

# Lab2

Thursday, February 6, 2025 4:44 PM

1) What are the system call names for:

Getting the process ID = getpid()

Opening a file = openat()

Closing a file = close()

Reading a file = read()

Printing to the console = write()

Sleeping = clock\_nanosleep()

2) What are the number of system calls for opening, closing and reading the file(s) (i.e. how many times each was called).

Opening = 3: 1 for the mycat program, and 2 for other background tasks

Reading = 2: 1 for the mycat program, and 1 for other background tasks

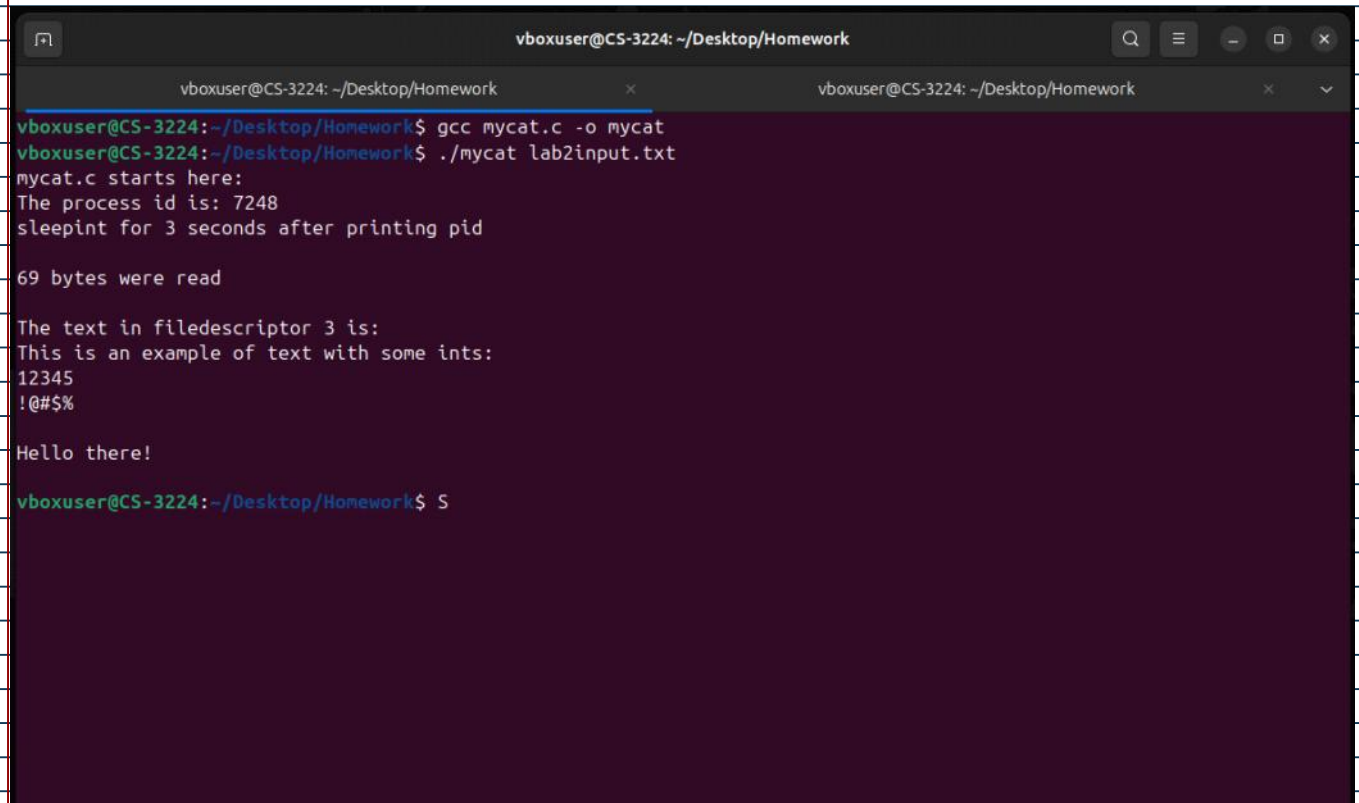
Closing = 3: 1 for the mycat program, and 2 for other background tasks

3) What are the number of system calls for printing to the screen? (count each individually. You may either use strace options to aid you in doing so, or you may use grep).

Printint to screen = 7

4) What was the value of the file descriptor of your read file (please review the lecture slides before asking what this means)?

File descriptor = 3



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vboxuser@CS-3224: ~/Desktop/Homework
vboxuser@CS-3224: ~/Desktop/Homework$ gcc mycat.c -o mycat
vboxuser@CS-3224: ~/Desktop/Homework$ ./mycat lab2input.txt
mycat.c starts here:
The process id is: 7248
sleepint for 3 seconds after printing pid

69 bytes were read

The text in filedescriptor 3 is:
This is an example of text with some ints:
12345
!@#$%

Hello there!

vboxuser@CS-3224: ~/Desktop/Homework$ S
```