School Of Engineering

Linux Programming
Assignment-2

Name: Neehara Lakshmi
USN No: ENG24CY0138
Roll No: 55
Section: B (CyberSecurity)
Semester: 3rd

Q1. What does the command pwd, whoami, and hostname display?

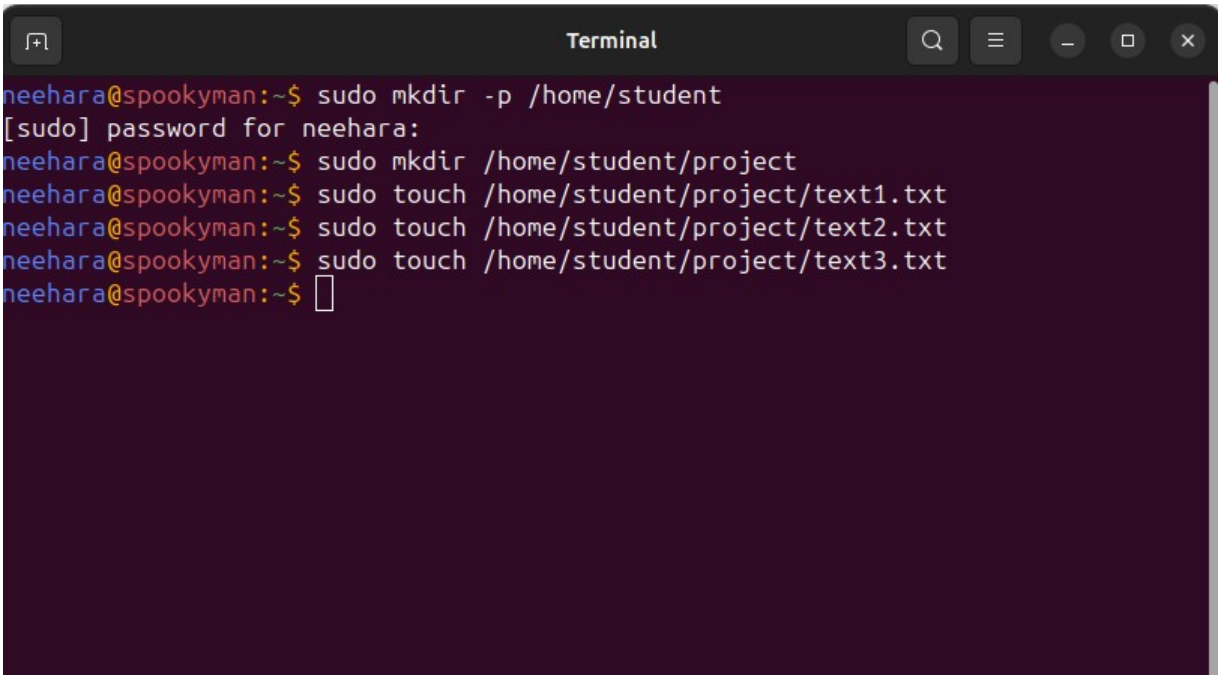
Ans: pwd - Print Working Directory: Displays the current directory path you're in.

whoami - Displays the username of the current logged-in user.

hostname - Displays the name of the computer/system you're working on.

Q2. Write the command to create a directory named "project" inside the /home/student folder and keep three .txt file into it. Give output snapshot.

Ans:



Q3. Explain the difference between absolute path and relative path with proper examples.

Ans: Absolute path: It is the complete location of a file or directory from the root of the file system. It provides the full path to the target.

Example: cat /home/user/file1.txt

Relative path: the location relative to the current working directory. It doesn't start from the root.

Example: If the current directory is home then: cat user/file1.txt.

Q4. What command will give you the already executed command traces in the terminal. Give output snapshot.

Ans: The command **history** will give you the already executed command traces in the terminal.

```
neehara@spookyman:~$ history
    1  clear
    2  sudo apt upgrade
    3  sudo apt install tasksel
    4  sudo reboot now
    5  gedit Functiondemo.sh
    6  sudo snap install gedit #version 46.1-3
    7  sudo apt install bash
    8  gedit func.sh
    9  sudo apt install gedit # version 48.1
   10  gedit func.sh
   11  cal
   12  sudo apt install ncal
   13  cal
   14  man
   15  manual
   16  -s
   17  sudo timedetect1 set-time "03:47:00"
   18  -t
   19  ls
   20  pwd
   21  cd
   22  mkdir
   23  sudo -i
   24  dirb
   25  cd
   26  rmdir
   27  rm
   28  cp
   29  mv
   30  gedit spookyman
   31  CHMOD 755 FILENAME
```

Q5. Compare the working functionality of find and locate command. Which one is faster and why?

Ans: locate: It is faster than find because it searches a pre-built database instead of scanning your file system live.

find: It is slower than locate because it searches your entire file system in real-time rather than using a pre-built database.

Q6. Which command is used to modify file permissions in Linux? Give an example.

Ans: The command used to modify file permissions in Linux is chmod (change mode). It allows you to alter the read (r), write (w), and execute (x) permissions for the file's owner, group, and others.

Example: chmod u+rw myfile.txt

u+rw means Give yourself read+write.

Q7. A file has permissions -rw -r- -r- -. What does this mean?

Ans: The file is a regular file, not a directory. The owner of the file can read it and write to it, but cannot execute it as a program. It can only read the file, but cannot modify it or execute it. All other users can only read the file, but cannot modify it or execute it.

Q8. Explain the difference between chown and chgrp with an example?

Ans:

chown:

- It means **Change Of Owner of a file.**
- It can change both **Owner and Group.**

chgrp:

- It means **Change Of Group of a file.**
- It can only change **Group.**

Q9. A file needs to be accessible by multiple users but only writable by the owner. How will you set permissions?

Ans: The command for a file that need to be accessible by multiple users but only writable by the owner is:

chmod u=rw,go=r filename

u=rw means "set the owner's permissions to read and write"

go=r means "set the group's and others' permissions to read only"

Q10. How do you check the manual page for any Linux commands?

Ans: To check the manual page for any linux commands we use:

syntax: man <command_name>

THANK YOU