Московский Авиационный Институт

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Институт №8 “Компьютерные науки и прикладная математика”

Кафедра №806 “Вычислительная математика и программирование”

Лабораторная работа №3 по курсу «Операционные системы»

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Дата: 29.11.24

Москва, 2024

Постановка задачи

Вариант 19.

Составить и отладить программу на языке Си, осуществляющую работу с процессами и взаимодействие между ними в одной из двух операционных систем. В результате работы программа (основной процесс) должен создать для решение задачи один или несколько дочерних процессов. Взаимодействие между процессами осуществляется через системные сигналы/события и/или через отображаемые файлы (memory-mapped files). Необходимо обрабатывать системные ошибки, которые могут возникнуть в результате работы.

Общий метод и алгоритм решения

Управление процессами:

- pid_t fork(void) – создает дочерний процесс, который является копией родительского
- int execl(const char *path, const char *arg, ...) – заменяет текущий процесс новой программой
- pid_t waitpid(pid_t pid, int *status, int options) – ожидает изменения состояния дочернего процесса

Операции с файлами:

- int open(const char *pathname, int flags, mode_t mode) – открывает или создает файл
- int close(int fd) – закрывает файловый дескриптор
- int ftruncate(int fd, off_t length) – изменяет размер файла
- int unlink(const char *pathname) – удаляет файл из файловой системы
- FILE* fopen(const char *pathname, const char *mode) – открывает поток для работы с файлом
- int fclose(FILE *stream) – закрывает поток

Управление памятью:

- void *mmap(void *addr, size_t length, int prot, int flags, int fd, off_t offset) – отображает файл в память
- int munmap(void *addr, size_t length) – удаляет отображение памяти
- int msync(void *addr, size_t length, int flags) – синхронизирует память с физическим хранилищем

Операции с семафорами:

- sem_t *sem_open(const char *name, int oflag, mode_t mode, unsigned int value) – создает/открывает семафор
- int sem_close(sem_t *sem) – закрывает семафор
- int sem_wait(sem_t *sem) – блокирует семафор (ожидание)
- int sem_post(sem_t *sem) – разблокирует семафор (освобождение)
- int sem_unlink(const char *name) – удаляет именованный семафор

Работа со временем:

- usleep(unsigned int usec) – приостанавливает выполнение на заданное количество микросекунд

Информация о файлах:

- int fstat(int fd, struct stat *statbuf) – получает информацию о состоянии файла

В целом метод решения идейно ничем не отличается от первой лабы. Просто здесь вместо пайпов используются MMF.

1. То есть вводим названия файлов
2. Подготавливаем файлы для MM, соответственно делаем MM
3. Инициализируем семафоры
4. Форкаем процесс для двух детей
5. В бесконечном цикле принимаем строки и направляем их в детей

Дети в свою очередь открывают мапед файлы, а так же файлы для записи. Ну и удаляют гласные

Код программы

parent.cpp

```cpp
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <ctime>
#include <fcntl.h>
#include <unistd.h>
#include <sys/mman.h>
#include <sys/wait.h>
#include <semaphore.h>
#include "common.h"

void prepareFileForMapping(const char* filename) {
    int fd = open(filename, O_RDWR | O_CREAT | O_TRUNC, 0666);
    if (fd == -1) {
        perror("Error creating mapped file");
        exit(1);
    }

    if (ftruncate(fd, sizeof(struct SharedData)) == -1) {
        perror("Error setting file size");
        close(fd);
        exit(1);
    }
    close(fd);
}

int main() {
    std::srand(std::time(nullptr));

    // Создаем семафоры
    sem_t *sem1 = sem_open(SEM_NAME1, O_CREAT | O_EXCL, 0666, 1);
    sem_t *sem2 = sem_open(SEM_NAME2, O_CREAT | O_EXCL, 0666, 1);

    if (sem1 == SEM_FAILED || sem2 == SEM_FAILED) {
        perror("Error creating semaphores");
        exit(1);
    }

    prepareFileForMapping(MAPPED_FILE1);
    prepareFileForMapping(MAPPED_FILE2);

    int fd1 = open(MAPPED_FILE1, O_RDWR);
    int fd2 = open(MAPPED_FILE2, O_RDWR);
    if (fd1 == -1 || fd2 == -1) {
        perror("Error opening mapped files");
        exit(1);
    }
```

```c
    struct SharedData* shared1 = (struct SharedData*)mmap(NULL, sizeof(struct SharedData),
                                         PROT_READ | PROT_WRITE,
                                         MAP_SHARED, fd1, 0);
    struct SharedData* shared2 = (struct SharedData*)mmap(NULL, sizeof(struct SharedData),
                                         PROT_READ | PROT_WRITE,
                                         MAP_SHARED, fd2, 0);
    if (shared1 == MAP_FAILED || shared2 == MAP_FAILED) {
        perror("Error mapping files");
        exit(1);
    }

    shared1->size = 0;
    shared1->done = 0;
    shared2->size = 0;
    shared2->done = 0;

    char filename1[256], filename2[256];
    printf("Enter filename for child1: ");
    scanf("%255s", filename1);
    printf("Enter filename for child2: ");
    scanf("%255s", filename2);
    getchar();

    pid_t child1 = fork();
    if (child1 == -1) {
        perror("Error creating first child");
        exit(1);
    }
    if (child1 == 0) {
        execl("./child1", "child1", filename1, NULL);
        perror("Error executing child1");
        exit(1);
    }

    pid_t child2 = fork();
    if (child2 == -1) {
        perror("Error creating second child");
        exit(1);
    }
    if (child2 == 0) {
        execl("./child2", "child2", filename2, NULL);
        perror("Error executing child2");
        exit(1);
    }

    printf("Enter lines (Ctrl+D to finish):\n");
    char line[MAX_LINE];
    while (fgets(line, MAX_LINE, stdin) != NULL) {
        struct SharedData* target;
        sem_t* current_sem;

        if ((double)rand() / RAND_MAX < PROB_FILE1) {
            target = shared1;
            current_sem = sem1;
        } else {
            target = shared2;
            current_sem = sem2;
        }

        sem_wait(current_sem);
        size_t len = strlen(line);
        strncpy(target->data, line, len);
        target->size = len;
        msync(target, sizeof(struct SharedData), MS_SYNC);
        sem_post(current_sem);
        usleep(100000);
    }

    shared1->done = 1;
    shared2->done = 1;
    msync(shared1, sizeof(struct SharedData), MS_SYNC);
    msync(shared2, sizeof(struct SharedData), MS_SYNC);

    waitpid(child1, NULL, 0);
    waitpid(child2, NULL, 0);

    munmap(shared1, sizeof(struct SharedData));
    munmap(shared2, sizeof(struct SharedData));
    close(fd1);
    close(fd2);

    sem_close(sem1);
    sem_close(sem2);
    sem_unlink(SEM_NAME1);
    sem_unlink(SEM_NAME2);

    unlink(MAPPED_FILE1);
    unlink(MAPPED_FILE2);

    printf("All processes completed.\n");
    return 0;
}
```

child1.cpp & child2.cpp

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <ctype.h>
#include <fcntl.h>
#include <unistd.h>
#include <sys/mman.h>
#include <sys/stat.h>
#include <semaphore.h>
#include "common.h"

int isVowel(char c) {
    c = tolower(c);
    return (c == 'a' || c == 'e' || c == 'i' || c == 'o' || c == 'u');
}

void removeVowels(char* str) {
    int i, j;
    for (i = 0, j = 0; str[i]; i++) {
        if (!isVowel(str[i])) {
            str[j++] = str[i];
        }
    }
    str[j] = '\0';
}

int main(int argc, char* argv[]) {
    if (argc != 2) {
        fprintf(stderr, "Usage: %s <output_file>\n", argv[0]);
        return 1;
    }

    sem_t *sem = sem_open(SEM_NAME1, 0);
    if (sem == SEM_FAILED) {
```

```c
        perror("Error opening semaphore");
        return 1;
    }

    int fd = open(MAPPED_FILE1, O_RDWR);
    if (fd == -1) {
        perror("Error opening mapped file");
        return 1;
    }

    struct stat sb;
    if (fstat(fd, &sb) == -1) {
        perror("Error getting file size");
        close(fd);
        return 1;
    }

    struct SharedData* shared = (struct SharedData*)mmap(NULL, sizeof(struct SharedData),
                                          PROT_READ | PROT_WRITE,
                                          MAP_SHARED, fd, 0);
    if (shared == MAP_FAILED) {
        perror("Error mapping file");
        close(fd);
        return 1;
    }

    FILE* outFile = fopen(argv[1], "w");
    if (!outFile) {
        perror("Error opening output file");
        munmap(shared, sizeof(struct SharedData));
        close(fd);
        return 1;
    }

    char buffer[MAX_LINE];
    while (!shared->done || shared->size > 0) {
        sem_wait(sem);
        if (shared->size > 0) {
            strncpy(buffer, shared->data, shared->size);
            buffer[shared->size] = '\0';
            removeVowels(buffer);
            fprintf(outFile, "%s", buffer);
            shared->size = 0;
            msync(shared, sizeof(struct SharedData), MS_SYNC);
        }
        sem_post(sem);
        usleep(100000);
    }

    fclose(outFile);
    munmap(shared, sizeof(struct SharedData));
    close(fd);
    sem_close(sem);
    return 0;
}
```

common.h

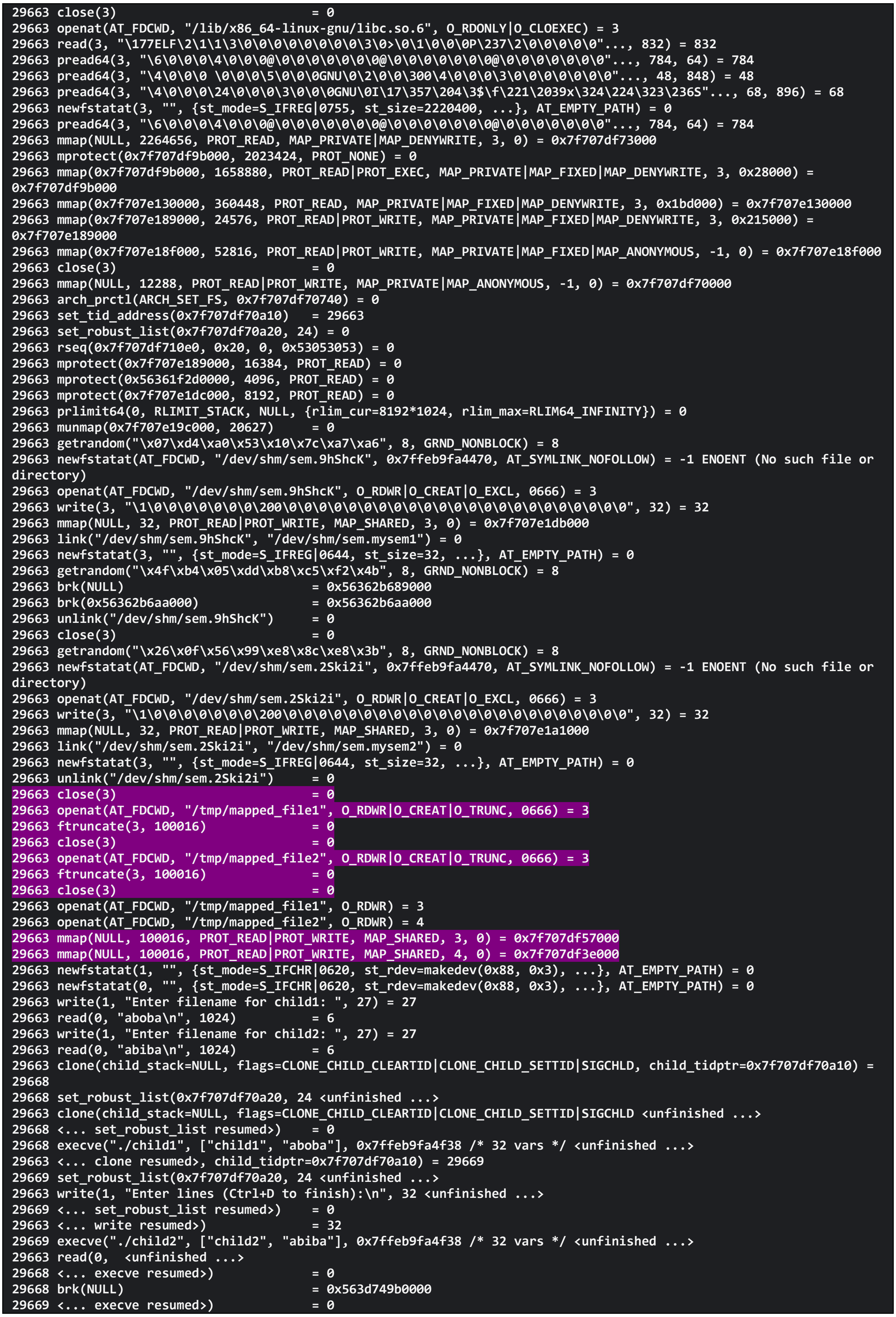
```c
#ifndef COMMON_H
#define COMMON_H

#define MAX_LINE 1000
#define SHARED_MEM_SIZE (MAX_LINE * 100)
#define PROB_FILE1 0.8
#define MAPPED_FILE1 "/tmp/mapped_file1"
```

```
#define MAPPED_FILE2 "/tmp/mapped_file2"
#define SEM_NAME1 "/mysem1"
#define SEM_NAME2 "/mysem2"

struct SharedData {
    char data[SHARED_MEM_SIZE];
    size_t size;
    bool done;
};

#endif
```

Протокол работы программы

```
den4ik2975@den4ikpc:~/CLionProjects/MAI_OS_Labs/Labs/Lab3/src$ g++ -o parent parent.cpp
den4ik2975@den4ikpc:~/CLionProjects/MAI_OS_Labs/Labs/Lab3/src$ g++ -o child1 child1.cpp
den4ik2975@den4ikpc:~/CLionProjects/MAI_OS_Labs/Labs/Lab3/src$ g++ -o child2 child2.cpp
den4ik2975@den4ikpc:~/CLionProjects/MAI_OS_Labs/Labs/Lab3/src$ ./parent
Enter filename for child1: aboba
Enter filename for child2: abiba
Enter lines (Ctrl+D to finish):
ak
al
an
am
nodsfbnofsoegseoigsio
egsgsegsregrner
ololllllloololo
dodododo
oj
cock
All processes completed.
den4ik2975@den4ikpc:~/CLionProjects/MAI_OS_Labs/Labs/Lab3/src$ cat aboba
l
n
ndsfbnfsgsgs
dddd
j
den4ik2975@den4ikpc:~/CLionProjects/MAI_OS_Labs/Labs/Lab3/src$ cat abiba
m
cck
```

```
29663 execve("./parent", ["./parent"], 0x7ffd86804068 /* 32 vars */) = 0
29663 brk(NULL)                               = 0x56362b689000
29663 arch_prctl(0x3001 /* ARCH_??? */, 0x7ffeb9fa4d60) = -1 EINVAL (Invalid argument)
29663 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f707e1a2000
29663 access("/etc/ld.so.preload", R_OK) = -1 ENOENT (No such file or directory)
29663 openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC) = 3
29663 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=20627, ...}, AT_EMPTY_PATH) = 0
29663 mmap(NULL, 20627, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7f707e19c000
```



```
29663 close(3)                          = 0
29663 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6", O_RDONLY|O_CLOEXEC) = 3
29663 read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0P\237\2\0\0\0\0\0"..., 832) = 832
29663 pread64(3, "\6\0\0\0\4\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0\0"..., 784, 64) = 784
29663 pread64(3, "\4\0\0\0 \0\0\0\5\0\0\0GNU\0\2\0\0\300\4\0\0\0\3\0\0\0\0\0\0\0"..., 48, 848) = 48
29663 pread64(3, "\4\0\0\0\24\0\0\0\3\0\0\0GNU\0I\17\357\204\3$\f\221\2039x\324\224\323\236S"..., 68, 896) = 68
29663 newfstatat(3, "", {st_mode=S_IFREG|0755, st_size=2220400, ...}, AT_EMPTY_PATH) = 0
29663 pread64(3, "\6\0\0\0\4\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0\0"..., 784, 64) = 784
29663 mmap(NULL, 2264656, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f707df73000
29663 mprotect(0x7f707df9b000, 2023424, PROT_NONE) = 0
29663 mmap(0x7f707df9b000, 1658880, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000) =
0x7f707df9b000
29663 mmap(0x7f707e130000, 360448, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1bd000) = 0x7f707e130000
29663 mmap(0x7f707e189000, 24576, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x215000) =
0x7f707e189000
29663 mmap(0x7f707e18f000, 52816, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f707e18f000
29663 close(3)                          = 0
29663 mmap(NULL, 12288, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f707df70000
29663 arch_prctl(ARCH_SET_FS, 0x7f707df70740) = 0
29663 set_tid_address(0x7f707df70a10)   = 29663
29663 set_robust_list(0x7f707df70a20, 24) = 0
29663 rseq(0x7f707df710e0, 0x20, 0, 0x53053053) = 0
29663 mprotect(0x7f707e189000, 16384, PROT_READ) = 0
29663 mprotect(0x56361f2d0000, 4096, PROT_READ) = 0
29663 mprotect(0x7f707e1dc000, 8192, PROT_READ) = 0
29663 prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) = 0
29663 munmap(0x7f707e19c000, 20627)     = 0
29663 getrandom("\x07\xd4\xa0\x53\x10\x7c\xa7\xa6", 8, GRND_NONBLOCK) = 8
29663 newfstatat(AT_FDCWD, "/dev/shm/sem.9hShcK", 0x7ffeb9fa4470, AT_SYMLINK_NOFOLLOW) = -1 ENOENT (No such file or
directory)
29663 openat(AT_FDCWD, "/dev/shm/sem.9hShcK", O_RDWR|O_CREAT|O_EXCL, 0666) = 3
29663 write(3, "\1\0\0\0\0\0\0\0\200\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0", 32) = 32
29663 mmap(NULL, 32, PROT_READ|PROT_WRITE, MAP_SHARED, 3, 0) = 0x7f707e1db000
29663 link("/dev/shm/sem.9hShcK", "/dev/shm/sem.mysem1") = 0
29663 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=32, ...}, AT_EMPTY_PATH) = 0
29663 getrandom("\x4f\xb4\x05\xdd\xb8\xc5\xf2\x4b", 8, GRND_NONBLOCK) = 8
29663 brk(NULL)                         = 0x56362b689000
29663 brk(0x56362b6aa000)               = 0x56362b6aa000
29663 unlink("/dev/shm/sem.9hShcK")     = 0
29663 close(3)                          = 0
29663 getrandom("\x26\x0f\x56\x99\xe8\x8c\xe8\x3b", 8, GRND_NONBLOCK) = 8
29663 newfstatat(AT_FDCWD, "/dev/shm/sem.2Ski2i", 0x7ffeb9fa4470, AT_SYMLINK_NOFOLLOW) = -1 ENOENT (No such file or
directory)
29663 openat(AT_FDCWD, "/dev/shm/sem.2Ski2i", O_RDWR|O_CREAT|O_EXCL, 0666) = 3
29663 write(3, "\1\0\0\0\0\0\0\0\200\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0", 32) = 32
29663 mmap(NULL, 32, PROT_READ|PROT_WRITE, MAP_SHARED, 3, 0) = 0x7f707e1a1000
29663 link("/dev/shm/sem.2Ski2i", "/dev/shm/sem.mysem2") = 0
29663 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=32, ...}, AT_EMPTY_PATH) = 0
29663 unlink("/dev/shm/sem.2Ski2i")     = 0
29663 close(3)                          = 0
29663 openat(AT_FDCWD, "/tmp/mapped_file1", O_RDWR|O_CREAT|O_TRUNC, 0666) = 3
29663 ftruncate(3, 100016)              = 0
29663 close(3)                          = 0
29663 openat(AT_FDCWD, "/tmp/mapped_file2", O_RDWR|O_CREAT|O_TRUNC, 0666) = 3
29663 ftruncate(3, 100016)              = 0
29663 close(3)                          = 0
29663 openat(AT_FDCWD, "/tmp/mapped_file1", O_RDWR) = 3
29663 openat(AT_FDCWD, "/tmp/mapped_file2", O_RDWR) = 4
29663 mmap(NULL, 100016, PROT_READ|PROT_WRITE, MAP_SHARED, 3, 0) = 0x7f707df57000
29663 mmap(NULL, 100016, PROT_READ|PROT_WRITE, MAP_SHARED, 4, 0) = 0x7f707df3e000
29663 newfstatat(1, "", {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0x3), ...}, AT_EMPTY_PATH) = 0
29663 newfstatat(0, "", {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0x3), ...}, AT_EMPTY_PATH) = 0
29663 write(1, "Enter filename for child1: ", 27) = 27
29663 read(0, "aboba\n", 1024)          = 6
29663 write(1, "Enter filename for child2: ", 27) = 27
29663 read(0, "abiba\n", 1024)          = 6
29663 clone(child_stack=NULL, flags=CLONE_CHILD_CLEARTID|CLONE_CHILD_SETTID|SIGCHLD, child_tidptr=0x7f707df70a10) =
29668
29668 set_robust_list(0x7f707df70a20, 24 <unfinished ...>
29663 clone(child_stack=NULL, flags=CLONE_CHILD_CLEARTID|CLONE_CHILD_SETTID|SIGCHLD <unfinished ...>
29668 <... set_robust_list resumed>)    = 0
29668 execve("./child1", ["child1", "aboba"], 0x7ffeb9fa4f38 /* 32 vars */ <unfinished ...>
29663 <... clone resumed>, child_tidptr=0x7f707df70a10) = 29669
29669 set_robust_list(0x7f707df70a20, 24 <unfinished ...>
29663 write(1, "Enter lines (Ctrl+D to finish):\n", 32 <unfinished ...>
29669 <... set_robust_list resumed>)    = 0
29663 <... write resumed>)              = 32
29669 execve("./child2", ["child2", "abiba"], 0x7ffeb9fa4f38 /* 32 vars */ <unfinished ...>
29663 read(0,  <unfinished ...>
29668 <... execve resumed>)             = 0
29668 brk(NULL)                         = 0x563d749b0000
29669 <... execve resumed>)             = 0
```

```
29669 brk(NULL <unfinished ...>
29668 arch_prctl(0x3001 /* ARCH_??? */, 0x7ffc44aa0ca0 <unfinished ...>
29669 <... brk resumed>)                = 0x55cd6fd91000
29668 <... arch_prctl resumed>)         = -1 EINVAL (Invalid argument)
29669 arch_prctl(0x3001 /* ARCH_??? */, 0x7fffbda76c40 <unfinished ...>
29668 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0 <unfinished ...>
29669 <... arch_prctl resumed>)         = -1 EINVAL (Invalid argument)
29668 <... mmap resumed>)               = 0x7f3cfb8dd000
29669 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0 <unfinished ...>
29668 access("/etc/ld.so.preload", R_OK <unfinished ...>
29669 <... mmap resumed>)               = 0x7f8f3bb2f000
29668 <... access resumed>)             = -1 ENOENT (No such file or directory)
29669 access("/etc/ld.so.preload", R_OK <unfinished ...>
29668 openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC <unfinished ...>
29669 <... access resumed>)             = -1 ENOENT (No such file or directory)
29668 <... openat resumed>)             = 5
29669 openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC <unfinished ...>
29668 newfstatat(5, "",  <unfinished ...>
29669 <... openat resumed>)             = 5
29668 <... newfstatat resumed>{st_mode=S_IFREG|0644, st_size=20627, ...}, AT_EMPTY_PATH) = 0
29669 newfstatat(5, "",  <unfinished ...>
29668 mmap(NULL, 20627, PROT_READ, MAP_PRIVATE, 5, 0 <unfinished ...>
29669 <... newfstatat resumed>{st_mode=S_IFREG|0644, st_size=20627, ...}, AT_EMPTY_PATH) = 0
29668 <... mmap resumed>)               = 0x7f3cfb8d7000
29669 mmap(NULL, 20627, PROT_READ, MAP_PRIVATE, 5, 0 <unfinished ...>
29668 close(5 <unfinished ...>
29669 <... mmap resumed>)               = 0x7f8f3bb29000
29668 <... close resumed>)              = 0
29669 close(5 <unfinished ...>
29668 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6", O_RDONLY|O_CLOEXEC <unfinished ...>
29669 <... close resumed>)              = 0
29668 <... openat resumed>)             = 5
29669 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6", O_RDONLY|O_CLOEXEC <unfinished ...>
29668 read(5,  <unfinished ...>
29669 <... openat resumed>)             = 5
29669 read(5,  <unfinished ...>
29668 <... read resumed>"\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0P\237\2\0\0\0\0\0"..., 832) = 832
29669 <... read resumed>"\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0P\237\2\0\0\0\0\0"..., 832) = 832
29668 pread64(5,  <unfinished ...>
29669 pread64(5,  <unfinished ...>
29668 <... pread64 resumed>"\6\0\0\0\4\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0\0"..., 784, 64) = 784
29669 <... pread64 resumed>"\6\0\0\0\4\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0\0"..., 784, 64) = 784
29668 pread64(5,  <unfinished ...>
29669 pread64(5,  <unfinished ...>
29668 <... pread64 resumed>"\4\0\0\0 \0\0\0\5\0\0\0GNU\0\2\0\0\300\4\0\0\0\3\0\0\0\0\0\0\0"..., 48, 848) = 48
29669 <... pread64 resumed>"\4\0\0\0 \0\0\0\5\0\0\0GNU\0\2\0\0\300\4\0\0\0\3\0\0\0\0\0\0\0"..., 48, 848) = 48
29669 pread64(5,  <unfinished ...>
29668 pread64(5,  <unfinished ...>
29669 <... pread64 resumed>"\4\0\0\0\24\0\0\0\3\0\0\0GNU\0I\17\357\204\3$\f\221\2039x\324\224\323\236S"..., 68, 896)
= 68
29668 <... pread64 resumed>"\4\0\0\0\24\0\0\0\3\0\0\0GNU\0I\17\357\204\3$\f\221\2039x\324\224\323\236S"..., 68, 896)
= 68
29669 newfstatat(5, "",  <unfinished ...>
29668 newfstatat(5, "",  <unfinished ...>
29669 <... newfstatat resumed>{st_mode=S_IFREG|0755, st_size=2220400, ...}, AT_EMPTY_PATH) = 0
29668 <... newfstatat resumed>{st_mode=S_IFREG|0755, st_size=2220400, ...}, AT_EMPTY_PATH) = 0
29669 pread64(5,  <unfinished ...>
29668 pread64(5,  <unfinished ...>
29669 <... pread64 resumed>"\6\0\0\0\4\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0\0"..., 784, 64) = 784
29668 <... pread64 resumed>"\6\0\0\0\4\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0\0"..., 784, 64) = 784
29669 mmap(NULL, 2264656, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 5, 0 <unfinished ...>
29668 mmap(NULL, 2264656, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 5, 0 <unfinished ...>
29669 <... mmap resumed>)               = 0x7f8f3b900000
29668 <... mmap resumed>)               = 0x7f3cfb6ae000
29669 mprotect(0x7f8f3b928000, 2023424, PROT_NONE <unfinished ...>
29668 mprotect(0x7f3cfb6d6000, 2023424, PROT_NONE <unfinished ...>
29669 <... mprotect resumed>)           = 0
29668 <... mprotect resumed>)           = 0
29669 mmap(0x7f8f3b928000, 1658880, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 5, 0x28000 <unfinished
...>
29668 mmap(0x7f3cfb6d6000, 1658880, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 5, 0x28000 <unfinished
...>
29669 <... mmap resumed>)               = 0x7f8f3b928000
29668 <... mmap resumed>)               = 0x7f3cfb6d6000
29669 mmap(0x7f8f3babd000, 360448, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 5, 0x1bd000 <unfinished ...>
29668 mmap(0x7f3cfb86b000, 360448, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 5, 0x1bd000 <unfinished ...>
29669 <... mmap resumed>)               = 0x7f8f3babd000
29668 <... mmap resumed>)               = 0x7f3cfb86b000
29669 mmap(0x7f8f3bb16000, 24576, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 5, 0x215000 <unfinished
...>
29668 mmap(0x7f3cfb8c4000, 24576, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 5, 0x215000 <unfinished
...>
```

```
29669 <... mmap resumed>)               = 0x7f8f3bb16000
29668 <... mmap resumed>)               = 0x7f3cfb8c4000
29669 mmap(0x7f8f3bb1c000, 52816, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0 <unfinished ...>
29668 mmap(0x7f3cfb8ca000, 52816, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0 <unfinished ...>
29669 <... mmap resumed>)               = 0x7f8f3bb1c000
29668 <... mmap resumed>)               = 0x7f3cfb8ca000
29669 close(5 <unfinished ...>
29668 close(5 <unfinished ...>
29669 <... close resumed>)              = 0
29668 <... close resumed>)              = 0
29669 mmap(NULL, 12288, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0 <unfinished ...>
29668 mmap(NULL, 12288, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0 <unfinished ...>
29669 <... mmap resumed>)               = 0x7f8f3b8fd000
29668 <... mmap resumed>)               = 0x7f3cfb6ab000
29669 arch_prctl(ARCH_SET_FS, 0x7f8f3b8fd740 <unfinished ...>
29668 arch_prctl(ARCH_SET_FS, 0x7f3cfb6ab740 <unfinished ...>
29669 <... arch_prctl resumed>)         = 0
29668 <... arch_prctl resumed>)         = 0
29669 set_tid_address(0x7f8f3b8fda10 <unfinished ...>
29668 set_tid_address(0x7f3cfb6aba10 <unfinished ...>
29669 <... set_tid_address resumed>)    = 29669
29668 <... set_tid_address resumed>)    = 29668
29669 set_robust_list(0x7f8f3b8fda20, 24 <unfinished ...>
29668 set_robust_list(0x7f3cfb6aba20, 24 <unfinished ...>
29669 <... set_robust_list resumed>)    = 0
29668 <... set_robust_list resumed>)    = 0
29669 rseq(0x7f8f3b8fe0e0, 0x20, 0, 0x53053053 <unfinished ...>
29668 rseq(0x7f3cfb6ac0e0, 0x20, 0, 0x53053053 <unfinished ...>
29669 <... rseq resumed>)               = 0
29668 <... rseq resumed>)               = 0
29669 mprotect(0x7f8f3bb16000, 16384, PROT_READ <unfinished ...>
29668 mprotect(0x7f3cfb8c4000, 16384, PROT_READ <unfinished ...>
29669 <... mprotect resumed>)           = 0
29668 <... mprotect resumed>)           = 0
29669 mprotect(0x55cd47753000, 4096, PROT_READ <unfinished ...>
29668 mprotect(0x563d6e501000, 4096, PROT_READ <unfinished ...>
29669 <... mprotect resumed>)           = 0
29668 <... mprotect resumed>)           = 0
29669 mprotect(0x7f8f3bb69000, 8192, PROT_READ <unfinished ...>
29668 mprotect(0x7f3cfb917000, 8192, PROT_READ <unfinished ...>
29669 <... mprotect resumed>)           = 0
29668 <... mprotect resumed>)           = 0
29669 prlimit64(0, RLIMIT_STACK, NULL,  <unfinished ...>
29668 prlimit64(0, RLIMIT_STACK, NULL,  <unfinished ...>
29669 <... prlimit64 resumed>{rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) = 0
29668 <... prlimit64 resumed>{rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) = 0
29669 munmap(0x7f8f3bb29000, 20627 <unfinished ...>
29668 munmap(0x7f3cfb8d7000, 20627 <unfinished ...>
29669 <... munmap resumed>)             = 0
29668 <... munmap resumed>)             = 0
29669 openat(AT_FDCWD, "/dev/shm/sem.mysem1", O_RDWR|O_NOFOLLOW <unfinished ...>
29668 openat(AT_FDCWD, "/dev/shm/sem.mysem1", O_RDWR|O_NOFOLLOW <unfinished ...>
29669 <... openat resumed>)             = 5
29668 <... openat resumed>)             = 5
29669 newfstatat(5, "",  <unfinished ...>
29668 newfstatat(5, "",  <unfinished ...>
29669 <... newfstatat resumed>{st_mode=S_IFREG|0644, st_size=32, ...}, AT_EMPTY_PATH) = 0
29668 <... newfstatat resumed>{st_mode=S_IFREG|0644, st_size=32, ...}, AT_EMPTY_PATH) = 0
29669 getrandom( <unfinished ...>
29668 getrandom( <unfinished ...>
29669 <... getrandom resumed>"\xf2\x52\xa1\xfe\x1b\x8b\xe4\x0a", 8, GRND_NONBLOCK) = 8
29668 <... getrandom resumed>"\x00\x79\x19\x85\xf3\x6a\xd7\x6e", 8, GRND_NONBLOCK) = 8
29669 brk(NULL <unfinished ...>
29668 brk(NULL <unfinished ...>
29669 <... brk resumed>)                = 0x55cd6fd91000
29668 <... brk resumed>)                = 0x563d749b0000
29669 brk(0x55cd6fdb2000 <unfinished ...>
29668 brk(0x563d749d1000 <unfinished ...>
29669 <... brk resumed>)                = 0x55cd6fdb2000
29668 <... brk resumed>)                = 0x563d749d1000
29669 mmap(NULL, 32, PROT_READ|PROT_WRITE, MAP_SHARED, 5, 0 <unfinished ...>
29668 mmap(NULL, 32, PROT_READ|PROT_WRITE, MAP_SHARED, 5, 0 <unfinished ...>
29669 <... mmap resumed>)               = 0x7f8f3bb68000
29669 close(5 <unfinished ...>
29668 <... mmap resumed>)               = 0x7f3cfb916000
29669 <... close resumed>)              = 0
29668 close(5 <unfinished ...>
29669 openat(AT_FDCWD, "/tmp/mapped_file1", O_RDWR <unfinished ...>
29668 <... close resumed>)              = 0
29669 <... openat resumed>)             = 5
29668 openat(AT_FDCWD, "/tmp/mapped_file1", O_RDWR <unfinished ...>
29669 newfstatat(5, "",  <unfinished ...>
29668 <... openat resumed>)            = 5
29669 <... newfstatat resumed>{st_mode=S_IFREG|0644, st_size=100016, ...}, AT_EMPTY_PATH) = 0
29668 newfstatat(5, "",  <unfinished ...>
29669 mmap(NULL, 100016, PROT_READ|PROT_WRITE, MAP_SHARED, 5, 0) = 0x7f8f3b8e4000
29668 <... newfstatat resumed>{st_mode=S_IFREG|0644, st_size=100016, ...}, AT_EMPTY_PATH) = 0
29669 openat(AT_FDCWD, "abiba", O_WRONLY|O_CREAT|O_TRUNC, 0666 <unfinished ...>
29668 mmap(NULL, 100016, PROT_READ|PROT_WRITE, MAP_SHARED, 5, 0) = 0x7f3cfb692000
29669 <... openat resumed>)            = 6
29668 openat(AT_FDCWD, "aboba", O_WRONLY|O_CREAT|O_TRUNC, 0666 <unfinished ...>
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... openat resumed>)            = 6
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29668 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000}, NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000}, NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000}, NULL) = 0
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000}, NULL) = 0
29668 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29668 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000}, NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
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29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29663 <... read resumed>"abababaababqa\n", 1024) = 14
29663 msync(0x7f707df57000, 100016, MS_SYNC) = 0
29663 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 newfstatat(6, "", {st_mode=S_IFREG|0644, st_size=0, ...}, AT_EMPTY_PATH) = 0
29668 msync(0x7f3cfb692000, 100016, MS_SYNC) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29663 <... clock_nanosleep resumed>NULL) = 0
29663 read(0,  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000}, NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29668 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29668 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29668 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000}, NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000}, NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000}, NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000}, NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29663 <... read resumed>"okokokook\n", 1024) = 10
29663 msync(0x7f707df57000, 100016, MS_SYNC) = 0
29663 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 newfstatat(6, "", {st_mode=S_IFREG|0644, st_size=0, ...}, AT_EMPTY_PATH) = 0
```

```
29669 msync(0x7f8f3b8e4000, 100016, MS_SYNC) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29663 <... clock_nanosleep resumed>NULL) = 0
29663 read(0,  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29668 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000}, NULL) = 0
29669 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000}, NULL) = 0
29668 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29668 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29668 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29668 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29663 <... read resumed>"ihihihhi\n", 1024) = 9
29663 msync(0x7f707df57000, 100016, MS_SYNC) = 0
29663 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 msync(0x7f8f3b8e4000, 100016, MS_SYNC) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29663 <... clock_nanosleep resumed>NULL) = 0
29663 read(0,  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=0, tv_nsec=100000000},  <unfinished ...>
29663 <... read resumed>"", 1024)       = 0
29663 msync(0x7f707df57000, 100016, MS_SYNC) = 0
29663 msync(0x7f707df3e000, 100016, MS_SYNC) = 0
29663 wait4(29668,  <unfinished ...>
29669 <... clock_nanosleep resumed>NULL) = 0
29669 write(6, "kkkk\nhhhh\n", 10)      = 10
```

```
29669 close(6)                         = 0
29669 munmap(0x7f8f3b8e4000, 100016)    = 0
29669 close(5)                         = 0
29669 munmap(0x7f8f3bb68000, 32)        = 0
29669 exit_group(0)                    = ?
29669 +++ exited with 0 +++
29663 <... wait4 resumed>NULL, 0, NULL) = ? ERESTARTSYS (To be restarted if SA_RESTART is set)
29663 --- SIGCHLD {si_signo=SIGCHLD, si_code=CLD_EXITED, si_pid=29669, si_uid=1000, si_status=0, si_utime=0,
si_stime=2} ---
29663 wait4(29668,  <unfinished ...>
29668 <... clock_nanosleep resumed>NULL) = 0
29668 write(6, "bbbbbq\n", 7)           = 7
29668 close(6)                         = 0
29668 munmap(0x7f3cfb692000, 100016)    = 0
29668 close(5)                         = 0
29668 munmap(0x7f3cfb916000, 32)        = 0
29668 exit_group(0)                    = ?
29668 +++ exited with 0 +++
29663 <... wait4 resumed>NULL, 0, NULL) = 29668
29663 --- SIGCHLD {si_signo=SIGCHLD, si_code=CLD_EXITED, si_pid=29668, si_uid=1000, si_status=0, si_utime=0,
si_stime=2} ---
29663 wait4(29669, NULL, 0, NULL)       = 29669
29663 munmap(0x7f707df57000, 100016)    = 0
29663 munmap(0x7f707df3e000, 100016)    = 0
29663 close(3)                         = 0
29663 close(4)                         = 0
29663 munmap(0x7f707e1db000, 32)        = 0
29663 munmap(0x7f707e1a1000, 32)        = 0
29663 unlink("/dev/shm/sem.mysem1")     = 0
29663 unlink("/dev/shm/sem.mysem2")     = 0
29663 unlink("/tmp/mapped_file1")       = 0
29663 unlink("/tmp/mapped_file2")       = 0
29663 write(1, "All processes completed.\n", 25) = 25
29663 exit_group(0)                    = ?
29663 +++ exited with 0 +++
```

Вывод

Интересно было повозится и разобраться с MMF файлами. Не понял зачем семафор если честно, у меня и без него работало, но сказали надо.