UCSC

Assignment - 04
ENH 1301 - Application Laboratory

Instructions : **Time: 45 minutes**

- **Do the following questions using the terminal .**
- **Write the answers to the question and take the necessary screenshots for proof. Create a PDF file that includes screenshots and answers.**
- **Rename the file using your index number (Eg. 230011.pdf) and upload**

1. Create a directory ~/lab_secure and Create a file named project.txt inside that folder and make it read-only for all users.
   Show commands used for file creation and permission change.

2. Inside lab_secure, create 4 files: report.txt, log.txt, data.csv, config.ini using a single command.

3. Add the following lines to report.txt using redirection:
   Linux File Handling
   Permissions are important
   Access Control is Key

4. Change permissions of all .txt files in the directory using a single command so that:
   Owner: read + write
   Group: read only
   Others: no access

5. Check and confirm file permissions using ls -l and redirect the output to permissions_check.txt.

6. Move config.ini to your home directory and rename it to conf.bak in a single command.

7. Create two files as file1.log and file2.log in your current working directory then create a directory named backup and copy all .log files from the current directory into the backup directory.

8. Create a file named report_old.txt and a folder named archives.
   Rename the file to report_final.txt and move it into the archives folder.

9. Create three files named temp1.csv, temp2.csv, and temp_final.csv.
   Use wildcards to list all files that start with temp and end with .csv.

10. Create two files named file1.txt and file2.txt, each containing one line of text (without using text editors).

11. Display the contents of both files (in question 10)together and save the output into a new file named combined.txt.

12. What do the following permission values mean?
    a. -rw-r--r--
    b. -rwxr-xr–

13. What does changing the permission of a file to 755 do? Explain how this affects user, group, and others.

14. Create a directory named testdir with three files ending in .tmp, and a subdirectory inside it with one more .tmp file.
    Remove all files with the .tmp extension in the main and subdirectories.

15. Create a file named script.sh.
    Change its permissions so that only the file owner can read, write, and execute it.

16. Create a file named data.txt and add the text "Hello Linux" to it.
    Then, display its contents using a single command line.

17. Differentiate between an absolute path and a relative path.
    Provide one example of each.

18. Create files a.sh, mann.sh, b.txt, c.csv in your current directory,List only the files that have exactly four characters in their names and end with .sh