

Linux Practical Work

Perform the following tasks practically on your Linux system or VM, and submit a detailed report with screenshots demonstrating each step.

1. Directories and Files Management

- Create a directory named `LinuxCourse` in your home directory.
- Inside `LinuxCourse`, create three subdirectories named `scripts`, `logs`, and `configs`.
- Within `configs`, create an empty hidden file named `.config`.
- Verify creation using the `ls` command to display hidden files.

2. File Creation and Editing

- Using the `cat` command, create a file named `notes.txt` containing:
"Linux is essential for cybersecurity professionals."
- Create an empty file named `script.sh` in the `scripts` directory using `touch`.

3. Navigation and Path Exploration

- Use the `cd` command to navigate to the `logs` directory from your home directory using a relative path.
- From `logs`, print your current working directory with `pwd`.
- Return to your home directory directly using `cd`.

4. Searching and Monitoring

- Using `grep`, search for the word "Linux" in the file `notes.txt`.
- Find all `.txt` files in your `LinuxCourse` directory using the `find` command.

5. Administrative Privileges

- Using `sudo`, update your system package repository.
- Attempt to switch to the root user temporarily using `su -` (if applicable). Demonstrate this action through a screenshot (or explain if restricted).

6. Cleaning Up

- Delete the hidden file `.config` from `configs` using the `rm` command.
- Verify deletion.