

Remove a package:

sudo yum remove <package\_name>

Clean the cache and free up disk space:

sudo yum clean all

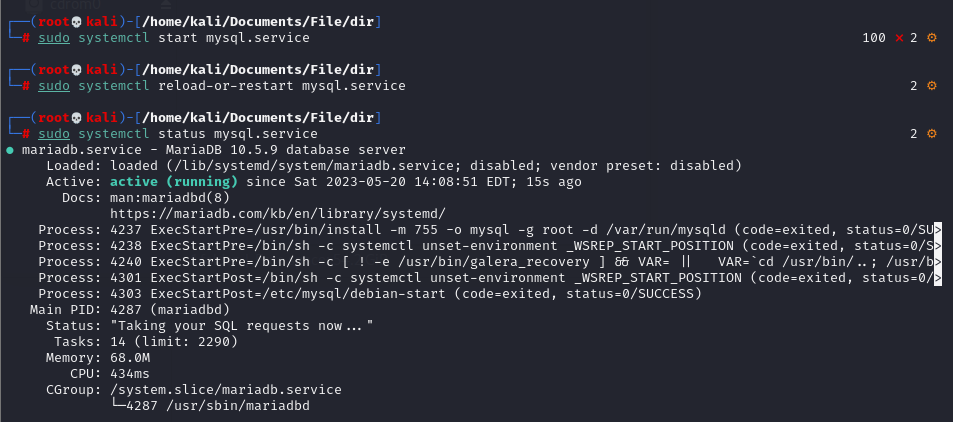
Enable a repository:

sudo yum-config-manager --enable <repository\_name>

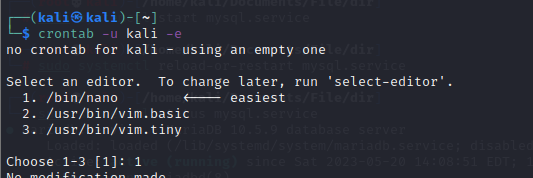
Disable a repository:

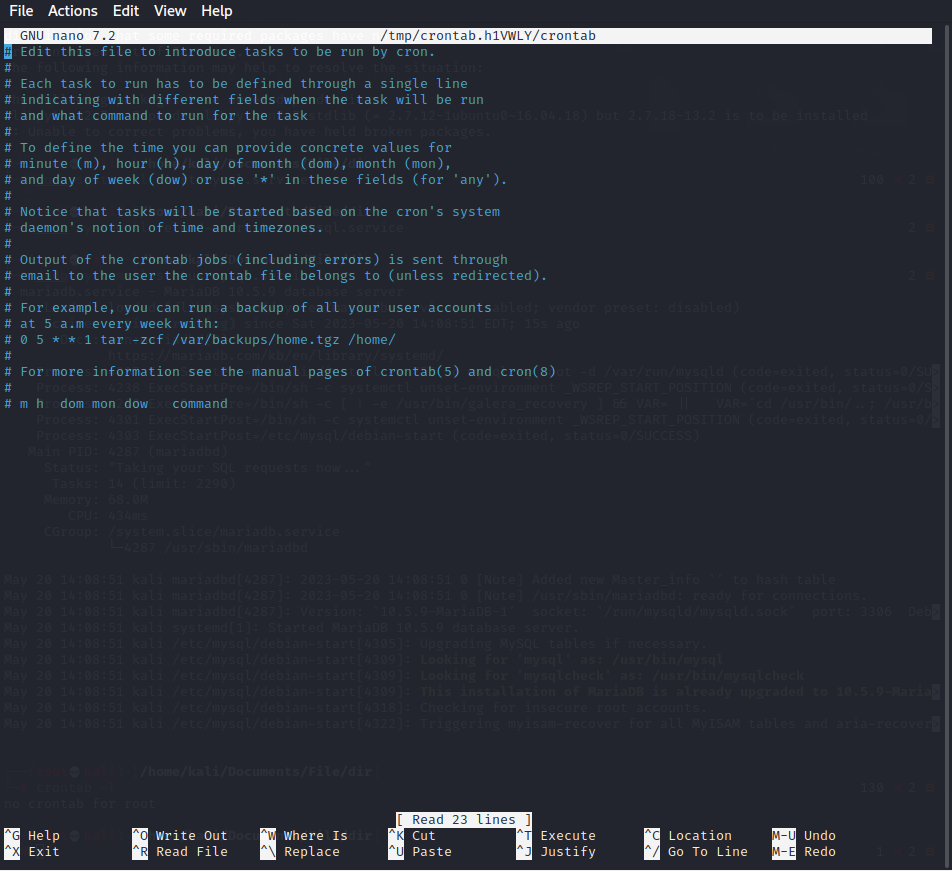
sudo yum-config-manager --disable <repository\_name>

systemctl: Manage system services

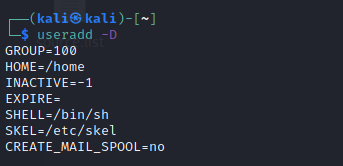


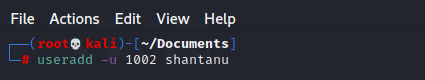
crontab: Schedule recurring tasks

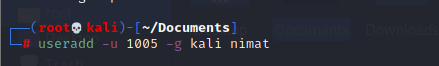




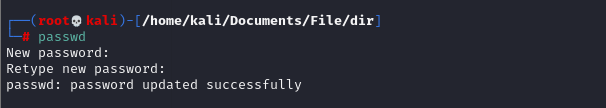
useradd: Add a new user







passwd: Change user password



Ensure that you provide the correct command(s) used to accomplish each task. Write your answers below each task.

Once you have completed the assessment, review your answers and verify that the output or results are correct.

Make this in doucement format and send them with images