## Московский Авиационный Институт

(Национальный Исследовательский Университет)

Институт №8 "Компьютерные науки и прикладная математика" Кафедра №806 "Вычислительная математика и программирование"

## Лабораторная работа №2 по курсу «Операционные системы»

Группа: М80-206Б-20

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Оценка: \_\_\_\_\_

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$ strace -f ./a.out 2
execve("./a.out", ["./a.out", "2"], 0x7ffd268697c0 /* 36 vars */) = 0
brk(NULL)
                      = 0x559786f32000
arch prctl(0x3001 /* ARCH ??? */, 0x7ffd8c3b0c00) = -1 EINVAL (Invalid argument)
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1,
0) = 0x7fb6e42c4000
access("/etc/ld.so.preload", R OK) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC) = 3
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=18151, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 18151, PROT READ, MAP PRIVATE, 3, 0) = 0x7fb6e42bf000
close(3)
openat(AT FDCWD, "/lib/x86 64-linux-gnu/libc.so.6", O RDONLY|O CLOEXEC) = 3
pread64(3,
"\4\0\0\0\24\0\0\0\3\0\0\0GNU\0\244:\374\204(\337f#\315I\214\234\f\256\271\32".... 68, 896)
= 68
newfstatat(3, "", {st mode=S IFREG|0755, st size=2216304, ...}, AT EMPTY PATH) = 0
mmap(NULL, 2260560, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fb6e4097000
mmap(0x7fb6e40bf000, 1658880, PROT_READ|PROT_EXEC,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x28000) = 0x7fb6e40bf000
mmap(0x7fb6e4254000, 360448, PROT READ,
MAP PRIVATE MAP FIXED MAP DENYWRITE, 3, 0x1bd000) = 0x7fb6e4254000
mmap(0x7fb6e42ac000, 24576, PROT READ|PROT WRITE,
MAP PRIVATE MAP FIXED MAP DENYWRITE, 3, 0x214000) = 0x7fb6e42ac000
mmap(0x7fb6e42b2000, 52816, PROT READIPROT WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7fb6e42b2000
mmap(NULL, 12288, PROT READIPROT WRITE, MAP PRIVATEIMAP ANONYMOUS,
-1, 0) = 0x7fb6e4094000
arch prctl(ARCH SET FS, 0x7fb6e4094740) = 0
set tid address(0x7fb6e4094a10)
                              = 3863
set robust list(0x7fb6e4094a20, 24)
rseq(0x7fb6e40950e0, 0x20, 0, 0x53053053) = 0
mprotect(0x7fb6e42ac000, 16384, PROT READ) = 0
mprotect(0x559785386000, 4096, PROT READ) = 0
mprotect(0x7fb6e42fe000, 8192, PROT READ) = 0
prlimit64(0, RLIMIT STACK, NULL, {rlim cur=8192*1024, rlim max=RLIM64 INFINITY}) =
munmap(0x7fb6e42bf000, 18151)
                              = 0
newfstatat(1, "", {st mode=S IFCHR|0620, st rdev=makedev(0x88, 0x4), ...},
AT EMPTY PATH) = 0
getrandom("\xeb\xfe\x18\x76\xab\x28\xa4\x68", 8, GRND_NONBLOCK) = 8
brk(NULL)
                      = 0x559786f32000
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brk(0x559786f53000)
                               = 0x559786f53000
newfstatat(0, "", {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0x4), ...},
AT EMPTY PATH) = 0
write(1, "Please enter the matrix dimensio"..., 35Please enter the matrix dimension: ) = 35
read(0, 4
"4\n", 1024)
                     = 2
read(0, 1 2 3 4
"1 2 3 4\n", 1024)
                       = 8
read(0, 67 34 0 9
"67 34 0 9\n", 1024)
                        = 10
read(0, 12 3 4 1
"12 3 4 1\n", 1024)
                        = 9
read(0, 2 45 60
"2 45 60\n", 1024)
                        = 8
read(0, 89
"89\n", 1024)
                      = 3
rt_sigaction(SIGRT_1, {sa_handler=0x7fb6e4128870, sa_mask=[],
sa flags=SA RESTORER|SA ONSTACK|SA RESTART|SA SIGINFO,
sa_restorer=0x7fb6e40d9520, NULL, 8) = 0
rt_sigprocmask(SIG_UNBLOCK, [RTMIN RT_1], NULL, 8) = 0
mmap(NULL, 8392704, PROT NONE, MAP PRIVATE|MAP ANONYMOUS|MAP STACK,
-1, 0) = 0x7fb6e3893000
mprotect(0x7fb6e3894000, 8388608, PROT_READ|PROT_WRITE) = 0
rt_sigprocmask(SIG_BLOCK, ~[], [], 8) = 0
clone3({flags=CLONE VM|CLONE FS|CLONE FILES|CLONE SIGHAND|CLONE THREA
D|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_CLEA
RTID, child tid=0x7fb6e4093910, parent tid=0x7fb6e4093910, exit signal=0,
stack=0x7fb6e3893000, stack size=0x7fff00, tls=0x7fb6e4093640}strace: Process 3992
attached
=> \{parent tid=[3992]\}, 88\} = 3992
[pid 3863] rt sigprocmask(SIG SETMASK, [], <unfinished ...>
[pid 3992] rseq(0x7fb6e4093fe0, 0x20, 0, 0x53053053 <unfinished ...>
[pid 3863] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 3992] < ... rseg resumed>)
[pid 3863] mmap(NULL, 8392704, PROT NONE,
MAP PRIVATE MAP ANONYMOUS MAP STACK, -1, 0 < unfinished ... >
[pid 3992] set_robust_list(0x7fb6e4093920, 24 <unfinished ...>
[pid 3863] <... mmap resumed>)
                                   = 0x7fb6e3092000
[pid 3992] <... set robust list resumed>) = 0
[pid 3863] mprotect(0x7fb6e3093000, 8388608, PROT READ|PROT WRITE < unfinished
...>
[pid 3992] rt sigprocmask(SIG SETMASK, [], <unfinished ...>
[pid 3863] <... mprotect resumed>) = 0
[pid 3992] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 3863] rt sigprocmask(SIG BLOCK, ~[], <unfinished ...>
[pid 3992] write(1, "\320\275\320\276\320\274\320\265\321\200
\320\277\320\276\321\202\320\276\320\272\320\260: 1 \n", 28номер потока: 1
<unfinished ...>
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[pid 3863] <... rt sigprocmask resumed>[], 8) = 0
[pid 3992] <... write resumed>)
[pid 3863]
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THREA
DICLONE SYSVSEMICLONE SETTLSICLONE PARENT SETTIDICLONE CHILD CLEA
RTID, child tid=0x7fb6e3892910, parent tid=0x7fb6e3892910, exit signal=0,
stack=0x7fb6e3092000, stack_size=0x7fff00, tls=0x7fb6e3892640} < unfinished ...>
[pid 3992] openat(AT FDCWD, "/etc/ld.so.cache", O RDONLY|O CLOEXECstrace:
Process 3993 attached
) = 3
[pid 3863] <... clone3 resumed> => {parent_tid=[3993]}, 88) = 3993
[pid 3993] rseq(0x7fb6e3892fe0, 0x20, 0, 0x53053053 <unfinished ...>
[pid 3863] rt_sigprocmask(SIG_SETMASK, [], <unfinished ...>
[pid 3992] newfstatat(3, "", <unfinished ...>
[pid 3863] <... rt sigprocmask resumed>NULL, 8) = 0
[pid 3993] < ... rseq resumed>)
[pid 3863] futex(0x7fb6e4093910, FUTEX_WAIT_BITSET|FUTEX_CLOCK_REALTIME,
3992, NULL, FUTEX BITSET MATCH ANY <unfinished ...>
[pid 3992] < ... newfstatat resumed>{st_mode=S_IFREG|0644, st_size=18151, ...},
AT EMPTY PATH) = 0
[pid 3993] set robust list(0x7fb6e3892920, 24 <unfinished ...>
[pid 3992] mmap(NULL, 18151, PROT_READ, MAP_PRIVATE, 3, 0 <unfinished ...>
[pid 3993] <... set_robust_list resumed>) = 0
[pid 3992] <... mmap resumed>)
                                 = 0x7fb6e42bf000
[pid 3993] rt sigprocmask(SIG SETMASK, [], <unfinished ...>
[pid 3992] close(3 <unfinished ...>
[pid 3993] <... rt sigprocmask resumed>NULL, 8) = 0
[pid 3992] <... close resumed>)
[pid 3993] write(1, "\320\275\320\276\320\274\320\265\321\200
\320\277\320\276\321\202\320\276\320\272\320\260: 2 \n", 28 < unfinished ...>
[pid 3992] mmap(NULL, 134217728, PROT NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_NORESERVE, -1, 0HOMED HOTOKA: 2
<unfinished ...>
[pid 3993] <... write resumed>)
                               = 28
[pid 3992] <... mmap resumed>)
                                 = 0x7fb6db092000
[pid 3993] futex(0x7fb6e4300a48, FUTEX WAIT PRIVATE, 2, NULL <unfinished ...>
[pid 3992] munmap(0x7fb6db092000, 16179200) = 0
[pid 3992] munmap(0x7fb6e0000000, 50929664) = 0
[pid 3992] mprotect(0x7fb6dc000000, 135168, PROT READ|PROT WRITE) = 0
[pid 3992] openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libgcc_s.so.1",
O_RDONLY|O_CLOEXEC) = 3
832
[pid 3992] newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=125488, ...},
AT EMPTY PATH) = 0
[pid 3992] mmap(NULL, 127720, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fb6e3072000
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[pid 3992] mmap(0x7fb6e3075000, 94208, PROT READ|PROT EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7fb6e3075000
[pid 3992] mmap(0x7fb6e308c000, 16384, PROT READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1a000) = 0x7fb6e308c000
[pid 3992] mmap(0x7fb6e3090000, 8192, PROT READ|PROT WRITE,
MAP PRIVATE MAP FIXED MAP DENYWRITE, 3, 0x1d000) = 0x7fb6e3090000
[pid 3992] close(3)
                             = 0
[pid 3992] mprotect(0x7fb6e3090000, 4096, PROT READ) = 0
[pid 3992] munmap(0x7fb6e42bf000, 18151) = 0
[pid 3992] futex(0x7fb6e4300a48, FUTEX WAKE PRIVATE, 1 < unfinished ...>
[pid 3993] <... futex resumed>)
                                 = 0
[pid 3992] <... futex resumed>)
                                 = 1
[pid 3993] futex(0x7fb6e4300a48, FUTEX_WAKE_PRIVATE, 1 < unfinished ...>
[pid 3992] futex(0x7fb6e3091210, FUTEX_WAKE_PRIVATE, 2147483647 <unfinished ...>
[pid 3993] <... futex resumed>)
                                 = 0
[pid 3992] < ... futex resumed>)
                                 = 0
[pid 3993] rt_sigprocmask(SIG_BLOCK, ~[RT_1], <unfinished ...>
[pid 3992] rt_sigprocmask(SIG_BLOCK, ~[RT_1], <unfinished ...>
[pid 3993] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 3992] <... rt sigprocmask resumed>NULL, 8) = 0
[pid 3993] madvise(0x7fb6e3092000, 8368128, MADV DONTNEED <unfinished ...>
[pid 3992] madvise(0x7fb6e3893000, 8368128, MADV_DONTNEED <unfinished ...>
[pid 3993] <... madvise resumed>)
                                   = 0
[pid 3992] <... madvise resumed>)
                                   = 0
[pid 3993] exit(0 < unfinished ... >
[pid 3992] exit(0 <unfinished ...>
[pid 3993] <... exit resumed>)
                                = ?
[pid 3992] <... exit resumed>)
[pid 3993] +++ exited with 0 +++
[pid 3863] <... futex resumed>)
                                 = 0
[pid 3992] +++ exited with 0 +++
write(1, "\320\236\321\202\320\265\321\202: 4724 \n", 18Ответ: 4724
) = 18
Iseek(0, -1, SEEK_CUR)
                                = -1 ESPIPE (Illegal seek)
exit_group(0)
                           = ?
+++ exited with 0 +++
```