

## Project 2 Test Cases

Here are short descriptions of test cases run by the AutoGrader for Project 2. Please check that your program doesn't print out your debugging statements or take unusually long, this will probably give you a resourceLimitExceed error.

### I. Filesystem Syscall Tests

Tests file syscalls (creat, open, read, write, close, unlink), as well as stdin/stdout. If anything is printed to the console aside from what is expected, the test will fail.

- a. testID 0: Creates a file, checks syscall creat works
- b. testID 2: tests if your syscall close actually closes the file
- c. testID 3: tests if your syscall open fails gracefully when stubFileSystem's openfile limit is exceeded
- d. testID 5: tests your syscall read by reading some bytes from a file
- e. testID 6: tests that each of your process's file descriptors are independent from other processes
- f. testID 10: tests that stdin uses console

### II. Multiprogramming Syscall Tests

Tests exec syscalls (exec, join, exit)

- a. testID 2: tests your syscall join to a child
- b. testID 11: tests writeVirtualMemory small valid range, make sure wrote right data

### III. Lottery Scheduler Tests

Forks off some threads with different numbers of tickets and verifies that the lottery scheduler picks them with the right probabilities.

**The total number of tickets in the system is guaranteed not to exceed Integer.MAX\_VALUE.**

- a. Small lottery scheduler test with priority donation