Changed Files

/Makefile /kernel/fork.c /include/linux/syscalls.h /arch/x86/syscalls/syscall_32.tbl /include/linux/sched.h /include/linux/init_task.h /set_myFlag /kernel/exit.c

How to Use Test Program

To run test_G30.c: gcc test_G30.c -o test

If testing with different priorities (nice values) is wanted, following command can be written. If nice value is smaller than 10, exit system call will work normally.

sudo nice -n 12 ./test

In test_G30.c, Firstly, the Pid of given process is will be entered. Then myFlag of process will be entered. In the given cases, errors will be printed:

- If process does not have root privileges
- If process with the given Pid cannot be found
- If the value of myFlag is different from 0 or 1

If the process goes out from setMyFlag function successfully, three child processes will be created. In exit part, if myFlag equals to 1, process will be killed with children. If myFlag equals to 0, children of process will be alive but main process will be killed.