

HW 2

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All semaphores were implemented in `proc.c`. We also made system calls in `usys.S`, `syscall.c`, `syscall.h` and `sysproc.c`. We define the user functions in `defs.h` and `user.h`.

We define our semaphore table with `semtableinit()` in `proc.c`, which loops through an array of semaphores and calls `sem_init()` on each of them. `sem_init()` sets each semaphore to active and each value to `sem.value`. `sem_wait()` first acquires a spinlock, and checks with the semaphore value is below. If so, it will block the process with `sleep()` until value is above zero. Processes are arbitrarily unblocked in `sem_signal()` with `wakeup()`.