

Program- BTech-3rd Semester
 Course Code- CSET213
 Year- 2025
 Date- 29/07/25

Type- Sp. Core-I
 Course Name-Linux and Shell Programming
 Semester- Odd
 Batch- B1-14

Lab Assignment 2

Exp No	Name	CLO Achieved				Marks
		CO1	CO2	CO3	CO4	
1	Linux commands- commands and editor	✓				2

Objective: Linux commands- commands and editor

Outcomes: Students will be able to do hands-on working on file and directory commands and working on Vi/Vim editor.

Problem: Open terminal and run the following commands to get familiar with Linux command line interface (CLI):

1. Basic File & Directory Related Linux Commands

- a. Make a new directory(folder): mkdir dirname
- b. Create/Open text file using vi : vi filename
- c. Copy file: cp src dest
- d. Copy folder: cp -r src dest
- e. Rename: mv originalname newname
- f. Delete a single file: rm filename
- g. Delete a whole folder: rm -r foldername
- h. Change working directory: cd path
- i. Move to parent folder: cd ..
- j. List contents of a folder: ls
- k. List contents of a folder including hidden _les: ls -a.
- l. Print current directory: pwd.
- m. Open manual for a command: man commandname

2. Using Commands to operate your system

- a. Create a new directory with the name LSP
- b. Change the current directory to LSP
- c. In this directory, create another folder, called as Lab1.
- d. Change the current directory to Lab1.
- e. Create a text file me.txt using gedit/vi/nano and write your complete details (Name, Roll No, Program, Sem etc.) in it. Save and close it
- f. Copy the contents of me.txt to mycopy.txt using cp
- g. Open mycopy.txt using gedit/vi/nano and verify that it is a copy of me.txt. Close the file
- h. Rename mycopy.txt as stillme.txt using mv
- i. Check if the file has been renamed by listing the contents using ls
- j. Move out of LSP using cd .. twice. (TIP: You can retrieve previous commands you typed using the UP-arrow key without typing them again.)
- k. Copy the directory hierarchy LSP to LSPcopy using cp -r
- l. Check the contents of the folder LSPcopy by going to the folder (cd) and then listing the contents(ls).

- m. Go out of the folder (cd ..) and delete the whole directory LSPcopy using rm -r
- n. You can use man to learn about different commands

Vim editor cheat sheet

Use the following commands in command mode:

- o h - Moves the cursor to the left by one character; you can also press the left arrow.
- o j - Moves the cursor one line down; you can also press the down arrow.
- o k - Moves the cursor one line up; you can also press the up arrow.
- o l - Moves the cursor to the right by one character; you can also press the right arrow.
- o w - Moves the cursor one full word to the right.
- o b - Moves the cursor one full word to the left.
- o 0 - Moves the cursor to the beginning of the current line.
- o \$ - Moves the cursor to the end of the current line.
- o ~ - Changes the case of the current character.
- o dd - Deletes the current line.
- o D - Deletes everything on the line to the right of the cursor's current position.
- o x - Deletes the current character.
- o u - Undo the last command.
- o . - Repeats the last command.
- o :w - Saves current file, but does not exit.
- o :wq - Saves current file, and quits.

The following commands place you into insert mode:

- o i - Inserts to the left of the current cursor position.
- o a - Appends to the right of the current cursor position.
- o dw - Deletes the current word.
- o cw - Changes the current word.

Problems: Execute the commands for the following and observe the output:

- a. Create a file in vim and write two paragraph each having at least two sentences and apply all the options to process the text.
- b. Partitioning disk
- c. Creation of a filesystem
- d. Displaying the system space
- e. Forcefully kill the process
- f. Name 1000 directories in one go with a pattern like Photo-1- OfMyBirthday, Photo-2-OfMyBirthday, Photo-3- OfMyBirthday.... Photo-4-OfMyBirthday.

Submission Instructions:

1. Submission requires the screen shots of all the incurred steps to execute a shell script or a video showing the whole process.
2. All these files are in single zip folder.
3. Use the naming convention: Prog_CourseCode_EnrollmentNo_LabNo.docx (Example: BTech3rdSem_CSET213_EnrollmentNo_Lab1.1)
4. Submission is through LMS only