

COMP3000 - Exercise 10 (Individual)

Testing Locked Files

March 18, 2018

Write a program that tests the existence of a lock on a file. Use the program *writelock-afile.c* to lock a file. When there is a lock on a file, your program (*testlock.c*) should print the ID of the process holding the lock. Otherwise, it prints the message **File is not locked**. For example, in one window do:

```
$ touch test-file
$ ./writelockafile test-file
my pid is 5166
locking
locked; hit enter to unlock...
```

In another window, run:

```
$ ./testlock test-file
File is locked by 5166
```

When the file is not locked, you should get:

```
$ ./testlock test-file
File is not locked
```

For a non-existent file, you should get:

```
./testlock non-existent-file
*** No such file or directory
```

Due date: April 8. This exercise must be done in the C programming language under Linux (make sure it runs on Ubuntu 16.04 64-bit). Submit a single *tar.gz* file. Source code and a make file must be included. You are responsible for the completeness of your submission. You are responsible for submitting your work on time. Submissions that do not compile are not accepted.