

The main start by allocating and initializing, a mutex and a condition. After that it create N threads for reader and N threads for writers.

Each writer will get the current timestamp, activate the mutex, wait for a correct condition, write the new timestamp, unlock the mutex and terminate.

Each reader start by getting the current timestamp and printing it, lock the mutex, increasing the cond and then unlock the mutex. After that it will reprint the timestamp, pause, print the ending time stamp. In the ending part it lock the mutex, decrease the condition and, if it is zero, perform a signal. Unlock the mutex and terminate.