SCHOOL OF COMPUTING & INFORMATICS

Course Title   :   **OPERATING SYSTEMS**
Course Code   :   **CCC 2123**

LAB EXERCISE
(WEEK 7)

Instructions:

Using the Command Line Interface (CLI) for Linux that we have learned and used so far, please execute the following tasks:

Task 1: File Creation and Text Editing

- In the home directory, create a new directory named "File_Lab."
- Move into the "File_Lab" directory.
- Inside this directory, create three text files: "text1.txt," "text2.txt," and "text3.txt."
- Open "text1.txt" using a text editor like nano or vim and add some content.
- Save and exit the text editor.

Answers:


```
# Create a new directory named "File_Lab" in the home directory
mkdir ~/File_Lab

# Move into the "File_Lab" directory
cd ~/File_Lab

# Create three text files: "text1.txt," "text2.txt," and "text3.txt."
touch text1.txt text2.txt text3.txt
```

\# Open "text1.txt" using a text editor like nano
\# You can choose either nano or vim, we usually use nano in our Lab Session
nano text1.txt

\#Now, you can add your desired content to "text1.txt." After adding the content, save and exit the text editor.
*In nano, you can save by pressing Ctrl + O, then press Enter, and exit by pressing Ctrl + X.

Task 2: File Copying and Moving

- Copy "text1.txt" to a new file named "text1_copy.txt" within the same directory.
- Move "text2.txt" to a subdirectory named "Subdir1."
- Verify that the move was successful and check the contents of "Subdir1."

Answers:

```
┌──(haryani㉿kali)-[~/File_Lab]
└─$ cp text1.txt text1_copy.txt

┌──(haryani㉿kali)-[~/File_Lab]
└─$ ls
text1.text  text1.txt  text1_copy.txt  text2.txt  text3.txt

┌──(haryani㉿kali)-[~/File_Lab]
└─$ mkdir Subdir1

┌──(haryani㉿kali)-[~/File_Lab]
└─$ ls
Subdir1  text1.text  text1.txt  text1_copy.txt  text2.txt  text3.txt

┌──(haryani㉿kali)-[~/File_Lab]
└─$ mv text2.txt Subdir1/

┌──(haryani㉿kali)-[~/File_Lab]
└─$ ls
Subdir1  text1.text  text1.txt  text1_copy.txt  text3.txt

┌──(haryani㉿kali)-[~/File_Lab]
└─$ ls Subdir1
text2.txt
```

\# Copy "text1.txt" to a new file named "text1_copy.txt" within the same directory
cp text1.txt text1_copy.txt

\# Move "text2.txt" to a subdirectory named "Subdir1"
mkdir Subdir1

\# Create the subdirectory if it doesn't exist
mv text2.txt Subdir1/
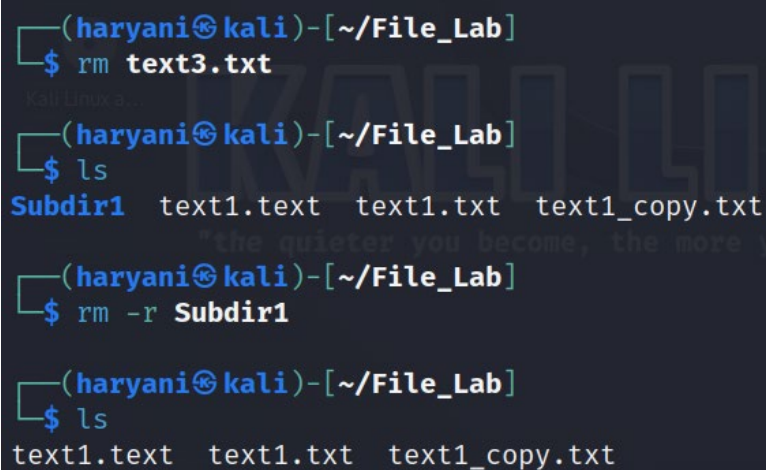
\# Verify that the move was successful
ls

List the contents of the current directory
ls Subdir1

Task 3: File Deletion and Cleanup

- Delete "text3.txt" using the appropriate command.
- Remove the entire "Subdir1" and its contents.
- Confirm that the files and directories have been deleted.

Answers:

```
┌──(haryani㊉kali)-[~/File_Lab]
└─$ rm text3.txt

┌──(haryani㊉kali)-[~/File_Lab]
└─$ ls
Subdir1  text1.text  text1.txt  text1_copy.txt

┌──(haryani㊉kali)-[~/File_Lab]
└─$ rm -r Subdir1

┌──(haryani㊉kali)-[~/File_Lab]
└─$ ls
text1.text  text1.txt  text1_copy.txt
```

Delete "text3.txt" using the appropriate command
rm text3.txt

Remove the entire "Subdir1" and its contents
rm -r Subdir1

Confirm that the files and directories have been deleted
List the contents of the current directory
ls

#These commands will delete "text3.txt" using the rm command and remove the entire "Subdir1" and its contents using rm -r (the -r flag stands for recursive, allowing removal of directories and their contents).