

Answers

Answer 1.

Functionality	System Calls
Opening a file	open_at() newfstatat()
Closing a file	close()
Reading a file	read()
writing a file	write()

Answer 2.

Functionality	System Calls
Opening a file	2
Closing a file	1
Reading a file	1
writing a file	1

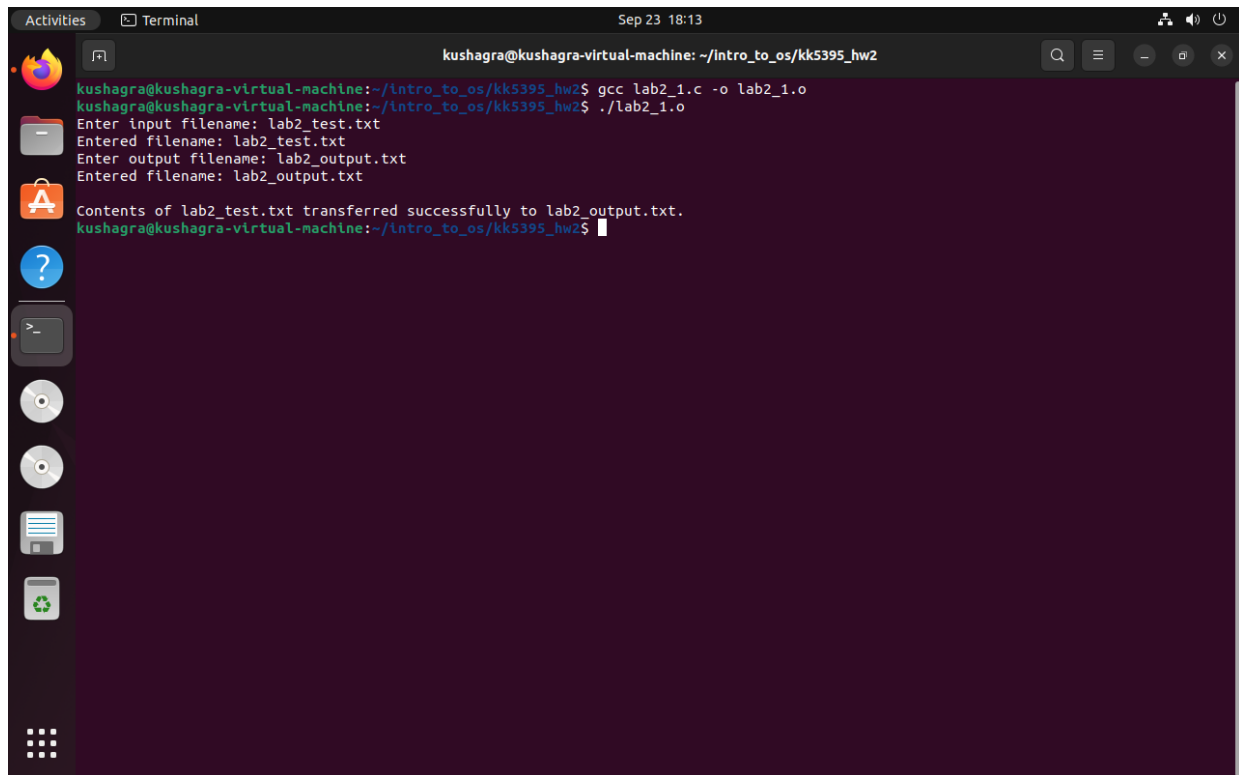
Answer 3.

The value of file descriptor for read file in my program was **3**. Yes, we can expect the value of read file to change, for instance if write file was opened first then the value of file descriptor would have been different (4 in my case).

Answer 3.

The value of file descriptor for write file in my program was **4**. Yes, we can expect the value of write file to change, for instance if write file was opened first then the value of file descriptor would have been different (3 in my case).

Snapshot



A terminal window titled "Terminal" with a timestamp of "Sep 23 18:13". The window shows a user named "kushagra" on a "kushagra-virtual-machine" at the directory "~/Intro_to_os/kk5395_hw2". The user has compiled a C program "lab2_1.c" into "lab2_1.o" and executed it. The program prompts for an input filename, an output filename, and then transfers the contents of the input file to the output file. The terminal output is as follows:

```
kushagra@kushagra-virtual-machine:~/Intro_to_os/kk5395_hw2$ gcc lab2_1.c -o lab2_1.o
kushagra@kushagra-virtual-machine:~/Intro_to_os/kk5395_hw2$ ./lab2_1.o
Enter input filename: lab2_test.txt
Entered filename: lab2_test.txt
Enter output filename: lab2_output.txt
Entered filename: lab2_output.txt
Contents of lab2_test.txt transferred successfully to lab2_output.txt.
kushagra@kushagra-virtual-machine:~/Intro_to_os/kk5395_hw2$
```

Figure 1: Snapshot