Московский Авиационный Институт

(Национальный Исследовательский Университет)

Факультет информационных технологий и прикладной математики

Кафедра вычислительной математики и программирования

Лабораторная работа №8 по курсу

«Операционные системы»

Группа: М8О-209Б-22

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Оценка: _____

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Содержание

Постановка задачи

При выполнении лабораторных работ по курсу ОС необходимо продемонстрировать ключевые системные вызовы, которые в них используются и то, что их использование соответствует варианту ЛР. По итогам выполнения всех лабораторных работ отчет по данной ЛР должен содержать краткую сводку по исследованию написанных программ.

Общие сведения о программе

Делал вызов strace для каждой лабораторной работы и анализировал полученную выкладку системных вызовов

Общий метод и алгоритм решения

Команда в терминале make strace. Эквивалентна записи strace -f ./run.cpp

Код программы

1 ЛР

```
execve("./bin/run_parent", ["./bin/run_parent"], 0x7fff623cb7f0 /* 55 vars */) = 0
brk(NULL) = 0x5612f1ced000 arch_prctl(0x3001 /* ARCH_??? */, 0x7fffc96e6340) = -1
EINVAL (Invalid argument) mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f55dcdd0000
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=65771, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 65771, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7f55dcdbf000 close(3)
= 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libstdc++.so.6",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=2260296, ...}, AT_EMPTY_PATH)
= 0 mmap(NULL, 2275520, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0)
= 0x7f55dca00000 mprotect(0x7f55dca9a000, 1576960, PROT_NONE) = 0
mmap(0x7f55dca9a000, 1118208, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x9a000) = 0x7f55dca9a000
mmap(0x7f55dcbab000, 454656, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1ab000) = 0x7f55dcbab000
mmap(0x7f55dcc1b000, 57344, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x21a000) = 0x7f55dcc1b000
mmap(0x7f55dcc29000, 10432, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f55dcc29000 close(3)
= 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libgcc_s.so.1",
O_RDONLY|O_CLOEXEC) = 3 read(3,
```

"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=125488, ...}, AT_EMPTY_PATH) = 0 mmap(NULL, 127720, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f55dcd9f000 mmap(0x7f55dcda2000, 94208, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7f55dcda2000 mmap(0x7f55dcdb9000, 16384, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1a000) = 0x7f55dcdb9000 mmap(0x7f55dcdbd000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1d000) = 0x7f55dcdbd000 close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6", O_RDONLY|O_CLOEXEC) = 3 read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0P\237\2\0\0\0\0\0"..., 832) = 832 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 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 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 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 mmap(NULL, 2260560, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f55dc600000 mmap(0x7f55dc628000, 1658880, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000) = 0x7f55dc628000 mmap(0x7f55dc7bd000, 360448, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1bd000) = 0x7f55dc7bd000 mmap(0x7f55dc815000, 24576, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x214000) = 0x7f55dc815000 mmap(0x7f55dc81b000, 52816, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f55dc81b000 close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libm.so.6", O_RDONLY|O_CLOEXEC) = 3 read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=940560, ...}, AT_EMPTY_PATH) = 0 mmap(NULL, 942344, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f55dccb8000 mmap(0x7f55dccc6000, 507904, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xe000) = 0x7f55dccc6000 mmap(0x7f55dcd42000, 372736, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x8a000) = 0x7f55dcd42000 mmap(0x7f55dcd9d000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xe4000) = 0x7f55dcd9d000 close(3) = 0 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f55dccb6000

arch_prctl(ARCH_SET_FS, 0x7f55dccb73c0) = 0 set_tid_address(0x7f55dccb7690) = 5535 set_robust_list(0x7f55dccb76a0, 24) = 0 rseq(0x7f55dccb7d60, 0x20, 0, 0x53053053) = 0 mprotect(0x7f55dc815000, 16384, PROT_READ) = 0 mprotect(0x7f55dcd9d000, 4096, PROT_READ) = 0 mprotect(0x7f55dcdbd000, 4096, PROT_READ) = 0 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f55dccb4000 mprotect(0x7f55dcc1b000, 45056, PROT_READ) = 0 mprotect(0x5612f0789000, 4096, PROT_READ) = 0 mprotect(0x7f55dce0a000, 8192, PROT_READ) = 0 prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) = 0 munmap(0x7f55dcdbf000, 65771) = 0 getrandom("\x5c\x9d\x27\x34\x0c\x78\x68\x97", 8, GRND_NONBLOCK) = 8 brk(NULL) = 0x5612f1ced000 brk(0x5612f1d0e000) = 0x5612f1d0e000 futex(0x7f55dcc2977c, FUTEX_WAKE_PRIVATE, 2147483647) = 0 newfstatat(1, "", {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0), ...}, AT_EMPTY_PATH) = 0 getpid() = 5535 write(1, "Parent process with pid 5535 sta"..., 37Parent process with pid 5535 started) = 37 write(1, "Input file name: ", 17Input file name:) = 17 newfstatat(0, "", {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0), ...}, AT_EMPTY_PATH) = 0 read(0, strace_test "strace_test\n", 1024) = 12 pipe2([3, 4], 0) = 0 write(1, "34\n", 334) = 3 pipe2([5, 6], 0) = 0 write(1, "56\n", 356) = 3 write(1, "34\n", 334) = 3 clone(child_stack=NULL, flags=CLONE_CHILD_CLEARTID|CLONE_CHILD_SETTID|SIGCHLD, child_tidptr=0x7f55dccb7690) = 5537 close(6) = 0 close(3) = 0 getpid() = 5535 write(1, "Parent process with pid 5535\n", 29Parent process with pid 5535) = 29 read(0, Child process with pid 5537 started Input numbers: 7 7 7 " 7 7 7\n", 1024) = 7 newfstatat(4, "", {st_mode=S_IFIFO|0600, st_size=0, ...}, AT_EMPTY_PATH) = 0 lseek(4, 0, SEEK_CUR) = -1 ESPIPE (Illegal seek) write(4, "7 ", 2) = 2 newfstatat(4, "", {st_mode=S_IFIFO|0600, st_size=0, ...}, AT_EMPTY_PATH) = 0 lseek(4, 0, SEEK_CUR) = -1 ESPIPE (Illegal seek) write(4, "7 ", 2) = 2 newfstatat(4, "", {st_mode=S_IFIFO|0600, st_size=0, ...}, AT_EMPTY_PATH) = 0 lseek(4, 0, SEEK_CUR) = -1 ESPIPE (Illegal seek) write(4, "7 ", 2) = 2 read(0, "", 1024) = 0 close(4) = 0 --- SIGCHLD {si_signo=SIGCHLD, si_code=CLD_EXITED, si_pid=5537, si_uid=1000, si_status=0, si_utime=0, si_stime=0} --- close(5) = 0 exit_group(0) = ? +++ exited with 0 +++

2 ЛР

execve("./build/Lab2_exe", ["./build/Lab2_exe", "5"], 0x7ffced5c45b0 /* 62 vars */) = 0 brk(NULL) = 0x5641eff83000 arch_prctl(0x3001 /* ARCH_??? */, 0x7ffe57554c20) = -1 EINVAL (Invalid argument) mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7ff94ab67000 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=66003, ...}, AT_EMPTY_PATH) = 0 mmap(NULL, 66003, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7ff94ab56000 close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libstdc++.so.6", O_RDONLY|O_CLOEXEC) = 3 read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0"..., 832) = 832 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=2260296, ...}, AT_EMPTY_PATH) = 0 mmap(NULL, 2275520, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7ff94a800000 mprotect(0x7ff94a89a000, 1576960, PROT_NONE) = 0 mmap(0x7ff94a89a000, 1118208, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x9a000) = 0x7ff94a89a000 mmap(0x7ff94a9ab000, 454656, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1ab000) = 0x7ff94a9ab000 mmap(0x7ff94aa1b000, 57344, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x21a000) = 0x7ff94aa1b000 mmap(0x7ff94aa29000, 10432, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7ff94aa29000 close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libgcc_s.so.1", O_RDONLY|O_CLOEXEC) = 3 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0"..., 832) = 832 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=125488, ...}, AT_EMPTY_PATH) = 0 mmap(NULL, 127720, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7ff94ab36000 mmap(0x7ff94ab39000, 94208, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7ff94ab39000 mmap(0x7ff94ab50000, 16384, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1a000) = 0x7ff94ab50000 mmap(0x7ff94ab54000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1d000) = 0x7ff94ab54000 close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6", O_RDONLY|O_CLOEXEC) = 3 read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\3\0>\0\1\0\0P\237\2\0\0\0\0\0"..., 832) = 832

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 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 pread64(3, "\4\0\0\0\24\0\0\0\3\0\0\0GNU\0 =\340\2563\265?\356\25x\261\27\313A#\350"..., 68, 896) = 68 newfstatat(3, "", {st_mode=S_IFREG|0755, st_size=2216304, ...}, AT_EMPTY_PATH) = 0 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 mmap(NULL, 2260560, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7ff94a400000 mmap(0x7ff94a428000, 1658880, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000) = 0x7ff94a428000 mmap(0x7ff94a5bd000, 360448, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1bd000) = 0x7ff94a5bd000 mmap(0x7ff94a615000, 24576, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x214000) = 0x7ff94a615000 mmap(0x7ff94a61b000, 52816, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7ff94a61b000 close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libm.so.6", O_RDONLY|O_CLOEXEC) = 3 read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=940560, ...}, AT_EMPTY_PATH) = 0 mmap(NULL, 942344, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7ff94aa4f000 mmap(0x7ff94aa5d000, 507904, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xe000) = 0x7ff94aa5d000 mmap(0x7ff94aad9000, 372736, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x8a000) = 0x7ff94aad9000 mmap(0x7ff94ab34000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xe4000) = 0x7ff94ab34000 close(3) = 0 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7ff94aa4d000 arch_prctl(ARCH_SET_FS, 0x7ff94aa4e3c0) = 0 set_tid_address(0x7ff94aa4e690) = 27577 set_robust_list(0x7ff94aa4e6a0, 24) = 0 rseq(0x7ff94aa4ed60, 0x20, 0, 0x53053053) = 0 mprotect(0x7ff94a615000, 16384, PROT_READ) = 0 mprotect(0x7ff94ab34000, 4096, PROT_READ) = 0 mprotect(0x7ff94ab54000, 4096, PROT_READ) = 0 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7ff94aa4b000 mprotect(0x7ff94aa1b000, 45056, PROT_READ) = 0 mprotect(0x5641ef9f0000, 4096, PROT_READ) = 0 mprotect(0x7ff94aba1000, 8192, PROT_READ) = 0 prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) = 0

munmap(0x7ff94ab56000, 66003) = 0

getrandom("\xc9\xcf\xa1\x76\xce\x99\x16\x57", 8, GRND_NONBLOCK) = 8

brk(NULL) = 0x5641eff83000 brk(0x5641effa4000) = 0x5641effa4000

futex(0x7ff94aa2977c, FUTEX_WAKE_PRIVATE, 2147483647) = 0

openat(AT_FDCWD, "data_files/test_data.txt", O_RDONLY) = 3 read(3, "-692341236 763343610 255380542\n8"..., 8191) = 8191 read(3, "62011\n91530661 -718790895 627331"..., 8191) = 8191 read(3, "260496414\n79383051 -159346961 59"..., 8191) = 8191 brk(0x5641effc8000) = 0x5641effc8000 read(3, " -762735654 -389754819\n596634860"..., 8191) = 8191 read(3, "46891\n1066298355 865520765 -1021"..., 8191) = 8191 read(3, "522859 379625262 1022474406\n9605"..., 8191) = 8191 read(3, "172 858645906 -673200857\n-541985"..., 8191) = 8191 read(3, "8443 686420068 127346613\n-430528"..., 8191) = 8191 read(3, "01923 752725321\n-625511622 49737"..., 8191) = 8191 read(3, " -321252255 459373756\n42884021 5"..., 8191) = 8191 read(3, "955639\n-158271838 253285459 -510"..., 8191) = 8191 mmap(NULL, 135168, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7ff94a7df000 brk(0x5641effb8000) = 0x5641effb8000 read(3, "0597513 460929062 166155230\n5511"..., 8191) = 8191 read(3, "07542 -1022882217 423960680\n-866"..., 8191) = 8191 read(3, "3785361\n325664568 -241510882 749"..., 8191) = 8191 read(3, "0 89881889\n-156578463 -589213808"..., 8191) = 8191 read(3, "10060254 836014959 876540385\n-87"..., 8191) = 8191 read(3, "0430761\n-824811093 564273547 170"..., 8191) = 8191 read(3, "-904820235 558633827\n4397060 -54"..., 8191) = 8191 read(3, " 33783\n-308019348 -49972070 1809"..., 8191) = 8191 read(3, " -215057244\n-902699246 590016606"..., 8191) = 8191 read(3, "626038 -964302344\n-994731162 726"..., 8191) = 8191 mmap(NULL, 266240, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7ff94a79e000 munmap(0x7ff94a7df000, 135168) = 0 read(3, "1 -1030194914 -989085512\n-437937"..., 8191) = 8191 read(3, "172\n969474459 -717332997 1045406"..., 8191) = 8191 read(3, "208331\n420504994 551782247 74452"..., 8191) = 8191 read(3, "2 -981784337 307162932\n692051980"..., 8191) = 8191 read(3, "580602259\n-316948654 -596509921 "..., 8191) = 8191 read(3, "756203690\n690041193 508371465 -1"..., 8191) = 8191 read(3, "995 -1022750896 818898137\n314055"..., 8191) = 8191 read(3, "6385\n-729213255 812472263 173332"..., 8191) = 8191 read(3, "00432694 -69824814\n434801799 770"..., 8191) = 8191 read(3, "27\n-133375170 -417464868 7770346"..., 8191) = 8191 read(3, "2498641\n-388378316 -711731991 -7"..., 8191) = 8191 read(3, "2827334 591539109\n-1067347929 -2"..., 8191) = 8191 read(3, "0230928\n-551122242 -224067438 -5"..., 8191) = 8191 read(3, "1 897723005 -6618273\n478611806 4"..., 8191) = 8191 read(3, "69663 -216784586 -402593351\n-663"..., 8191) = 8191 read(3, "10338 -641518895

900922097\n23996"..., 8191) = 8191 read(3, "68019\n-812872780 948666207 59442"..., 8191) = 8191 read(3, "96910322 933943114 25820787\n6540"..., 8191) = 2696 read(3, "", 8191) = 0 close(3) = 0 rt_sigaction(SIGRT_1, {sa_handler=0x7ff94a491870, sa_mask=[], sa_flags=SA_RESTORER|SA_ONSTACK|SA_RESTART|SA_SIGINFO, sa_restorer=0x7ff94a442520}, 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) = 0x7ff949bff000 mprotect(0x7ff949c00000, 8388608, PROT_READ|PROT_WRITE) = 0 rt_sigprocmask(SIG_BLOCK, ~[], [], 8) = 0 clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CL ONE_THREAD|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SE T TID|CLONE_CHILD_CLEARTID, child_tid=0x7ff94a3ff910, parent_tid=0x7ff94a3ff910, exit_signal=0, stack=0x7ff949bff000, stack_size=0x7fff00, tls=0x7ff94a3ff640}strace: Process 27578 attached => {parent_tid=[27578]}, 88) = 27578 [pid 27578] rseq(0x7ff94a3fffe0, 0x20, 0, 0x53053053 [pid 27577] rt_sigprocmask(SIG_SETMASK, [], [pid 27578]) = 0 [pid 27577] NULL, 8) = 0 [pid 27578] set_robust_list(0x7ff94a3ff920, 24 [pid 27577] mmap(NULL, 8392704, PROT_NONE, MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0 [pid 27578]) = 0 [pid 27577]) = 0x7ff9493fe000 [pid 27578] rt_sigprocmask(SIG_SETMASK, [], [pid 27577] mprotect(0x7ff9493ff000, 8388608, PROT_READ|PROT_WRITE [pid 27578] NULL, 8) = 0 [pid 27577]) = 0 [pid 27577] rt_sigprocmask(SIG_BLOCK, ~[], [], 8) = 0 [pid 27577] clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CL ONE_THREAD|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SE T TID|CLONE_CHILD_CLEARTID, child_tid=0x7ff949bfe910, parent_tid=0x7ff949bfe910, exit_signal=0, stack=0x7ff9493fe000, stack_size=0x7fff00, tls=0x7ff949bfe640}strace: Process 27579 attached => {parent_tid=[27579]}, 88) = 27579 [pid 27579] rseq(0x7ff949bfefe0, 0x20, 0, 0x53053053 [pid 27577] rt_sigprocmask(SIG_SETMASK, [], [pid 27579]) = 0 [pid 27577] NULL, 8) = 0 [pid 27579] set_robust_list(0x7ff949bfe920, 24 [pid 27577] mmap(NULL, 8392704, PROT_NONE, MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0 [pid 27579]) = 0 [pid 27578] rt_sigprocmask(SIG_BLOCK, ~[RT_1], [pid 27577]) = 0x7ff948bfd000 [pid 27579] rt_sigprocmask(SIG_SETMASK, [], [pid 27578] NULL, 8) = 0 [pid 27577] mprotect(0x7ff948bfe000, 8388608, PROT_READ|PROT_WRITE [pid 27579] NULL, 8) = 0 [pid 27578] madvise(0x7ff949bff000, 8368128, MADV_DONTNEED [pid 27577]) = 0 [pid

27577] rt_sigprocmask(SIG_BLOCK, ~[], [pid 27578]) = 0 [pid 27577] [], 8) = 0 [pid 27578] exit(0 [pid 27577]
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CL
ONE_THREAD|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SE
T TID|CLONE_CHILD_CLEARTID, child_tid=0x7ff9493fd910,
parent_tid=0x7ff9493fd910, exit_signal=0, stack=0x7ff948bfd000,
stack_size=0x7fff00, tls=0x7ff9493fd640} [pid 27578]) = ? strace: Process
27580 attached [pid 27578] +++ exited with 0 +++ [pid 27577] =>
{parent_tid=[27580]}, 88) = 27580 [pid 27580] rseq(0x7ff9493fdfe0, 0x20, 0,
0x53053053 [pid 27577] rt_sigprocmask(SIG_SETMASK, [], [pid 27580]) = 0
[pid 27579] rt_sigprocmask(SIG_BLOCK, ~[RT_1], [pid 27577] NULL, 8) = 0
[pid 27580] set_robust_list(0x7ff9493fd920, 24 [pid 27577] mmap(NULL,
8392704, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0 [pid 27580]) = 0
[pid 27579] NULL, 8) = 0 [pid 27577]) = 0x7ff9483fc000 [pid 27580]
rt_sigprocmask(SIG_SETMASK, [], [pid 27579] madvise(0x7ff9493fe000,
8368128, MADV_DONTNEED [pid 27577] mprotect(0x7ff9483fd000, 8388608,
PROT_READ|PROT_WRITE) = 0 [pid 27580] NULL, 8) = 0 [pid 27579]) = 0
[pid 27577] rt_sigprocmask(SIG_BLOCK, ~[], [pid 27579] exit(0 [pid 27577] [],
8) = 0 [pid 27579]) = ? [pid 27577]
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CL
ONE_THREAD|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SE
T TID|CLONE_CHILD_CLEARTID, child_tid=0x7ff948bfc910,
parent_tid=0x7ff948bfc910, exit_signal=0, stack=0x7ff9483fc000,
stack_size=0x7fff00, tls=0x7ff948bfc640} [pid 27579] +++ exited with 0 +++
strace: Process 27581 attached [pid 27577] => {parent_tid=[27581]}, 88) =
27581 [pid 27581] rseq(0x7ff948bfcfe0, 0x20, 0, 0x53053053 [pid 27577]
rt_sigprocmask(SIG_SETMASK, [], [pid 27581]) = 0 [pid 27577] NULL, 8) = 0
[pid 27581] set_robust_list(0x7ff948bfc920, 24 [pid 27577] mmap(NULL,
8392704, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0 [pid 27581]) = 0
[pid 27581] rt_sigprocmask(SIG_SETMASK, [], [pid 27577]) = 0x7ff947bfb000
[pid 27581] NULL, 8) = 0 [pid 27580] rt_sigprocmask(SIG_BLOCK, ~[RT_1],
[pid 27577] mprotect(0x7ff947bfc000, 8388608, PROT_READ|PROT_WRITE
[pid 27580] NULL, 8) = 0 [pid 27577]) = 0 [pid 27577]
rt_sigprocmask(SIG_BLOCK, ~[], [pid 27580] madvise(0x7ff948bfd000,
8368128, MADV_DONTNEED [pid 27577] [], 8) = 0 [pid 27580]) = 0 [pid
27577]
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|C

L
ONE_THREAD|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SE
T TID|CLONE_CHILD_CLEARTID, child_tid=0x7ff9483fb910,
parent_tid=0x7ff9483fb910, exit_signal=0, stack=0x7ff947bfb000,
stack_size=0x7fff00, tls=0x7ff9483fb640} [pid 27580] exit(0) = ? strace: Process
27582 attached [pid 27577] => {parent_tid=[27582]}, 88) = 27582 [pid 27580]
+++ exited with 0 +++ [pid 27582] rseq(0x7ff9483fbfe0, 0x20, 0, 0x53053053
[pid 27577] rt_sigprocmask(SIG_SETMASK, [], [pid 27582]) = 0 [pid 27577]
NULL, 8) = 0 [pid 27577] futex(0x7ff948bfc910,
FUTEX_WAIT_BITSET|FUTEX_CLOCK_REALTIME, 27581, NULL,
FUTEX_BITSET_MATCH_ANY [pid 27582] set_robust_list(0x7ff9483fb920,
24 [pid 27581] rt_sigprocmask(SIG_BLOCK, ~[RT_1], [pid 27582]) = 0 [pid
27581] NULL, 8) = 0 [pid 27582] rt_sigprocmask(SIG_SETMASK, [], [pid
27581] madvise(0x7ff9483fc000, 8368128, MADV_DONTNEED [pid 27582]
NULL, 8) = 0 [pid 27581]) = 0 [pid 27581] exit(0) = ? [pid 27577]) = 0 [pid
27581] +++ exited with 0 +++ [pid 27577] futex(0x7ff9483fb910,
FUTEX_WAIT_BITSET|FUTEX_CLOCK_REALTIME, 27582, NULL,
FUTEX_BITSET_MATCH_ANY [pid 27582] rt_sigprocmask(SIG_BLOCK,
~[RT_1], NULL, 8) = 0 [pid 27582] madvise(0x7ff947bfb000, 8368128,
MADV_DONTNEED) = 0 [pid 27582] exit(0) = ? [pid 27577]) = 0 [pid 27582]
+++ exited with 0 +++ munmap(0x7ff949bff000, 8392704) = 0
futex(0x7ff94aa29788, FUTEX_WAKE_PRIVATE, 2147483647) = 0
openat(AT_FDCWD, "data_files/metrics.txt",
O_WRONLY|O_CREAT|O_APPEND, 0666) = 3 lseek(3, 0, SEEK_END) = 105
write(3, "5 695\n", 6) = 6 close(3) = 0 newfstatat(1, "",
{st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0), ...}, AT_EMPTY_PATH)
= 0 write(1, "Sorted arr: -1073689173 -1073672"..., 133Sorted arr: -1073689173 -
1073672387 -1073665828 -1073618934 -1073543708 -1073488700 -1073463638
-1073383344 -1073345043 -1073327405) = 133 write(1, "Size: 30001\n",
12Size: 30001) = 12 munmap(0x7ff94a79e000, 266240) = 0 exit_group(0) = ?
+++ exited with 0 +++

3 ЛР

execve("./build/Lab2_exe", ["./build/Lab2_exe", "5"], 0x7ffced5c45b0 /* 62 vars */)
= 0 brk(NULL) = 0x5641eff83000 arch_prctl(0x3001 /* ARCH_??? */, 0x7ffe57554c20) =
-1 EINVAL (Invalid argument) mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7ff94ab67000
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=66003, ...}, AT_EMPTY_PATH) = 0 mmap(NULL,
66003, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7ff94ab56000 close(3) = 0
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libstdc++.so.6",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=2260296, ...}, AT_EMPTY_PATH) =
0 mmap(NULL, 2275520, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7ff94a800000 mprotect(0x7ff94a89a000, 1576960, PROT_NONE) = 0
mmap(0x7ff94a89a000, 1118208, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x9a000) = 0x7ff94a89a000
mmap(0x7ff94a9ab000, 454656, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1ab000) = 0x7ff94a9ab000
mmap(0x7ff94aa1b000, 57344, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x21a000) = 0x7ff94aa1b000
mmap(0x7ff94aa29000, 10432, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7ff94aa29000 close(3) =
0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libgcc_s.so.1",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=125488, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 127720, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7ff94ab36000 mmap(0x7ff94ab39000, 94208, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7ff94ab39000
mmap(0x7ff94ab50000, 16384, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1a000) = 0x7ff94ab50000
mmap(0x7ff94ab54000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1d000) = 0x7ff94ab54000
close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6",
O_RDONLY|O_CLOEXEC) = 3 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
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 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 pread64(3, "\4\0\0\0\24\0\0\0\3\0\0\0GNU\0
=\340\2563\265?\356\25x\261\27\313A#\350"..., 68, 896) = 68 newfstatat(3, "",

```
{st_mode=S_IFREG|0755, st_size=2216304, ...}, AT_EMPTY_PATH) = 0 pread64(3,
"\6\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
mmap(NULL, 2260560, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7ff94a400000 mmap(0x7ff94a428000, 1658880, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000) = 0x7ff94a428000
mmap(0x7ff94a5bd000, 360448, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1bd000) = 0x7ff94a5bd000
mmap(0x7ff94a615000, 24576, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x214000) = 0x7ff94a615000
mmap(0x7ff94a61b000, 52816, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7ff94a61b000 close(3) =
0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libm.so.6", O_RDONLY|O_CLOEXEC) =
3 read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=940560, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 942344, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7ff94aa4f000 mmap(0x7ff94aa5d000, 507904, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xe000) = 0x7ff94aa5d000
mmap(0x7ff94aad9000, 372736, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x8a000) = 0x7ff94aad9000
mmap(0x7ff94ab34000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xe4000) = 0x7ff94ab34000
close(3) = 0 mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7ff94aa4d000
arch_prctl(ARCH_SET_FS, 0x7ff94aa4e3c0) = 0 set_tid_address(0x7ff94aa4e690) =
27577 set_robust_list(0x7ff94aa4e6a0, 24) = 0 rseq(0x7ff94aa4ed60, 0x20, 0,
0x53053053) = 0 mprotect(0x7ff94a615000, 16384, PROT_READ) = 0
mprotect(0x7ff94ab34000, 4096, PROT_READ) = 0 mprotect(0x7ff94ab54000, 4096,
PROT_READ) = 0 mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7ff94aa4b000
mprotect(0x7ff94aa1b000, 45056, PROT_READ) = 0 mprotect(0x5641ef9f0000, 4096,
PROT_READ) = 0 mprotect(0x7ff94aba1000, 8192, PROT_READ) = 0 prlimit64(0,
RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) = 0
munmap(0x7ff94ab56000, 66003) = 0 getrandom("\xc9\xcf\xa1\x76\xce\x99\x16\x57", 8,
GRND_NONBLOCK) = 8 brk(NULL) = 0x5641eff83000 brk(0x5641effa4000) =
0x5641effa4000 futex(0x7ff94aa2977c, FUTEX_WAKE_PRIVATE, 2147483647) = 0
openat(AT_FDCWD, "data_files/test_data.txt", O_RDONLY) = 3 read(3, "-692341236
763343610 255380542\n8"..., 8191) = 8191 read(3, "62011\n91530661 -718790895
627331"..., 8191) = 8191 read(3, "260496414\n79383051 -159346961 59"..., 8191) = 8191
brk(0x5641effc8000) = 0x5641effc8000 read(3, " -762735654 -389754819\n596634860"...,
8191) = 8191 read(3, "46891\n1066298355 865520765 -1021"..., 8191) = 8191 read(3,
"522859 379625262 1022474406\n9605"..., 8191) = 8191 read(3, "172 858645906 -
```

673200857\n-541985"..., 8191) = 8191 read(3, "8443 686420068 127346613\n-430528"..., 8191) = 8191 read(3, "01923 752725321\n-625511622 49737"..., 8191) = 8191 read(3, " -321252255 459373756\n42884021 5"..., 8191) = 8191 read(3, "955639\n-158271838 253285459 -510"..., 8191) = 8191 mmap(NULL, 135168, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7ff94a7df000 brk(0x5641effb8000) = 0x5641effb8000 read(3, "0597513 460929062 166155230\n5511"..., 8191) = 8191 read(3, "07542 -1022882217 423960680\n-866"..., 8191) = 8191 read(3, "3785361\n325664568 -241510882 749"..., 8191) = 8191 read(3, "0 89881889\n-156578463 -589213808"..., 8191) = 8191 read(3, "10060254 836014959 876540385\n-87"..., 8191) = 8191 read(3, "0430761\n-824811093 564273547 170"..., 8191) = 8191 read(3, "-904820235 558633827\n4397060 -54"..., 8191) = 8191 read(3, " 33783\n-308019348 -49972070 1809"..., 8191) = 8191 read(3, " -215057244\n-902699246 590016606"..., 8191) = 8191 read(3, "626038 -964302344\n-994731162 726"..., 8191) = 8191 mmap(NULL, 266240, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7ff94a79e000 munmap(0x7ff94a7df000, 135168) = 0 read(3, "1 -1030194914 -989085512\n-437937"..., 8191) = 8191 read(3, "172\n969474459 -717332997 1045406"..., 8191) = 8191 read(3, "208331\n420504994 551782247 74452"..., 8191) = 8191 read(3, "2 -981784337 307162932\n692051980"..., 8191) = 8191 read(3, "580602259\n-316948654 -596509921 "..., 8191) = 8191 read(3, "756203690\n690041193 508371465 -1"..., 8191) = 8191 read(3, "995 -1022750896 818898137\n314055"..., 8191) = 8191 read(3, "6385\n-729213255 812472263 173332"..., 8191) = 8191 read(3, "00432694 -69824814\n434801799 770"..., 8191) = 8191 read(3, "27\n-133375170 -417464868 7770346"..., 8191) = 8191 read(3, "2498641\n-388378316 -711731991 -7"..., 8191) = 8191 read(3, "2827334 591539109\n-1067347929 -2"..., 8191) = 8191 read(3, "0230928\n-551122242 -224067438 -5"..., 8191) = 8191 read(3, "1 897723005 -6618273\n478611806 4"..., 8191) = 8191 read(3, "69663 -216784586 -402593351\n-663"..., 8191) = 8191 read(3, "10338 -641518895 900922097\n23996"..., 8191) = 8191 read(3, "68019\n-812872780 948666207 59442"..., 8191) = 8191 read(3, "96910322 933943114 25820787\n6540"..., 8191) = 2696 read(3, "", 8191) = 0 close(3) = 0 rt_sigaction(SIGRT_1, {sa_handler=0x7ff94a491870, sa_mask=[], sa_flags=SA_RESTORER|SA_ONSTACK|SA_RESTART|SA_SIGINFO, sa_restorer=0x7ff94a442520}, 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) = 0x7ff949bff000 mprotect(0x7ff949c00000, 8388608, PROT_READ|PROT_WRITE) = 0 rt_sigprocmask(SIG_BLOCK, ~[], [], 8) = 0 clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THREAD|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_CLEARTID, child_tid=0x7ff94a3ff910, parent_tid=0x7ff94a3ff910, exit_signal=0, stack=0x7ff949bff000, stack_size=0x7fff00, tls=0x7ff94a3ff640}strace: Process 27578 attached => {parent_tid=[27578]}, 88) = 27578 [pid 27578]

rseq(0x7ff94a3fffe0, 0x20, 0, 0x53053053 [pid 27577] rt_sigprocmask(SIG_SETMASK, [], [pid 27578]) = 0 [pid 27577] NULL, 8) = 0 [pid 27578] set_robust_list(0x7ff94a3ff920, 24 [pid 27577] mmap(NULL, 8392704, PROT_NONE, MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0 [pid 27578]) = 0 [pid 27577]) = 0x7ff9493fe000 [pid 27578] rt_sigprocmask(SIG_SETMASK, [], [pid 27577] mprotect(0x7ff9493ff000, 8388608, PROT_READ|PROT_WRITE [pid 27578] NULL, 8) = 0 [pid 27577]) = 0 [pid 27577] rt_sigprocmask(SIG_BLOCK, ~[], [], 8) = 0 [pid 27577] clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CL ONE_THREAD|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SET TID|CLONE_CHILD_CLEARTID, child_tid=0x7ff949bfe910, parent_tid=0x7ff949bfe910, exit_signal=0, stack=0x7ff9493fe000, stack_size=0x7fff00, tls=0x7ff949bfe640}strace: Process 27579 attached => {parent_tid=[27579]}, 88) = 27579 [pid 27579] rseq(0x7ff949bfefe0, 0x20, 0, 0x53053053 [pid 27577] rt_sigprocmask(SIG_SETMASK, [], [pid 27579]) = 0 [pid 27577] NULL, 8) = 0 [pid 27579] set_robust_list(0x7ff949bfe920, 24 [pid 27577] mmap(NULL, 8392704, PROT_NONE, MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0 [pid 27579]) = 0 [pid 27578] rt_sigprocmask(SIG_BLOCK, ~[RT_1], [pid 27577]) = 0x7ff948bfd000 [pid 27579] rt_sigprocmask(SIG_SETMASK, [], [pid 27578] NULL, 8) = 0 [pid 27577] mprotect(0x7ff948bfe000, 8388608, PROT_READ|PROT_WRITE [pid 27579] NULL, 8) = 0 [pid 27578] madvise(0x7ff949bff000, 8368128, MADV_DONTNEED [pid 27577]) = 0 [pid 27577] rt_sigprocmask(SIG_BLOCK, ~[], [pid 27578]) = 0 [pid 27577] [], 8) = 0 [pid 27578] exit(0 [pid 27577] clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CL ONE_THREAD|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SET TID|CLONE_CHILD_CLEARTID, child_tid=0x7ff9493fd910, parent_tid=0x7ff9493fd910, exit_signal=0, stack=0x7ff948bfd000, stack_size=0x7fff00, tls=0x7ff9493fd640} [pid 27578]) = ? strace: Process 27580 attached [pid 27578] +++ exited with 0 +++ [pid 27577] => {parent_tid=[27580]}, 88) = 27580 [pid 27580] rseq(0x7ff9493fdfe0, 0x20, 0, 0x53053053 [pid 27577] rt_sigprocmask(SIG_SETMASK, [], [pid 27580]) = 0 [pid 27579] rt_sigprocmask(SIG_BLOCK, ~[RT_1], [pid 27577] NULL, 8) = 0 [pid 27580] set_robust_list(0x7ff9493fd920, 24 [pid 27577] mmap(NULL, 8392704, PROT_NONE, MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0 [pid 27580]) = 0 [pid 27579] NULL, 8) = 0 [pid 27577]) = 0x7ff9483fc000 [pid 27580] rt_sigprocmask(SIG_SETMASK, [], [pid 27579] madvise(0x7ff9493fe000, 8368128, MADV_DONTNEED [pid 27577] mprotect(0x7ff9483fd000, 8388608, PROT_READ|PROT_WRITE) = 0 [pid 27580] NULL, 8) = 0 [pid 27579]) = 0 [pid 27577] rt_sigprocmask(SIG_BLOCK, ~[], [pid 27579] exit(0 [pid 27577] [], 8) = 0 [pid 27579]) = ? [pid 27577] clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CL ONE_THREAD|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SET TID|CLONE_CHILD_CLEARTID, child_tid=0x7ff948bfc910,

parent_tid=0x7ff948bfc910, exit_signal=0, stack=0x7ff9483fc000, stack_size=0x7fff00, tls=0x7ff948bfc640} [pid 27579] +++ exited with 0 +++ strace: Process 27581 attached [pid 27577] => {parent_tid=[27581]}, 88) = 27581 [pid 27581] rseq(0x7ff948bfcfe0, 0x20, 0, 0x53053053 [pid 27577] rt_sigprocmask(SIG_SETMASK, [], [pid 27581]) = 0 [pid 27577] NULL, 8) = 0 [pid 27581] set_robust_list(0x7ff948bfc920, 24 [pid 27577] mmap(NULL, 8392704, PROT_NONE, MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0 [pid 27581]) = 0 [pid 27581] rt_sigprocmask(SIG_SETMASK, [], [pid 27577]) = 0x7ff947bfb000 [pid 27581] NULL, 8) = 0 [pid 27580] rt_sigprocmask(SIG_BLOCK, ~[RT_1], [pid 27577] mprotect(0x7ff947bfc000, 8388608, PROT_READ|PROT_WRITE [pid 27580] NULL, 8) = 0 [pid 27577]) = 0 [pid 27577] rt_sigprocmask(SIG_BLOCK, ~[], [pid 27580] madvise(0x7ff948bfd000, 8368128, MADV_DONTNEED [pid 27577] [], 8) = 0 [pid 27580]) = 0 [pid 27577] clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THREAD|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_CLEARTID, child_tid=0x7ff9483fb910, parent_tid=0x7ff9483fb910, exit_signal=0, stack=0x7ff947bfb000, stack_size=0x7fff00, tls=0x7ff9483fb640} [pid 27580] exit(0) = ? strace: Process 27582 attached [pid 27577] => {parent_tid=[27582]}, 88) = 27582 [pid 27580] +++ exited with 0 +++ [pid 27582] rseq(0x7ff9483fbfe0, 0x20, 0, 0x53053053 [pid 27577] rt_sigprocmask(SIG_SETMASK, [], [pid 27582]) = 0 [pid 27577] NULL, 8) = 0 [pid 27577] futex(0x7ff948bfc910, FUTEX_WAIT_BITSET|FUTEX_CLOCK_REALTIME, 27581, NULL, FUTEX_BITSET_MATCH_ANY [pid 27582] set_robust_list(0x7ff9483fb920, 24 [pid 27581] rt_sigprocmask(SIG_BLOCK, ~[RT_1], [pid 27582]) = 0 [pid 27581] NULL, 8) = 0 [pid 27582] rt_sigprocmask(SIG_SETMASK, [], [pid 27581] madvise(0x7ff9483fc000, 8368128, MADV_DONTNEED [pid 27582] NULL, 8) = 0 [pid 27581]) = 0 [pid 27581] exit(0) = ? [pid 27577]) = 0 [pid 27581] +++ exited with 0 +++ [pid 27577] futex(0x7ff9483fb910, FUTEX_WAIT_BITSET|FUTEX_CLOCK_REALTIME, 27582, NULL, FUTEX_BITSET_MATCH_ANY [pid 27582] rt_sigprocmask(SIG_BLOCK, ~[RT_1], NULL, 8) = 0 [pid 27582] madvise(0x7ff947bfb000, 8368128, MADV_DONTNEED) = 0 [pid 27582] exit(0) = ? [pid 27577]) = 0 [pid 27582] +++ exited with 0 +++ munmap(0x7ff949bff000, 8392704) = 0 futex(0x7ff94aa29788, FUTEX_WAKE_PRIVATE, 2147483647) = 0 openat(AT_FDCWD, "data_files/metrics.txt", O_WRONLY|O_CREAT|O_APPEND, 0666) = 3 lseek(3, 0, SEEK_END) = 105 write(3, "5 695\n", 6) = 6 close(3) = 0 newfstatat(1, "", {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0), ...}, AT_EMPTY_PATH) = 0 write(1, "Sorted arr: -1073689173 -1073672"..., 133Sorted arr: -1073689173 - 1073672387 -1073665828 -1073618934 -1073543708 -1073488700 -1073463638 -1073383344 - 1073345043 -1073327405) = 133 write(1, "Size: 30001\n", 12Size: 30001) = 12 munmap(0x7ff94a79e000, 266240) = 0 exit_group(0) = ? +++ exited with 0 +++

4 ЛР

cd build; strace -f ./run_runtime 1 0 10=0 execve("./run_runtime", ["./run_runtime", "1", "0", "10=0"], 0x7ffe1b0f6810 /* 64 vars */) = 0 brk(NULL) = 0x564eb9396000 arch_prctl(0x3001 /* ARCH_??? */, 0x7ffe69009ca0) = -1 EINVAL (Invalid argument) mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7fb77b714000 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=66003, ...}, AT_EMPTY_PATH) = 0 mmap(NULL, 66003, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7fb77b703000 close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libstdc++.so.6", O_RDONLY|O_CLOEXEC) = 3 read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=2260296, ...}, AT_EMPTY_PATH) = 0 mmap(NULL, 2275520, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7fb77b400000 mprotect(0x7fb77b49a000, 1576960, PROT_NONE) = 0 mmap(0x7fb77b49a000, 1118208, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x9a000) = 0x7fb77b49a000 mmap(0x7fb77b5ab000, 454656, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1ab000) = 0x7fb77b5ab000 mmap(0x7fb77b61b000, 57344, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x21a000) = 0x7fb77b61b000 mmap(0x7fb77b629000, 10432, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7fb77b629000 close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6", O_RDONLY|O_CLOEXEC) = 3 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 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 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 pread64(3, "\4\0\0\0\24\0\0\0\3\0\0\0GNU\0 =\340\2563\265?\356\25x\261\27\313A#\350"..., 68, 896) = 68 newfstatat(3, "", {st_mode=S_IFREG|0755, st_size=2216304, ...}, AT_EMPTY_PATH) = 0 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 mmap(NULL, 2260560, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7fb77b000000 mmap(0x7fb77b028000, 1658880, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000) = 0x7fb77b028000 mmap(0x7fb77b1bd000, 360448, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1bd000) = 0x7fb77b1bd000 mmap(0x7fb77b215000, 24576, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x214000) = 0x7fb77b215000 mmap(0x7fb77b21b000, 52816, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7fb77b21b000 close(3)

= 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libm.so.6", O_RDONLY|O_CLOEXEC)
= 3 read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=940560, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 942344, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fb77b319000 mmap(0x7fb77b327000, 507904, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xe000) = 0x7fb77b327000
mmap(0x7fb77b3a3000, 372736, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x8a000) = 0x7fb77b3a3000
mmap(0x7fb77b3fe000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xe4000) = 0x7fb77b3fe000
close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libgcc_s.so.1",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=125488, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 127720, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fb77b6e3000 mmap(0x7fb77b6e6000, 94208, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7fb77b6e6000
mmap(0x7fb77b6fd000, 16384, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1a000) = 0x7fb77b6fd000
mmap(0x7fb77b701000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1d000) = 0x7fb77b701000
close(3) = 0 mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7fb77b6e1000
arch_prctl(ARCH_SET_FS, 0x7fb77b6e23c0) = 0 set_tid_address(0x7fb77b6e2690) =
28718 set_robust_list(0x7fb77b6e26a0, 24) = 0 rseq(0x7fb77b6e2d60, 0x20, 0,
0x53053053) = 0 mprotect(0x7fb77b215000, 16384, PROT_READ) = 0
mprotect(0x7fb77b701000, 4096, PROT_READ) = 0 mprotect(0x7fb77b3fe000, 4096,
PROT_READ) = 0 mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7fb77b6df000
mprotect(0x7fb77b61b000, 45056, PROT_READ) = 0 mprotect(0x564eb8638000, 4096,
PROT_READ) = 0 mprotect(0x7fb77b74e000, 8192, PROT_READ) = 0 prlimit64(0,
RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) = 0
munmap(0x7fb77b703000, 66003) = 0 getrandom("\x2d\xf1\x96\x61\xb2\xa4\xb7\xaf", 8,
GRND_NONBLOCK) = 8 brk(NULL) = 0x564eb9396000 brk(0x564eb93b7000) =
0x564eb93b7000 futex(0x7fb77b62977c, FUTEX_WAKE_PRIVATE, 2147483647) = 0
openat(AT_FDCWD, "/home/baronpipistron/MAI_OS/4_Lab/build/libprime_numbers.so",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0775, st_size=33368, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 29192, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fb77b70c000 mmap(0x7fb77b70f000, 8192, PROT_READ|PROT_EXEC,

MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7fb77b70f000 mmap(0x7fb77b711000, 4096, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x5000) = 0x7fb77b711000 mmap(0x7fb77b712000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x5000) = 0x7fb77b712000 close(3) = 0 mprotect(0x7fb77b712000, 4096, PROT_READ) = 0 openat(AT_FDCWD, "/home/baronpipistron/MAI_OS/4_Lab/build/libeulers.so", O_RDONLY|O_CLOEXEC) = 3 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832 newfstatat(3, "", {st_mode=S_IFREG|0775, st_size=16640, ...}, AT_EMPTY_PATH) = 0 mmap(NULL, 16496, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7fb77b707000 mmap(0x7fb77b708000, 4096, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1000) = 0x7fb77b708000 mmap(0x7fb77b709000, 4096, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7fb77b709000 mmap(0x7fb77b70a000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7fb77b70a000 close(3) = 0 mprotect(0x7fb77b70a000, 4096, PROT_READ) = 0 newfstatat(1, "", {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0), ...}, AT_EMPTY_PATH) = 0 write(1, "Input implementation flag(0 - na"..., 57Input implementation flag(0 - naive, oth - eratosphene):) = 57 newfstatat(0, "", {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0), ...}, AT_EMPTY_PATH) = 0 read(0, 0 "0\n", 1024) = 2 write(1, "naive primes count implementatio"..., 37naive primes count implementation: 4) = 37 lseek(0, -1, SEEK_CUR) = -1 ESPIPE (Illegal seek) exit_group(0) = ? +++ exited with 0 +++

5-7 ЛР

execve("./server", ["./server"], 0x7ffd1ef5f518 /* 60 vars */) = 0 brk(NULL) =
0x55e7c2782000 arch_prctl(0x3001 /* ARCH_??? */, 0x7ffcf05462d0) = -1 EINVAL
(Invalid argument) mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f6415c7a000
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=67103, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 67103, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7f6415c69000 close(3)
= 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libzmq.so.5",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\240\233\1\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=634936, ...}, AT_EMPTY_PATH) =
0 mmap(NULL, 636784, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f6415bcd000 mmap(0x7f6415be5000, 397312, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x18000) = 0x7f6415be5000
mmap(0x7f6415c46000, 106496, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x79000) = 0x7f6415c46000
mmap(0x7f6415c60000, 36864, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x92000) = 0x7f6415c60000
close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libstdc++.so.6",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=2260296, ...}, AT_EMPTY_PATH)
= 0 mmap(NULL, 2275520, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0)
= 0x7f6415800000 mprotect(0x7f641589a000, 1576960, PROT_NONE) = 0
mmap(0x7f641589a000, 1118208, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x9a000) = 0x7f641589a000
mmap(0x7f64159ab000, 454656, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1ab000) = 0x7f64159ab000
mmap(0x7f6415a1b000, 57344, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x21a000) = 0x7f6415a1b000
mmap(0x7f6415a29000, 10432, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f6415a29000 close(3)
= 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libgcc_s.so.1",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=125488, ...}, AT_EMPTY_PATH) =
0 mmap(NULL, 127720, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f6415bad000 mmap(0x7f6415bb0000, 94208, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7f6415bb0000

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mmap(0x7f6415bc7000, 16384, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1a000) = 0x7f6415bc7000
mmap(0x7f6415bcb000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1d000) = 0x7f6415bcb000
close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6",
O_RDONLY|O_CLOEXEC) = 3 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
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 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 pread64(3, "\4\0\0\0\24\0\0\0\3\0\0\0GNU\0
=\340\2563\265?\356\25x\261\27\313A#\350"..., 68, 896) = 68 newfstatat(3, "",
{st_mode=S_IFREG|0755, st_size=2216304, ...}, AT_EMPTY_PATH) = 0 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
mmap(NULL, 2260560, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f6415400000 mmap(0x7f6415428000, 1658880, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000) = 0x7f6415428000
mmap(0x7f64155bd000, 360448, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1bd000) = 0x7f64155bd000
mmap(0x7f6415615000, 24576, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x214000) = 0x7f6415615000
mmap(0x7f641561b000, 52816, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f641561b000 close(3)
= 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libbsd.so.0",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=89096, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 94432, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f6415b95000 mprotect(0x7f6415b99000, 69632, PROT_NONE) = 0
mmap(0x7f6415b99000, 53248, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f6415b99000
mmap(0x7f6415ba6000, 12288, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x11000) = 0x7f6415ba6000
mmap(0x7f6415baa000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x14000) = 0x7f6415baa000
mmap(0x7f6415bac000, 224, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f6415bac000 close(3)
= 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libsodium.so.23",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=355040, ...}, AT_EMPTY_PATH) =
0 mmap(NULL, 357440, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
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0x7f6415b3d000 mprotect(0x7f6415b49000, 303104, PROT_NONE) = 0
mmap(0x7f6415b49000, 229376, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xc000) = 0x7f6415b49000
mmap(0x7f6415b81000, 69632, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x44000) = 0x7f6415b81000
mmap(0x7f6415b93000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x55000) = 0x7f6415b93000
close(3) = 0 mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f6415b3b000 openat(AT_FDCWD,
"/lib/x86_64-linux-gnu/libpgm-5.3.so.0", O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\340L\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=310264, ...}, AT_EMPTY_PATH) =
0 mmap(NULL, 329808, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f6415aea000 mmap(0x7f6415aee000, 172032, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f6415aee000
mmap(0x7f6415b18000, 118784, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2e000) = 0x7f6415b18000
mmap(0x7f6415b35000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4a000) = 0x7f6415b35000
mmap(0x7f6415b37000, 14416, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f6415b37000 close(3)
= 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libnorm.so.1",
O_RDONLY|O_CLOEXEC) = 3 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0
\255\0\0\0\0\0\0"..., 832) = 832 newfstatat(3, "", {st_mode=S_IFREG|0644,
st_size=497824, ...}, AT_EMPTY_PATH) = 0 mmap(NULL, 1223168, PROT_READ,
MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f64156d5000
mprotect(0x7f64156df000, 446464, PROT_NONE) = 0 mmap(0x7f64156df000, 286720,
PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0xa000) = 0x7f64156df000 mmap(0x7f6415725000, 155648, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x50000) = 0x7f6415725000
mmap(0x7f641574c000, 16384, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x76000) = 0x7f641574c000
mmap(0x7f6415750000, 719360, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f6415750000 close(3)
= 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libgssapi_krb5.so.2",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=338648, ...}, AT_EMPTY_PATH) =
0 mmap(NULL, 340960, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f6415a96000 mprotect(0x7f6415aa1000, 282624, PROT_NONE) = 0
mmap(0x7f6415aa1000, 229376, PROT_READ|PROT_EXEC,

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MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xb000) = 0x7f6415aa1000
mmap(0x7f6415ad9000, 49152, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x43000) = 0x7f6415ad9000
mmap(0x7f6415ae6000, 16384, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4f000) = 0x7f6415ae6000
close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libm.so.6",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=940560, ...}, AT_EMPTY_PATH) =
0 mmap(NULL, 942344, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f6415319000 mmap(0x7f6415327000, 507904, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xe000) = 0x7f6415327000
mmap(0x7f64153a3000, 372736, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x8a000) = 0x7f64153a3000
mmap(0x7f64153fe000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xe4000) = 0x7f64153fe000
close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libmd.so.0",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=47472, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 49384, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f6415a89000 mmap(0x7f6415a8b000, 28672, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f6415a8b000
mmap(0x7f6415a92000, 8192, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x9000) = 0x7f6415a92000
mmap(0x7f6415a94000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xa000) = 0x7f6415a94000
close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libpthread.so.0",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=21448, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f6415a87000 mmap(NULL, 16424,
PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f6415a82000
mmap(0x7f6415a83000, 4096, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1000) = 0x7f6415a83000
mmap(0x7f6415a84000, 4096, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f6415a84000
mmap(0x7f6415a85000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f6415a85000
close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libkrb5.so.3",
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O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=827936, ...}, AT_EMPTY_PATH) =
0 mmap(NULL, 830576, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f641524e000 mprotect(0x7f641526f000, 634880, PROT_NONE) = 0
mmap(0x7f641526f000, 380928, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x21000) = 0x7f641526f000
mmap(0x7f64152cc000, 249856, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x7e000) = 0x7f64152cc000
mmap(0x7f641530a000, 61440, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xbb000) = 0x7f641530a000
close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libk5crypto.so.3",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=182864, ...}, AT_EMPTY_PATH) =
0 mmap(NULL, 188472, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f6415a53000 mprotect(0x7f6415a57000, 163840, PROT_NONE) = 0
mmap(0x7f6415a57000, 110592, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f6415a57000
mmap(0x7f6415a72000, 49152, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1f000) = 0x7f6415a72000
mmap(0x7f6415a7f000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2b000) = 0x7f6415a7f000
mmap(0x7f6415a81000, 56, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f6415a81000 close(3)
= 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libcom_err.so.2",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=18504, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 20552, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f6415a4d000 mmap(0x7f6415a4f000, 4096, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f6415a4f000
mmap(0x7f6415a50000, 4096, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7f6415a50000
mmap(0x7f6415a51000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7f6415a51000
close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libkrb5support.so.0",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=52016, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 54224, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =

0x7f6415a3f000 mprotect(0x7f6415a42000, 36864, PROT_NONE) = 0
mmap(0x7f6415a42000, 24576, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7f6415a42000
mmap(0x7f6415a48000, 8192, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x9000) = 0x7f6415a48000
mmap(0x7f6415a4b000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xb000) = 0x7f6415a4b000
close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libkeyutils.so.1",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=22600, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f6415a3d000 mmap(NULL, 24592,
PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f6415a36000
mmap(0x7f6415a38000, 8192, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f6415a38000
mmap(0x7f6415a3a000, 4096, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f6415a3a000
mmap(0x7f6415a3b000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f6415a3b000
close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libresolv.so.2",
O_RDONLY|O_CLOEXEC) = 3 read(3,
"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=68552, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 80456, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f64156c1000 mmap(0x7f64156c4000, 40960, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7f64156c4000
mmap(0x7f64156ce000, 12288, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xd000) = 0x7f64156ce000
mmap(0x7f64156d1000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xf000) = 0x7f64156d1000
mmap(0x7f64156d3000, 6728, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f64156d3000 close(3)
= 0 mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f6415a34000 mmap(NULL, 12288,
PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x7f6415a31000 arch_prctl(ARCH_SET_FS, 0x7f6415a319c0) = 0
set_tid_address(0x7f6415a31c90) = 4598 set_robust_list(0x7f6415a31ca0, 24) = 0
rseq(0x7f6415a32360, 0x20, 0, 0x53053053) = 0 mprotect(0x7f6415615000, 16384,
PROT_READ) = 0 mprotect(0x7f64156d1000, 4096, PROT_READ) = 0
mprotect(0x7f6415a3b000, 4096, PROT_READ) = 0 mprotect(0x7f6415a4b000, 4096,

PROT_READ) = 0 mprotect(0x7f6415a51000, 4096, PROT_READ) = 0 mprotect(0x7f6415a7f000, 4096, PROT_READ) = 0 mprotect(0x7f641530a000, 53248, PROT_READ) = 0 mprotect(0x7f6415a85000, 4096, PROT_READ) = 0 mprotect(0x7f6415a94000, 4096, PROT_READ) = 0 mprotect(0x7f64153fe000, 4096, PROT_READ) = 0 mprotect(0x7f6415ae6000, 8192, PROT_READ) = 0 mprotect(0x7f6415bcb000, 4096, PROT_READ) = 0 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f6415a2f000 mprotect(0x7f6415a1b000, 45056, PROT_READ) = 0 mprotect(0x7f641574c000, 12288, PROT_READ) = 0 mprotect(0x7f6415b35000, 4096, PROT_READ) = 0 mprotect(0x7f6415b93000, 4096, PROT_READ) = 0 mprotect(0x7f6415baa000, 4096, PROT_READ) = 0 mprotect(0x7f6415c60000, 32768, PROT_READ) = 0 mprotect(0x55e7c1f4c000, 4096, PROT_READ) = 0 mprotect(0x7f6415cb4000, 8192, PROT_READ) = 0 prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) = 0 munmap(0x7f6415c69000, 67103) = 0 getrandom("\x39\x7b\x85\x9c\xb5\x4a\x9e\x2a", 8, GRND_NONBLOCK) = 8 brk(NULL) = 0x55e7c2782000 brk(0x55e7c27a3000) = 0x55e7c27a3000 futex(0x7f6415a2977c, FUTEX_WAKE_PRIVATE, 2147483647) = 0 openat(AT_FDCWD, "/sys/devices/system/cpu/online", O_RDONLY|O_CLOEXEC) = 3 read(3, "0-5\n", 1024) = 4 close(3) = 0 openat(AT_FDCWD, "/sys/devices/system/cpu", O_RDONLY|O_NONBLOCK|O_CLOEXEC|O_DIRECTORY) = 3 newfstatat(3, "", {st_mode=S_IFDIR|0755, st_size=0, ...}, AT_EMPTY_PATH) = 0 getdents64(3, 0x55e7c2793ee0 /* 22 entries */, 32768) = 640 getdents64(3, 0x55e7c2793ee0 /* 0 entries */, 32768) = 0 close(3) = 0 getpid() = 4598 sched_getaffinity(4598, 128, [0, 1, 2, 3, 4, 5]) = 16 newfstatat(AT_FDCWD, "/etc/nsswitch.conf", {st_mode=S_IFREG|0644, st_size=542, ...}, 0) = 0 newfstatat(AT_FDCWD, "/", {st_mode=S_IFDIR|0755, st_size=4096, ...}, 0) = 0 openat(AT_FDCWD, "/etc/nsswitch.conf", O_RDONLY|O_CLOEXEC) = 3 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=542, ...}, AT_EMPTY_PATH) = 0 read(3, "# /etc/nsswitch.conf\n#\n# Example"..., 4096) = 542 read(3, "", 4096) = 0 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=542, ...}, AT_EMPTY_PATH) = 0 close(3) = 0 openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC) = 3 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=67103, ...}, AT_EMPTY_PATH) = 0 mmap(NULL, 67103, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7f6415c69000 close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v3/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v3", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v2/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v2", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD,

"/lib/x86_64-linux-gnu/tls/x86_64/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/tls/x86_64/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/lib/x86_64-linux-gnu/tls/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/tls/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/lib/x86_64-linux-gnu/tls/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/tls/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/lib/x86_64-linux-gnu/tls/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/tls", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/lib/x86_64-linux-gnu/x86_64/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/x86_64/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/lib/x86_64-linux-gnu/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/lib/x86_64-linux-gnu/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu", {st_mode=S_IFDIR|0755, st_size=98304, ...}, 0) = 0 openat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64- v3/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v3", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v2/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v2", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/tls/x86_64/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/tls/x86_64/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/tls/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/tls/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/tls/x86_64/libnss_db.so.2",

O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/tls/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/tls/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/tls", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/x86_64/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/x86_64/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu", {st_mode=S_IFDIR|0755, st_size=98304, ...}, 0) = 0 openat(AT_FDCWD, "/lib/glibc-hwcaps/x86-64-v3/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/lib/glibc-hwcaps/x86-64-v3", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/lib/glibc-hwcaps/x86-64-v2/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/lib/glibc-hwcaps/x86-64-v2", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/lib/tls/x86_64/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/lib/tls/x86_64/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/lib/tls/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/lib/tls/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/lib/tls/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/lib/tls/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/lib/tls/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/lib/tls", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/lib/x86_64/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/lib/x86_64/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/lib/x86_64/libnss_db.so.2",

O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
newfstatat(AT_FDCWD, "/lib/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file
or directory) openat(AT_FDCWD, "/lib/x86_64/libnss_db.so.2",
O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
newfstatat(AT_FDCWD, "/lib/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file
or directory) openat(AT_FDCWD, "/lib/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -
1 ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/lib",
{st_mode=S_IFDIR|0755, st_size=4096, ...}, 0) = 0 openat(AT_FDCWD, "/usr/lib/glibc-
hwcaps/x86-64-v3/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such
file or directory) newfstatat(AT_FDCWD, "/usr/lib/glibc-hwcaps/x86-64-v3",
0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory) openat(AT_FDCWD,
"/usr/lib/glibc-hwcaps/x86-64-v2/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1
ENOENT (No such file or directory) newfstatat(AT_FDCWD, "/usr/lib/glibc-
hwcaps/x86-64-v2", 0x7ffcf05432c0, 0) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/usr/lib/tls/x86_64/x86_64/libnss_db.so.2",
O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
newfstatat(AT_FDCWD, "/usr/lib/tls/x86_64/x86_64", 0x7ffcf05432c0, 0) = -1
ENOENT (No such file or directory) openat(AT_FDCWD,
"/usr/lib/tls/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No
such file or directory) newfstatat(AT_FDCWD, "/usr/lib/tls/x86_64", 0x7ffcf05432c0, 0)
= -1 ENOENT (No such file or directory) openat(AT_FDCWD,
"/usr/lib/tls/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No
such file or directory) newfstatat(AT_FDCWD, "/usr/lib/tls/x86_64", 0x7ffcf05432c0, 0)
= -1 ENOENT (No such file or directory) openat(AT_FDCWD,
"/usr/lib/tls/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or
directory) newfstatat(AT_FDCWD, "/usr/lib/tls", 0x7ffcf05432c0, 0) = -1 ENOENT (No
such file or directory) openat(AT_FDCWD, "/usr/lib/x86_64/x86_64/libnss_db.so.2",
O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
newfstatat(AT_FDCWD, "/usr/lib/x86_64/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT
(No such file or directory) openat(AT_FDCWD, "/usr/lib/x86_64/libnss_db.so.2",
O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
newfstatat(AT_FDCWD, "/usr/lib/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such
file or directory) openat(AT_FDCWD, "/usr/lib/x86_64/libnss_db.so.2",
O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
newfstatat(AT_FDCWD, "/usr/lib/x86_64", 0x7ffcf05432c0, 0) = -1 ENOENT (No such
file or directory) openat(AT_FDCWD, "/usr/lib/libnss_db.so.2",
O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
newfstatat(AT_FDCWD, "/usr/lib", {st_mode=S_IFDIR|0755, st_size=4096, ...}, 0) = 0
munmap(0x7f6415c69000, 67103) = 0 openat(AT_FDCWD, "/etc/ld.so.cache",
O_RDONLY|O_CLOEXEC) = 3 newfstatat(3, "", {st_mode=S_IFREG|0644,
st_size=67103, ...}, AT_EMPTY_PATH) = 0 mmap(NULL, 67103, PROT_READ,

MAP_PRIVATE, 3, 0) = 0x7f6415c69000 close(3) = 0 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libnss_db-2.35.so", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/libnss_db-2.35.so", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/lib/libnss_db-2.35.so", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) openat(AT_FDCWD, "/usr/lib/libnss_db-2.35.so", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory) munmap(0x7f6415c69000, 67103) = 0 openat(AT_FDCWD, "/etc/protocols", O_RDONLY|O_CLOEXEC) = 3 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=2932, ...}, AT_EMPTY_PATH) = 0 lseek(3, 0, SEEK_SET) = 0 read(3, "# Internet (IP) protocols\n#\n# Up"..., 4096) = 2932 read(3, "", 4096) = 0 close(3) = 0 eventfd2(0, EFD_CLOEXEC) = 3 fcntl(3, F_GETFL) = 0x2 (flags O_RDWR) fcntl(3, F_SETFL, O_RDWR|O_NONBLOCK) = 0 fcntl(3, F_GETFL) = 0x802 (flags O_RDWR|O_NONBLOCK) fcntl(3, F_SETFL, O_RDWR|O_NONBLOCK) = 0 getpid() = 4598 getpid() = 4598 getrandom("\x36\x6b\xcc\x21\xa1\x7c\x07\xb7\xbe\xb9\x04\xb9\x28\x4c\xab\x31", 16, 0) = 16 getrandom("\x4a\x8a\xef\xac\x44\xaa\x91\xce\x9c\x67\xcc\x70\x86\xdf\x87\x2a", 16, 0) = 16 eventfd2(0, EFD_CLOEXEC) = 4 fcntl(4, F_GETFL) = 0x2 (flags O_RDWR) fcntl(4, F_SETFL, O_RDWR|O_NONBLOCK) = 0 fcntl(4, F_GETFL) = 0x802 (flags O_RDWR|O_NONBLOCK) fcntl(4, F_SETFL, O_RDWR|O_NONBLOCK) = 0 getpid() = 4598 epoll_create1(EPOLL_CLOEXEC) = 5 epoll_ctl(5, EPOLL_CTL_ADD, 4, {events=0, data={u32=3262726752, u64=94453888533088}}) = 0 epoll_ctl(5, EPOLL_CTL_MOD, 4, {events=EPOLLIN, data={u32=3262726752, u64=94453888533088}}) = 0 getpid() = 4598 rt_sigaction(SIGRT_1, {sa_handler=0x7f6415491870, sa_mask=[], sa_flags=SA_RESTORER|SA_ONSTACK|SA_RESTART|SA_SIGINFO, sa_restorer=0x7f6415442520}, 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) = 0x7f6414a4d000 mprotect(0x7f6414a4e000, 8388608, PROT_READ|PROT_WRITE) = 0 rt_sigprocmask(SIG_BLOCK, ~[], [], 8) = 0 clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THREAD|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_CLEARTID, child_tid=0x7f641524d910, parent_tid=0x7f641524d910, exit_signal=0, stack=0x7f6414a4d000, stack_size=0x7ffc80, tls=0x7f641524d640}strace: Process 4599 attached => {parent_tid=[4599]}, 88) = 4599 [pid 4599] rseq(0x7f641524dfe0, 0x20, 0, 0x53053053 [pid 4598] rt_sigprocmask(SIG_SETMASK, [], [pid 4599]) = 0 [pid 4598] NULL, 8) = 0 [pid 4599] set_robust_list(0x7f641524d920, 24 [pid 4598] eventfd2(0, EFD_CLOEXEC [pid 4599]) = 0 [pid 4598]) = 6 [pid 4599] rt_sigprocmask(SIG_SETMASK, [], [pid 4598] fcntl(6, F_GETFL [pid 4599] NULL, 8)

= 0 [pid 4598]) = 0x2 (flags O_RDWR) [pid 4599] rt_sigprocmask(SIG_BLOCK, ~[RTMIN RT_1], [pid 4598] fcntl(6, F_SETFL, O_RDWR|O_NONBLOCK [pid 4599] NULL, 8) = 0 [pid 4598]) = 0 [pid 4599] sched_getparam(4599, [pid 4598] fcntl(6, F_GETFL [pid 4599] [0]) = 0 [pid 4598]) = 0x802 (flags O_RDWR|O_NONBLOCK) [pid 4599] sched_getscheduler(4599 [pid 4598] fcntl(6, F_SETFL, O_RDWR|O_NONBLOCK [pid 4599]) = 0 (SCHED_OTHER) [pid 4598]) = 0 [pid 4599] sched_setscheduler(4599, SCHED_OTHER, [0] [pid 4598] getpid([pid 4599]) = 0 [pid 4598]) = 4598 [pid 4599] prctl(PR_SET_NAME, "ZMQbg/Reaper" [pid 4598] epoll_create1(EPOLL_CLOEXEC [pid 4599]) = 0 [pid 4598]) = 7 [pid 4599] epoll_wait(5, [pid 4598] epoll_ctl(7, EPOLL_CTL_ADD, 6, {events=0, data={u32=3262747808, u64=94453888554144}}) = 0 [pid 4598] epoll_ctl(7, EPOLL_CTL_MOD, 6, {events=EPOLLIN, data={u32=3262747808, u64=94453888554144}}) = 0 [pid 4598] mmap(NULL, 8392704, PROT_NONE, MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0) = 0x7f641424c000 [pid 4598] mprotect(0x7f641424d000, 8388608, PROT_READ|PROT_WRITE) = 0 [pid 4598] rt_sigprocmask(SIG_BLOCK, ~[], [], 8) = 0 [pid 4598] clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THREAD|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_CLEARTID, child_tid=0x7f6414a4c910, parent_tid=0x7f6414a4c910, exit_signal=0, stack=0x7f641424c000, stack_size=0x7ffc80, tls=0x7f6414a4c640}strace: Process 4600 attached => {parent_tid=[4600]}, 88) = 4600 [pid 4600] rseq(0x7f6414a4cfe0, 0x20, 0, 0x53053053 [pid 4598] rt_sigprocmask(SIG_SETMASK, [], [pid 4600]) = 0 [pid 4598] NULL, 8) = 0 [pid 4600] set_robust_list(0x7f6414a4c920, 24 [pid 4598] eventfd2(0, EFD_CLOEXEC) = 8 [pid 4600]) = 0 [pid 4598] fcntl(8, F_GETFL [pid 4600] rt_sigprocmask(SIG_SETMASK, [], [pid 4598]) = 0x2 (flags O_RDWR) [pid 4600] NULL, 8) = 0 [pid 4598] fcntl(8, F_SETFL, O_RDWR|O_NONBLOCK [pid 4600] rt_sigprocmask(SIG_BLOCK, ~[RTMIN RT_1], [pid 4598]) = 0 [pid 4600] NULL, 8) = 0 [pid 4598] fcntl(8, F_GETFL [pid 4600] sched_getparam(4600, [pid 4598]) = 0x802 (flags O_RDWR|O_NONBLOCK) [pid 4600] [0]) = 0 [pid 4598] fcntl(8, F_SETFL, O_RDWR|O_NONBLOCK [pid 4600] sched_getscheduler(4600 [pid 4598]) = 0 [pid 4600]) = 0 (SCHED_OTHER) [pid 4598] getpid([pid 4600] sched_setscheduler(4600, SCHED_OTHER, [0] [pid 4598]) = 4598 [pid 4600]) = 0 [pid 4598] newfstatat(1, "", [pid 4600] prctl(PR_SET_NAME, "ZMQbg/IO/0" [pid 4598] {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0), ...}, AT_EMPTY_PATH) = 0 [pid 4600]) = 0 [pid 4598] write(1, "Commands:\n", 10 [pid 4600] epoll_wait(7, Commands: [pid 4598]) = 10 [pid 4598] write(1, "1. create (id)\n", 151. create (id)) = 15 [pid 4598] write(1, "2. exec (id) (numbers_of_nums, k"..., 422. exec (id) (numbers_of_nums, k_1...k_n)) = 42 [pid 4598] write(1, "3. kill (id)\n", 133. kill (id)) = 13 [pid 4598] write(1, "4. pingall\n", 114. pingall) = 11 [pid 4598] write(1, "5. exit\n", 85. exit) = 8 [pid 4598] write(1, "\n", 1) = 1 [pid 4598] newfstatat(0, "", {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0), ...}, AT_EMPTY_PATH) = 0

[pid 4598] read(0, pingall close(7) = 0 close(6) = 0 close(5) = 0 close(4) = 0 close(3) = 0 lseek(0, -1, SEEK_CUR) = -1 ESPIPE (Illegal seek) exit_group(0) = ? +++ exited with 0 +++

Вывод

В ходе данной лабораторной работы познакомился с интересной утилитой strace, которая показывает, какие системные вызовы были использованы при выполнении моих программ. Считаю, что эта утилита может оказаться довольно полезной при разработке своего софта, низкоуровневого программирования. Очень важно знать как твое приложение, код взаимодействует непосредственно с ОС, какие звонки в Ядро совершает. Узнал очень много нового, лабораторная очень понравилась.