Experiment No.: 01

Experiment Name: Using Linux Virtual Terminal

1. To create a file / directory in desktop.
2. Edit File
3. Delete file / directory.

Objective: To create a file/directory, edit, and delete file/directory.

Theory:

pwd (Print Working Directory):

The pwd command prints the full path of the current working directory. It helps users identify their location in the directory structure, which is essential when navigating through files and folders.

ls (List Directory Contents):

The ls command lists the files and directories in the current working directory. It provides various options, such as ls -l for a detailed listing that includes file permissions, ownership, and modification dates.

cd (Change Directory):

The cd command is used to navigate between directories. We can move to a directory by specifying its path, such as cd Desktop, or move back one level with cd ...

touch (Create an Empty File):

The touch command is used to create an empty file or update the timestamp of an existing file. It's a quick way to generate new files in the directory.

nano (Text Editor):

nano is a simple, user-friendly text editor used within the terminal. We can create or edit text files by opening them with nano filename. After editing, you can save the file and exit by pressing Ctrl + O to write and Ctrl + X to exit.

mkdir (Make Directory):

The mkdir command is used to create a new directory. We can specify the name of the new directory to be created in the current working directory or provide a full path to create it elsewhere.

cat (Concatenate and Display File Content):

The cat command is used to concatenate files and display their contents on the terminal. It is often used to view the content of a file or to create small text files.

mv (Move or Rename a File/Directory):

The mv command is used to move files or directories from one location to another or to rename them. For renaming, you specify the current file name and the new name, while for moving, you provide the destination path.

rm (Remove File/Directory):

The rm command is used to delete files or directories. To remove a file, simply use rm filename, and for directories and their contents, use rm -r directoryname. Be careful when using rm, as it permanently deletes files without sending them to a recycle bin.

Procedure/ Algorithms:

   a) **Create a file in desktop ID.txt and folder 61D**

Step-01: First we check the present directory using **pwd** command, If we have another directory then change it using **cd** command.

Step-02: Using **ls** command check already desktop this name file / directory exists or not.

Step-03: Create file using

   touch ID.txt

   mkdir 61D

   b) **Make new directory on the 61D have Group A and Group B**

   cd Desktop/61D

   mkdir GroupA GroupB

c) **If you are GroupA , then make Name.txt file in GroupA, or You are in Group B then create a file Name.txt in GroupB**

Steps for GroupA:

Navigate to the GroupA directory:

Step-01: Use the cd command to move into the GroupA directory.

    cd Desktop/61D/GroupA

    touch Name.txt

Navigate to the GroupB directory:

Step-01: Use the cd command to move into the GroupB directory.

    Cd Desktop/61D/GroupB

    touch Name.txt

d) **Write your name, ID, Course Code, Course Tittle in Name.txt**

Step-01:   *cat > Name.txt*

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ID: 123456

 Course Code: CSE 313

Course Title: Operating System

press Ctrl + D to save and exit.

Step-02: *nano Name.txt*

Mr.ABC

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Course Code: CSE 314

Course Title: Operating System Lab

☐Press Ctrl + O to write the changes (save the file).

☐Press Enter to confirm the file name.

☐Press Ctrl + X to exit nano.

e) Show the output of edited text file

cat Name.txt

f) Delete the file/ directory

Step-01: Delete the Name.txt File if you are in GroupA

cd Desktop/61D/GroupA

rm Name.txt

Step-01: Delete the Name.txt File if you are in GroupB

cd Desktop/61D/GroupB

rm Name.txt

Conclusion:

This experiment helps students practice the creation, editing, and deletion of files and directories on Linux systems. It introduces basic Linux commands and how to work with files and directories through the terminal, providing a foundation for more advanced command-line usage.