Lab 1

Csc 33200 (H-63858)
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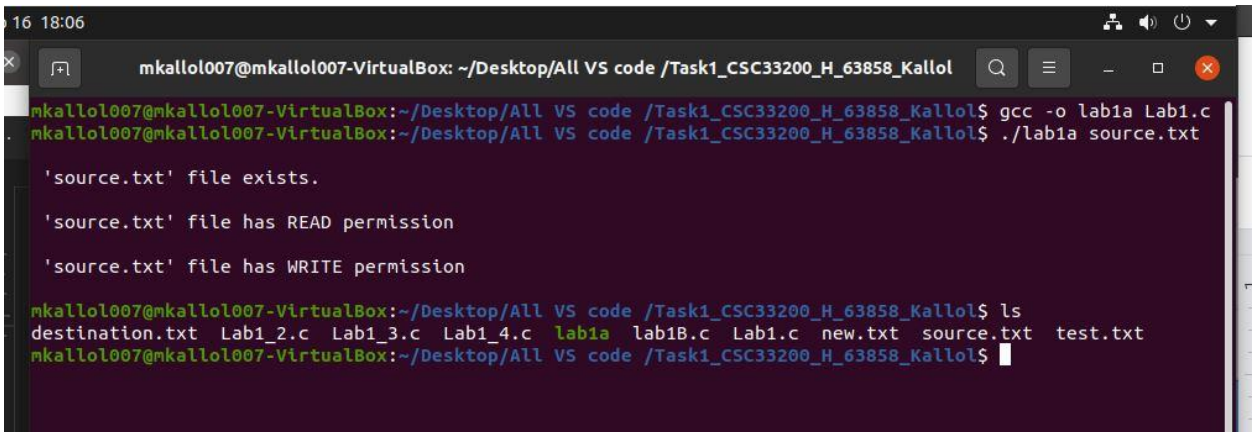
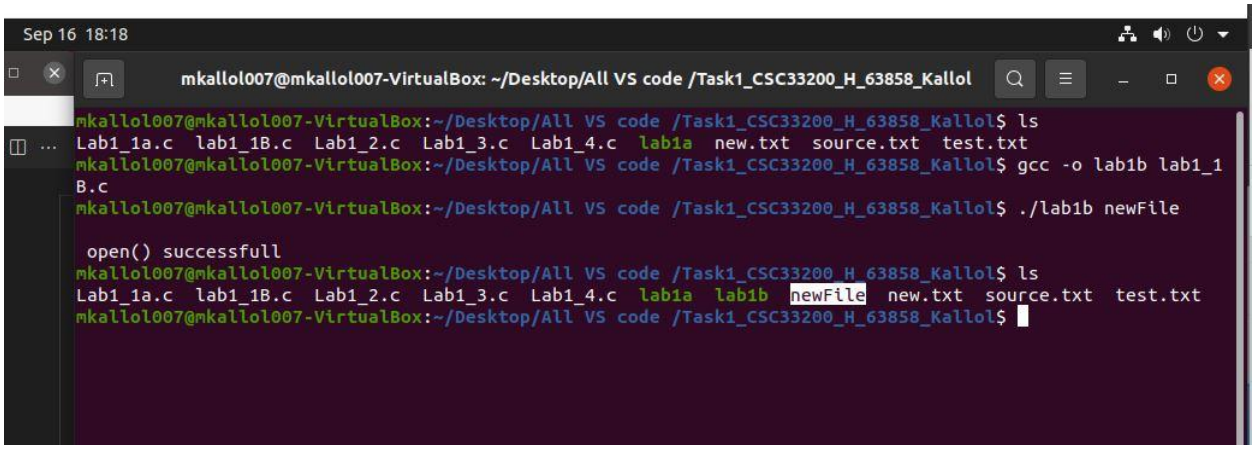
This lab briefly shows us how linux system calls work with the device and the user. For Lab 1, we are specifically working with ***File Management System Calls***. Here, I am attaching the codes and outputs for the given tasks.

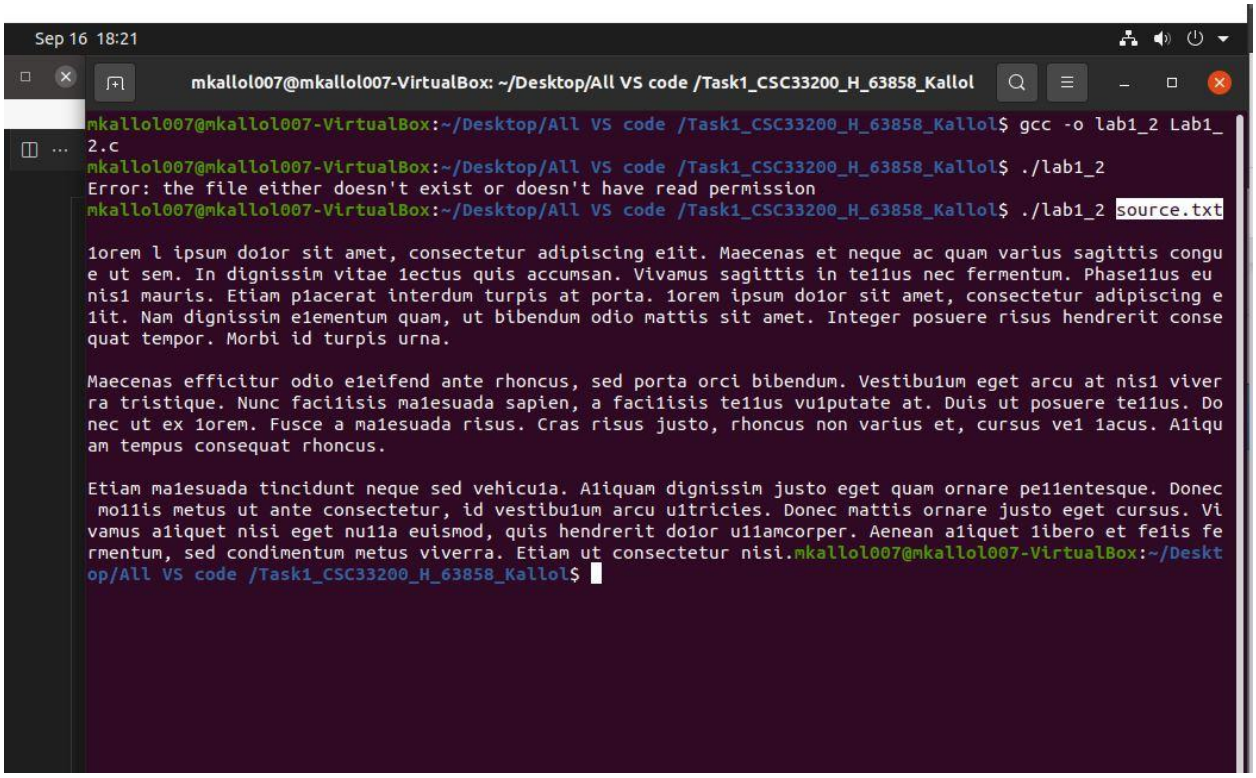
Task 1_A : We are asked to extend the given code snippet to check read and write permission.
Code: attached in the zip folder
Output:



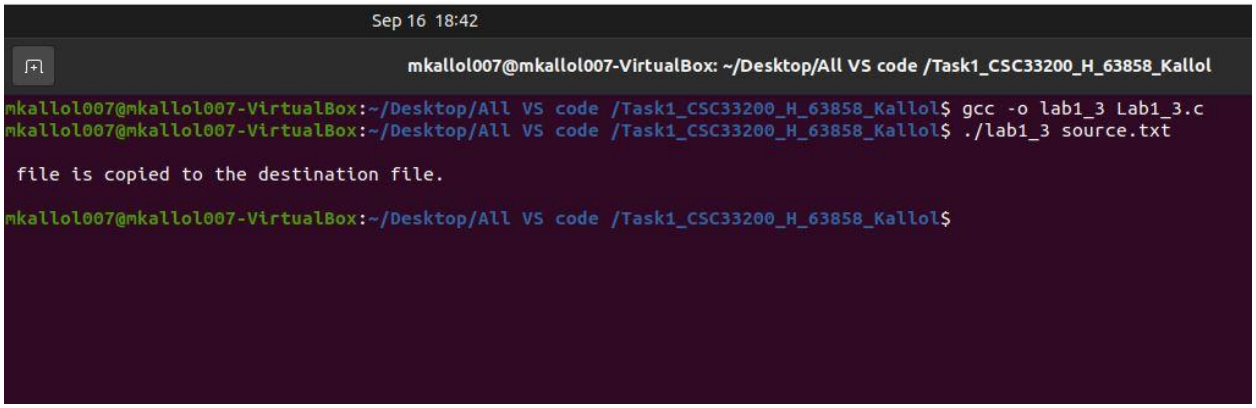
Task 1_B: Write a C program to create a new file using open system call.
Output:



Task 2: Write a C program to implement a command called *displaycontent* that takes a (text) file name as argument and displays its contents.
Output:



Task 3: Write a C program that mimics the cp command.
Code: file is attached.
Output: For this task I have tried getting the size of the file and using it as a buffer. It was not working correctly for me. So I specified the buffer implicitly . It copies the source file. But in the destination file, it also writes some garbage after the file is fully copied.



Task 4:

(a) Read the next 100 characters from source.txt, and among characters read, replace each character `1` with character `L` and all characters are then written in destination.txt

(b) Write characters "XYZ" into file destination.txt

(c) Repeat the previous steps until the end of file source.txt. The last read step may not have 100 characters.

Code: I tried copying 100 chars at a time using a specified scope. Then find ‘l’ and replace it.

Output: