Московский Авиационный Институт

(Национальный Исследовательский Университет)

Институт №8 “Компьютерные науки и прикладная математика”

Кафедра №806 “Вычислительная математика и программирование”

**Лабораторная работа №8 по курсу**

**«Операционные системы»**

Группа: М80-206Б-22

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**Постановка задачи**

Приобретение практических навыков диагностики работы программного обеспечения. 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.

**Общий метод и алгоритм решения**

Команда**strace** показывает все системные вызовы программы, которые та отправляет к системе во время выполнения, а также их параметры и результат выполнения. Но при необходимости можно подключиться и к уже запущенному процессу. Перед тем, как перейти к практике, разберем опции утилиты и ее синтаксис:

**$ strace опции команда аргументы**

В самом простом варианте **strace** запускает переданную команду с её аргументами и выводит в стандартный поток ошибок все системные вызовы команды. Давайте разберём опции утилиты, с помощью которых можно управлять её поведением:

* **-i** - выводить указатель на инструкцию во время выполнения системного вызова;
* **-k** - выводить стек вызовов для отслеживаемого процесса после каждого системного вызова;
* **-o** - выводить всю информацию о системных вызовах не в стандартный поток ошибок, а в файл;
* **-q** - не выводить сообщения о подключении о отключении от процесса;
* **-qq** - не выводить сообщения о завершении работы процесса;
* **-r** - выводить временную метку для каждого системного вызова;
* **-s** - указать максимальный размер выводимой строки, по умолчанию 32;
* **-t** - выводить время суток для каждого вызова;
* **-tt** - добавить микросекунды;
* **-ttt** - добавить микросекунды и количество секунд после начала эпохи Unix;
* **-T** - выводить длительность выполнения системного вызова;
* **-x** - выводить все не ASCI-строки в шестнадцатеричном виде;
* **-xx** - выводить все строки в шестнадцатеричном виде;
* **-y** - выводить пути для файловых дескрипторов;
* **-yy** - выводить информацию о протоколе для файловых дескрипторов;
* **-c** - подсчитывать количество ошибок, вызовов и время выполнения для каждого системного вызова;
* **-O** - добавить определённое количество микросекунд к счетчику времени для каждого вызова;
* **-S** - сортировать информацию выводимую при опции -c. Доступны поля time, calls, name и nothing. По умолчанию используется time;
* **-w** - суммировать время между началом и завершением системного вызова;
* **-e** - позволяет отфильтровать только нужные системные вызовы или события;
* **-P** - отслеживать только системные вызовы, которые касаются указанного пути;
* **-v** - позволяет выводить дополнительную информацию, такую как версии окружения, статистику и так далее;
* **-b** - если указанный системный вызов обнаружен, трассировка прекращается;
* **-f** - отслеживать также дочерние процессы, если они будут созданы;
* **-ff** - если задана опция -o, то для каждого дочернего процесса будет создан отдельный файл с именем имя\_файла.pid.
* **-I** - позволяет блокировать реакцию на нажатия Ctrl+C и Ctrl+Z;
* **-E** - добавляет переменную окружения для запускаемой программы;
* **-p** - указывает pid процесса, к которому следует подключиться;
* **-u** - запустить программу, от имени указанного пользователя.

**Strace**

**Лабораторная 1:**

execve("./lab1", ["./lab1"], 0x7ffe6c0a7de0 /\* 87 vars \*/) = 0

brk(NULL) = 0x55707f1be000

arch\_prctl(0x3001 /\* ARCH\_??? \*/, 0x7ffe19005760) = -1 EINVAL (Invalid argument)

mmap(NULL, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) = 0x7f146b7d6000

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=70887, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 70887, PROT\_READ, MAP\_PRIVATE, 3, 0) = 0x7f146b7c4000

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\302\211\332Pq\2439\235\350\223\322\257\201\326\243\f"..., 68, 896) = 68

newfstatat(3, "", {st\_mode=S\_IFREG|0755, st\_size=2220400, ...}, 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, 2264656, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f146b400000

mprotect(0x7f146b428000, 2023424, PROT\_NONE) = 0

mmap(0x7f146b428000, 1658880, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x28000) = 0x7f146b428000

mmap(0x7f146b5bd000, 360448, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1bd000) = 0x7f146b5bd000

mmap(0x7f146b616000, 24576, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x215000) = 0x7f146b616000

mmap(0x7f146b61c000, 52816, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f146b61c000

close(3) = 0

mmap(NULL, 12288, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) = 0x7f146b7c1000

arch\_prctl(ARCH\_SET\_FS, 0x7f146b7c1740) = 0

set\_tid\_address(0x7f146b7c1a10) = 31857

set\_robust\_list(0x7f146b7c1a20, 24) = 0

rseq(0x7f146b7c20e0, 0x20, 0, 0x53053053) = 0

mprotect(0x7f146b616000, 16384, PROT\_READ) = 0

mprotect(0x55707efbb000, 4096, PROT\_READ) = 0

mprotect(0x7f146b810000, 8192, PROT\_READ) = 0

prlimit64(0, RLIMIT\_STACK, NULL, {rlim\_cur=8192\*1024, rlim\_max=RLIM64\_INFINITY}) = 0

munmap(0x7f146b7c4000, 70887) = 0

newfstatat(1, "", {st\_mode=S\_IFCHR|0620, st\_rdev=makedev(0x88, 0), ...}, AT\_EMPTY\_PATH) = 0

getrandom("\x87\x78\xdb\xf9\x95\x45\xc5\x14", 8, GRND\_NONBLOCK) = 8

brk(NULL) = 0x55707f1be000

brk(0x55707f1df000) = 0x55707f1df000

write(1, "\320\222\320\262\320\265\320\264\320\270\321\202\320\265 \320\275\320\260\320\267\320\262\320\260\320\275\320\270\321\217 "..., 46Введите названия файлов.

) = 46

newfstatat(0, "", {st\_mode=S\_IFCHR|0620, st\_rdev=makedev(0x88, 0), ...}, AT\_EMPTY\_PATH) = 0

read(0, a

"a\n", 1024) = 2

openat(AT\_FDCWD, "a", O\_WRONLY|O\_CREAT, 0700) = 3

pipe2([4, 5], 0) = 0

clone(child\_stack=NULL, flags=CLONE\_CHILD\_CLEARTID|CLONE\_CHILD\_SETTID|SIGCHLD, child\_tidptr=0x7f146b7c1a10) = 31880

read(0, b

"b\n", 1024) = 2

openat(AT\_FDCWD, "b", O\_WRONLY|O\_CREAT, 0700) = 6

close(4) = 0

pipe2([4, 7], 0) = 0

clone(child\_stack=NULL, flags=CLONE\_CHILD\_CLEARTID|CLONE\_CHILD\_SETTID|SIGCHLD, child\_tidptr=0x7f146b7c1a10) = 31881

close(4) = 0

read(0, aeferg

"aeferg\n", 50) = 7

write(5, "aeferg\n", 7) = 7

read(0, sergbvserbtkrnb sntrbs

"sergbvserbtkrnb sntrbs\n", 50) = 23

write(7, "sergbvserbtkrnb sntrbs\n", 23) = 23

read(0, rtbstrbtrb

"rtbstrbtrb\n", 50) = 11

write(5, "rtbstrbtrb\n", 11) = 11

read(0, strxbstrdbtrdbrstb

"strxbstrdbtrdbrstb\n", 50) = 19

write(7, "strxbstrdbtrdbrstb\n", 19) = 19

read(0, srtbsrt

"srtbsrt\n", 50) = 8

write(5, "srtbsrt\n", 8) = 8

read(0, bsdbtb

"bsdbtb\n", 50) = 7

write(5, "bsdbtb\n", 7) = 7

read(0, "", 50) = 0

close(3) = 0

close(6) = 0

lseek(0, -1, SEEK\_CUR) = -1 ESPIPE (Illegal seek)

exit\_group(0) = ?

+++ exited with 0 +++

**Лабораторная 2:**

execve("./lab2", ["./lab2", "1", "56"], 0x7fffc3fb8b40 /\* 87 vars \*/) = 0

brk(NULL) = 0x55b6e54f8000

arch\_prctl(0x3001 /\* ARCH\_??? \*/, 0x7ffe6c9d8dc0) = -1 EINVAL (Invalid argument)

mmap(NULL, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) = 0x7fc02c4e1000

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=70887, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 70887, PROT\_READ, MAP\_PRIVATE, 3, 0) = 0x7fc02c4cf000

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\302\211\332Pq\2439\235\350\223\322\257\201\326\243\f"..., 68, 896) = 68

newfstatat(3, "", {st\_mode=S\_IFREG|0755, st\_size=2220400, ...}, 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, 2264656, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7fc02c200000

mprotect(0x7fc02c228000, 2023424, PROT\_NONE) = 0

mmap(0x7fc02c228000, 1658880, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x28000) = 0x7fc02c228000

mmap(0x7fc02c3bd000, 360448, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1bd000) = 0x7fc02c3bd000

mmap(0x7fc02c416000, 24576, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x215000) = 0x7fc02c416000

mmap(0x7fc02c41c000, 52816, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7fc02c41c000

close(3) = 0

mmap(NULL, 12288, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) = 0x7fc02c4cc000

arch\_prctl(ARCH\_SET\_FS, 0x7fc02c4cc740) = 0

set\_tid\_address(0x7fc02c4cca10) = 34884

set\_robust\_list(0x7fc02c4cca20, 24) = 0

rseq(0x7fc02c4cd0e0, 0x20, 0, 0x53053053) = 0

mprotect(0x7fc02c416000, 16384, PROT\_READ) = 0

mprotect(0x55b6e354c000, 4096, PROT\_READ) = 0

mprotect(0x7fc02c51b000, 8192, PROT\_READ) = 0

prlimit64(0, RLIMIT\_STACK, NULL, {rlim\_cur=8192\*1024, rlim\_max=RLIM64\_INFINITY}) = 0

munmap(0x7fc02c4cf000, 70887) = 0

getrandom("\x36\xde\x97\x41\xc6\xf5\xea\x2b", 8, GRND\_NONBLOCK) = 8

brk(NULL) = 0x55b6e54f8000

brk(0x55b6e5519000) = 0x55b6e5519000

openat(AT\_FDCWD, "file.txt", O\_RDWR|O\_CREAT, 0666) = 3

write(3, "30FEE6F6EC6FEBEE79E2293FC65EFDBB", 32) = 32

write(3, "\n", 1) = 1

write(3, "9BB7CFCDDB6CBB26F3261E2DC666DBFA", 32) = 32

write(3, "\n", 1) = 1

write(3, "FBEAB7D9DDDA0F8B35CAF06FEEE3F724", 32) = 32

write(3, "\n", 1) = 1

write(3, "AE3161D27D1DD9CC49B8CE7EEBA88F28", 32) = 32

write(3, "\n", 1) = 1

write(3, "EEC71CC60C50C34B90ED87AD2BAC1AC0", 32) = 32

write(3, "\n", 1) = 1

write(3, "E810EA4335BFC4E06EBFEBF5EC21EC22", 32) = 32

write(3, "\n", 1) = 1

write(3, "387D6D531A3DCF9BCBED82FD3A2EEF53", 32) = 32

write(3, "\n", 1) = 1

write(3, "F2F8C3A0A94B5A3FCCF339CA6D367EEE", 32) = 32

write(3, "\n", 1) = 1

write(3, "625C3FBEADDBEAA1CBEFC1FC0BDAA0E2", 32) = 32

write(3, "\n", 1) = 1

write(3, "BE034652CDACEC7914C96C29414F0CF4", 32) = 32

write(3, "\n", 1) = 1

write(3, "878AAB94FAFBFB7BB397788AE4FB3918", 32) = 32

write(3, "\n", 1) = 1

write(3, "0E9A553B951329EA0648BB4ED46BF6F1", 32) = 32

write(3, "\n", 1) = 1

write(3, "F7C4B2354ACCF0702D9CD562CA4240E9", 32) = 32

write(3, "\n", 1) = 1

write(3, "41CEDAC89064D4B8AE6EE24E9C992AB6", 32) = 32

write(3, "\n", 1) = 1

write(3, "9CA241DBAF72D3EFEE85353132407DC7", 32) = 32

write(3, "\n", 1) = 1

write(3, "BDA2CF4EB868BBB816C4B9BD1ED51105", 32) = 32

write(3, "\n", 1) = 1

write(3, "EF3B989D4ACDB4AA6DB55B699BC5DCC6", 32) = 32

write(3, "\n", 1) = 1

write(3, "2FF7052919B871AB873EBB581D6ABD38", 32) = 32

write(3, "\n", 1) = 1

write(3, "B55970D30C2358524AFAF89AA9E13A76", 32) = 32

write(3, "\n", 1) = 1

write(3, "65BA43EC4D903AB5C3EA6D4A07CC4919", 32) = 32

write(3, "\n", 1) = 1

write(3, "C56C6A8328B346EF275AB5E8A42E34BD", 32) = 32

write(3, "\n", 1) = 1

write(3, "D38BB819CB4DFAAEC711EDE999A0D2DE", 32) = 32

write(3, "\n", 1) = 1

write(3, "FB73A902EE10019B4FF5F5C15BCD9CA9", 32) = 32

write(3, "\n", 1) = 1

write(3, "D25A3FF2EE4AEAD404C1CBBAA521594A", 32) = 32

write(3, "\n", 1) = 1

write(3, "241DC01FDDFE7AF7CDB8DF0ECFCDAEB8", 32) = 32

write(3, "\n", 1) = 1

write(3, "FB4CAF8E7DC73E72EB0FB5AAAE2DBE79", 32) = 32

write(3, "\n", 1) = 1

write(3, "FDE4D5FC006EA16BEA3E7B8E0F2DB1B4", 32) = 32

write(3, "\n", 1) = 1

write(3, "B4B35DAD42DC8BBFCEDA2BC3F853D789", 32) = 32

write(3, "\n", 1) = 1

write(3, "7F9ECAB247E7C14CE3BB2FFAFDF2EE65", 32) = 32

write(3, "\n", 1) = 1

write(3, "C85EBA04BC72D521ADFE86937D7B18CC", 32) = 32

write(3, "\n", 1) = 1

write(3, "1F0C66BB67D016C2CB1BFC9BA3CAB5AE", 32) = 32

write(3, "\n", 1) = 1

write(3, "2FE4344E5F2BF33A1DD1E93AA334FB8E", 32) = 32

write(3, "\n", 1) = 1

write(3, "F7698F2DB1EACEA4CA4F08FEBE79DAAB", 32) = 32

write(3, "\n", 1) = 1

write(3, "4F05AAF45888D9F85CBAD40E5C559622", 32) = 32

write(3, "\n", 1) = 1

write(3, "DF8BCF243E3A434EABC2890CA32A4E90", 32) = 32

write(3, "\n", 1) = 1

write(3, "FA8C1CBCFBC5130E64528DCCA5E9E8D9", 32) = 32

write(3, "\n", 1) = 1

write(3, "6C5AE61D39F2F20AAD8B70DD61EAAC67", 32) = 32

write(3, "\n", 1) = 1

write(3, "B3C3AEBBB8071C45A364C4C4C52A8C5C", 32) = 32

write(3, "\n", 1) = 1

write(3, "DAF6CA10AAA9FD4CA60F61ACA8FA2B5B", 32) = 32

write(3, "\n", 1) = 1

write(3, "BBEF79F867DAABA9C25D66E3B0343FA6", 32) = 32

write(3, "\n", 1) = 1

write(3, "302F0D5D17AB67764C0A67964DA1B946", 32) = 32

write(3, "\n", 1) = 1

write(3, "B7A28CBD0FB44ED01ED3B412FC336FEA", 32) = 32

write(3, "\n", 1) = 1

write(3, "A06BF908D3B9E039EB6F3CD67D094ECB", 32) = 32

write(3, "\n", 1) = 1

write(3, "61129F1F98BBDBA7845A65B649C1B4CD", 32) = 32

write(3, "\n", 1) = 1

write(3, "20FDD807F2DE96DAB25703C8C6C0C93F", 32) = 32

write(3, "\n", 1) = 1

write(3, "B9CF71CDAA074699C49A005DE92FBBB4", 32) = 32

write(3, "\n", 1) = 1

write(3, "E152C4BB161BD4400ADFDFA74E5D1CF1", 32) = 32

write(3, "\n", 1) = 1

write(3, "E0FD43E76AEFAEEC5B89C69DCA1DCD6A", 32) = 32

write(3, "\n", 1) = 1

write(3, "04CAC5D6A9F2BEB5C6F0ACE44FDF9C7B", 32) = 32

write(3, "\n", 1) = 1

write(3, "55ECAA1E0D9014CBB49DCCA3EBBDCA2B", 32) = 32

write(3, "\n", 1) = 1

write(3, "185DACE09F433CC1ADAEC064FADE10CB", 32) = 32

write(3, "\n", 1) = 1

write(3, "31BA462CC31C982EF8DBDC61C1FCA39D", 32) = 32

write(3, "\n", 1) = 1

write(3, "9DA8800F06C40CDB2BF1ACED2A38A6F9", 32) = 32

write(3, "\n", 1) = 1

write(3, "DC5CC4B5DDAA7B983804690D8F4C4AE7", 32) = 32

write(3, "\n", 1) = 1

write(3, "F6C9EDE3913C13BA19A8DAAEFB0AC6DF", 32) = 32

write(3, "\n", 1) = 1

write(3, "53457FEFE7C28FE3E34097B455AF0548", 32) = 32

write(3, "\n", 1) = 1

write(3, "8CCFD19E1FB1E882B2DD715EFA17EFFA", 32) = 32

write(3, "\n", 1) = 1

write(3, "E8FC3BECF52ACE79AED7118DCD2D9C5F", 32) = 32

write(3, "\n", 1) = 1

write(3, "DE64C15FCA4CBF80A729CBCF8C40DE69", 32) = 32

write(3, "\n", 1) = 1

write(3, "0ABAAC8E21DE6626B0879F7ECACDF585", 32) = 32

write(3, "\n", 1) = 1

write(3, "CB93301EE8F4AF39966CFAE02F1BB940", 32) = 32

write(3, "\n", 1) = 1

write(3, "CF8B0B3F40CAFBF2DDEDC96298B84DBF", 32) = 32

write(3, "\n", 1) = 1

write(3, "265F6A1269DDB21DCDAF2EDEDE9B141B", 32) = 32

write(3, "\n", 1) = 1

write(3, "EBA525BD5D54638593DBDA2ADB2A0C28", 32) = 32

write(3, "\n", 1) = 1

write(3, "A3B89A01AF061EBFB94E08AA00EFC3F6", 32) = 32

write(3, "\n", 1) = 1

write(3, "6E98E00D3BAE7B96B84852BD9BC0FDDE", 32) = 32

write(3, "\n", 1) = 1

write(3, "D7BD8FF85FFAFA87DC4A5C58DADC04E6", 32) = 32

write(3, "\n", 1) = 1

write(3, "FDECE10DDE82E0C8B53F3ECAEDBA216A", 32) = 32

write(3, "\n", 1) = 1

write(3, "9CCFACC435FBD652F2DC836E37D2E7EA", 32) = 32

write(3, "\n", 1) = 1

write(3, "B018EDB147C62BA0EE376FB3EA3ACCFA", 32) = 32

write(3, "\n", 1) = 1

write(3, "20BBE0AC6AA90DC34EDEE18D6C0D21AD", 32) = 32

write(3, "\n", 1) = 1

write(3, "EAFBD7F4841EEE03B61F3ED9CDFEBFFA", 32) = 32

write(3, "\n", 1) = 1

write(3, "3F6831C673379E00BD0CAC9D1369DFD4", 32) = 32

write(3, "\n", 1) = 1

write(3, "FFFDEBC9F2DF80C24DC44F0CF47FAE9A", 32) = 32

write(3, "\n", 1) = 1

write(3, "C4A50F8DFA7DABE1CC6B229A48DEA8EC", 32) = 32

write(3, "\n", 1) = 1

write(3, "76BB3A2022B84F8CBA6A4A9F9FF752FF", 32) = 32

write(3, "\n", 1) = 1

write(3, "0C7CAECFEEDB1392ABE815FCEFA926BA", 32) = 32

write(3, "\n", 1) = 1

write(3, "A860FE443D525111AF7B7FDEEDEDFDB4", 32) = 32

write(3, "\n", 1) = 1

write(3, "D1531679D8F2BA110362A3CA53E6F3C5", 32) = 32

write(3, "\n", 1) = 1

write(3, "E16F6B8CA082ACA66FE91BCD5FAB0B7F", 32) = 32

write(3, "\n", 1) = 1

write(3, "09E71302EF66F3F903E576B4CB7BDEBD", 32) = 32

write(3, "\n", 1) = 1

write(3, "77E9CACA8A135B82CCB65DE7942DC515", 32) = 32

write(3, "\n", 1) = 1

write(3, "D0CFC9688E2BCBDE1BC47AA19539F23F", 32) = 32

write(3, "\n", 1) = 1

write(3, "873877CC5E5AF9F5BF9E5A02F6312D3F", 32) = 32

write(3, "\n", 1) = 1

write(3, "8AC76C1463C51EA315E34FDEFAF7D8CF", 32) = 32

write(3, "\n", 1) = 1

write(3, "B8867CE8DC114B592E3FCCF49A74DF73", 32) = 32

write(3, "\n", 1) = 1

write(3, "DAEAC6E19E7DA7612F4B3DA1E2BCA52E", 32) = 32

write(3, "\n", 1) = 1

write(3, "4BE7AF79CBBFF5107D4930BEFB39866E", 32) = 32

write(3, "\n", 1) = 1

write(3, "4A7CA6C0CBF748D9BE639FC09FB3ECBB", 32) = 32

write(3, "\n", 1) = 1

write(3, "2AD73FFD61D7FF96DE37162E66AC0EFB", 32) = 32

write(3, "\n", 1) = 1

write(3, "6FF78C9FFCC380DAEC1EDA0DAA12C1BA", 32) = 32

write(3, "\n", 1) = 1

write(3, "00D298BCEF75E632E6AE51C672850E97", 32) = 32

write(3, "\n", 1) = 1

write(3, "C4F359A5C9289A7747A3AEB0A96E6A10", 32) = 32

write(3, "\n", 1) = 1

write(3, "CC1EA4AE7AFBC5CA40F79FA2B938CC34", 32) = 32

write(3, "\n", 1) = 1

write(3, "CD325E19A75DD825B1EF4C5F88CAF971", 32) = 32

write(3, "\n", 1) = 1

write(3, "19DBCB58B0F8BB5206DAD52BDAF89EDF", 32) = 32

write(3, "\n", 1) = 1

write(3, "FA950CAC8DDCA2BE9286D8B9F4D2B051", 32) = 32

write(3, "\n", 1) = 1

write(3, "8CD286CA8BDF5F277FAF3C14FAAFB5C9", 32) = 32

write(3, "\n", 1) = 1

write(3, "6F6066B217EEDA6E0CD1DE9295FE8870", 32) = 32

write(3, "\n", 1) = 1

write(3, "77F49A124DEA79BF29A7DB9F836EACBF", 32) = 32

write(3, "\n", 1) = 1

close(3) = 0

openat(AT\_FDCWD, "file.txt", O\_RDWR|O\_CREAT, 0666) = 3

lseek(3, 0, SEEK\_END) = 3300

close(3) = 0

rt\_sigaction(SIGRT\_1, {sa\_handler=0x7fc02c291870, sa\_mask=[], sa\_flags=SA\_RESTORER|SA\_ONSTACK|SA\_RESTART|SA\_SIGINFO, sa\_restorer=0x7fc02c242520}, 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) = 0x7fc02b9ff000

mprotect(0x7fc02ba00000, 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=0x7fc02c1ff910, parent\_tid=0x7fc02c1ff910, exit\_signal=0, stack=0x7fc02b9ff000, stack\_size=0x7fff00, tls=0x7fc02c1ff640} => {parent\_tid=[34885]}, 88) = 34885

rt\_sigprocmask(SIG\_SETMASK, [], NULL, 8) = 0

futex(0x7fc02c1ff910, FUTEX\_WAIT\_BITSET|FUTEX\_CLOCK\_REALTIME, 34885, NULL, FUTEX\_BITSET\_MATCH\_ANY) = 0

newfstatat(1, "", {st\_mode=S\_IFCHR|0620, st\_rdev=makedev(0x88, 0), ...}, AT\_EMPTY\_PATH) = 0

write(1, "DEC: \n", 6DEC:

) = 6

write(1, "46541449712355940947844612565457"..., 3946541449712355940947844612565457047589

) = 39

exit\_group(0) = ?

+++ exited with 0 +++

**Лабораторная 3:**

execve("./lab3", ["./lab3"], 0x7fff4b3a8c30 /\* 87 vars \*/) = 0

brk(NULL) = 0x55b6735d7000

arch\_prctl(0x3001 /\* ARCH\_??? \*/, 0x7ffdab20ca00) = -1 EINVAL (Invalid argument)

mmap(NULL, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) = 0x7f063c296000

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=70887, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 70887, PROT\_READ, MAP\_PRIVATE, 3, 0) = 0x7f063c284000

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\302\211\332Pq\2439\235\350\223\322\257\201\326\243\f"..., 68, 896) = 68

newfstatat(3, "", {st\_mode=S\_IFREG|0755, st\_size=2220400, ...}, 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, 2264656, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f063c000000

mprotect(0x7f063c028000, 2023424, PROT\_NONE) = 0

mmap(0x7f063c028000, 1658880, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x28000) = 0x7f063c028000

mmap(0x7f063c1bd000, 360448, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1bd000) = 0x7f063c1bd000

mmap(0x7f063c216000, 24576, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x215000) = 0x7f063c216000

mmap(0x7f063c21c000, 52816, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f063c21c000

close(3) = 0

mmap(NULL, 12288, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) = 0x7f063c281000

arch\_prctl(ARCH\_SET\_FS, 0x7f063c281740) = 0

set\_tid\_address(0x7f063c281a10) = 22935

set\_robust\_list(0x7f063c281a20, 24) = 0

rseq(0x7f063c2820e0, 0x20, 0, 0x53053053) = 0

mprotect(0x7f063c216000, 16384, PROT\_READ) = 0

mprotect(0x55b672912000, 4096, PROT\_READ) = 0

mprotect(0x7f063c2d0000, 8192, PROT\_READ) = 0

prlimit64(0, RLIMIT\_STACK, NULL, {rlim\_cur=8192\*1024, rlim\_max=RLIM64\_INFINITY}) = 0

munmap(0x7f063c284000, 70887) = 0

newfstatat(1, "", {st\_mode=S\_IFCHR|0620, st\_rdev=makedev(0x88, 0x2), ...}, AT\_EMPTY\_PATH) = 0

getrandom("\x51\x0c\x4a\xfc\x91\x1a\x1a\x9f", 8, GRND\_NONBLOCK) = 8

brk(NULL) = 0x55b6735d7000

brk(0x55b6735f8000) = 0x55b6735f8000

write(1, "\320\222\320\262\320\265\320\264\320\270\321\202\320\265 \320\275\320\260\320\267\320\262\320\260\320\275\320\270\321\217 "..., 46Введите названия файлов.

) = 46

openat(AT\_FDCWD, "/dev/shm/sem.semafor1", O\_RDWR|O\_NOFOLLOW) = 3

newfstatat(3, "", {st\_mode=S\_IFREG|0700, st\_size=32, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 32, PROT\_READ|PROT\_WRITE, MAP\_SHARED, 3, 0) = 0x7f063c2cf000

close(3) = 0

openat(AT\_FDCWD, "/dev/shm/sem.semafor2", O\_RDWR|O\_NOFOLLOW) = 3

newfstatat(3, "", {st\_mode=S\_IFREG|0700, st\_size=32, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 32, PROT\_READ|PROT\_WRITE, MAP\_SHARED, 3, 0) = 0x7f063c295000

close(3) = 0

openat(AT\_FDCWD, "/dev/shm/sem.semafor3", O\_RDWR|O\_NOFOLLOW) = 3

newfstatat(3, "", {st\_mode=S\_IFREG|0700, st\_size=32, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 32, PROT\_READ|PROT\_WRITE, MAP\_SHARED, 3, 0) = 0x7f063c294000

close(3) = 0

newfstatat(0, "", {st\_mode=S\_IFCHR|0620, st\_rdev=makedev(0x88, 0x2), ...}, AT\_EMPTY\_PATH) = 0

read(0, a

"a\n", 1024) = 2

openat(AT\_FDCWD, "a", O\_RDWR|O\_CREAT, 0700) = 3

read(0, b

"b\n", 1024) = 2

openat(AT\_FDCWD, "b", O\_RDWR|O\_CREAT, 0700) = 4

openat(AT\_FDCWD, "/dev/shm/mmap\_file", O\_RDWR|O\_CREAT|O\_NOFOLLOW|O\_CLOEXEC, 0700) = 5

clone(child\_stack=NULL, flags=CLONE\_CHILD\_CLEARTID|CLONE\_CHILD\_SETTID|SIGCHLD, child\_tidptr=0x7f063c281a10) = 22954

clone(child\_stack=NULL, flags=CLONE\_CHILD\_CLEARTID|CLONE\_CHILD\_SETTID|SIGCHLD, child\_tidptr=0x7f063c281a10) = 22955

read(0, shghdzhgiuherdtgfz

"shghdzhgiuherdtgfz\n", 128) = 19

ftruncate(5, 19) = 0

mmap(NULL, 19, PROT\_WRITE, MAP\_SHARED, 5, 0) = 0x7f063c293000

futex(0x7f063c295000, FUTEX\_WAKE, 1) = 1

read(0, ebsuhtrbiuhsuerhdztbe

"ebsuhtrbiuhsuerhdztbe\n", 128) = 22

ftruncate(5, 22) = 0

mmap(NULL, 22, PROT\_WRITE, MAP\_SHARED, 5, 0) = 0x7f063c292000

futex(0x7f063c295000, FUTEX\_WAKE, 1) = 1

read(0, srtbrstbtrstrrstbrst

"srtbrstbtrstrrstbrst\n", 128) = 21

ftruncate(5, 21) = 0

mmap(NULL, 21, PROT\_WRITE, MAP\_SHARED, 5, 0) = 0x7f063c291000

futex(0x7f063c295000, FUTEX\_WAKE, 1) = 1

read(0, rbtstrbrstbrts

"rbtstrbrstbrts\n", 128) = 15

ftruncate(5, 15) = 0

mmap(NULL, 15, PROT\_WRITE, MAP\_SHARED, 5, 0) = 0x7f063c290000

futex(0x7f063c295000, FUTEX\_WAKE, 1) = 1

read(0, btrstbrbrsttrbsbrtnbdfhnhdgxfn

"btrstbrbrsttrbsbrtnbdfhnhdgxfn\n", 128) = 31

ftruncate(5, 31) = 0

mmap(NULL, 31, PROT\_WRITE, MAP\_SHARED, 5, 0) = 0x7f063c28f000

futex(0x7f063c295000, FUTEX\_WAKE, 1) = 1

read(0, dfxhnfg

"dfxhnfg\n", 128) = 8

ftruncate(5, 8) = 0

mmap(NULL, 8, PROT\_WRITE, MAP\_SHARED, 5, 0) = 0x7f063c28e000

futex(0x7f063c2cf000, FUTEX\_WAKE, 1) = 1

read(0, "", 128) = 0

unlink("/mmap\_file") = -1 ENOENT (No such file or directory)

kill(22954, SIGTERM) = 0

close(3) = 0

close(4) = 0

kill(22955, SIGTERM) = 0

close(3) = -1 EBADF (Bad file descriptor)

close(4) = -1 EBADF (Bad file descriptor)

--- SIGCHLD {si\_signo=SIGCHLD, si\_code=CLD\_EXITED, si\_pid=22954, si\_uid=1000, si\_status=0, si\_utime=0, si\_stime=0} ---

munmap(0x7f063c2cf000, 32) = 0

--- SIGCHLD {si\_signo=SIGCHLD, si\_code=CLD\_EXITED, si\_pid=22955, si\_uid=1000, si\_status=0, si\_utime=0, si\_stime=0} ---

unlink("/dev/shm/sem.semafor1") = 0

munmap(0x7f063c295000, 32) = 0

unlink("/dev/shm/sem.semafor2") = 0

munmap(0x7f063c294000, 32) = 0

unlink("/dev/shm/sem.semafor3") = 0

lseek(0, -1, SEEK\_CUR) = -1 ESPIPE (Illegal seek)

exit\_group(0) = ?

+++ exited with 0 +++

**Лабораторная 4:**

alex@alex-HP-ENVY-x360-Convertible-13-ay1xxx:~/Desktop/OSLabs/lab4$ strace

./main1

execve("./main1", ["./main1"], 0x7ffe17d74ac0 /\* 87 vars \*/) = 0

brk(NULL) = 0x5621f5960000

arch\_prctl(0x3001 /\* ARCH\_??? \*/, 0x7ffedf45dd10) = -1 EINVAL (Invalid argument)

mmap(NULL, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|

MAP\_ANONYMOUS, -1, 0) = 0x7ffade009000

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=70887, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 70887, PROT\_READ, MAP\_PRIVATE, 3, 0) = 0x7ffaddff7000

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\302\211\332Pq\

2439\235\350\223\322\257\201\326\243\f"..., 68, 896) = 68

newfstatat(3, "", {st\_mode=S\_IFREG|0755, st\_size=2220400, ...}, 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, 2264656, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) =

0x7ffaddc00000

mprotect(0x7ffaddc28000, 2023424, PROT\_NONE) = 0

mmap(0x7ffaddc28000, 1658880, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|

MAP\_FIXED|MAP\_DENYWRITE, 3, 0x28000) = 0x7ffaddc28000

mmap(0x7ffadddbd000, 360448, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|

MAP\_DENYWRITE, 3, 0x1bd000) = 0x7ffadddbd000

mmap(0x7ffadde16000, 24576, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|

MAP\_FIXED|MAP\_DENYWRITE, 3, 0x215000) = 0x7ffadde16000

mmap(0x7ffadde1c000, 52816, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|

MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7ffadde1c000

close(3) = 0

mmap(NULL, 12288, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|

MAP\_ANONYMOUS, -1, 0) = 0x7ffaddff4000

arch\_prctl(ARCH\_SET\_FS, 0x7ffaddff4740) = 0

set\_tid\_address(0x7ffaddff4a10) = 6521

set\_robust\_list(0x7ffaddff4a20, 24) = 0

rseq(0x7ffaddff50e0, 0x20, 0, 0x53053053) = 0

mprotect(0x7ffadde16000, 16384, PROT\_READ) = 0

mprotect(0x5621f47c0000, 4096, PROT\_READ) = 0

mprotect(0x7ffade043000, 8192, PROT\_READ) = 0

prlimit64(0, RLIMIT\_STACK, NULL, {rlim\_cur=8192\*1024,

rlim\_max=RLIM64\_INFINITY}) = 0

munmap(0x7ffaddff7000, 70887) = 0

newfstatat(0, "", {st\_mode=S\_IFCHR|0620, st\_rdev=makedev(0x88, 0), ...},

AT\_EMPTY\_PATH) = 0

getrandom("\xc1\x6a\xbe\x55\x5d\xa4\xb4\xc8", 8, GRND\_NONBLOCK) = 8

brk(NULL) = 0x5621f5960000

brk(0x5621f5981000) = 0x5621f5981000

read(0, 1

"1\n", 1024) = 2

newfstatat(1, "", {st\_mode=S\_IFCHR|0620, st\_rdev=makedev(0x88, 0), ...},

AT\_EMPTY\_PATH) = 0

write(1, "Your choice: prime count\n", 25Your choice: prime count

) = 25

write(1, " Please, enter 2 numbers: ", 26 Please, enter 2 numbers: ) = 26

read(0, 1

"1\n", 1024) = 2

read(0, 5

"5\n", 1024) = 2

write(1, "Naive implement: 3\n", 19Naive implement: 3

) = 19

write(1, "Eratosthenes method: 3\n", 23Eratosthenes method: 3

) = 23

read(0, "", 1024) = 0

exit\_group(0) = ?

+++ exited with 0 +++

alex@alex-HP-ENVY-x360-Convertible-13-ay1xxx:~/Desktop/OSLabs/lab4$ strace

./main2

execve("./main2", ["./main2"], 0x7ffdbc23fdc0 /\* 87 vars \*/) = 0

brk(NULL) = 0x561cadc45000

arch\_prctl(0x3001 /\* ARCH\_??? \*/, 0x7ffc1e8f7f90) = -1 EINVAL (Invalid argument)

mmap(NULL, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|

MAP\_ANONYMOUS, -1, 0) = 0x7fa100041000

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=70887, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 70887, PROT\_READ, MAP\_PRIVATE, 3, 0) = 0x7fa10002f000

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\302\211\332Pq\

2439\235\350\223\322\257\201\326\243\f"..., 68, 896) = 68

newfstatat(3, "", {st\_mode=S\_IFREG|0755, st\_size=2220400, ...}, 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, 2264656, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) =

0x7fa0ffe00000

mprotect(0x7fa0ffe28000, 2023424, PROT\_NONE) = 0

mmap(0x7fa0ffe28000, 1658880, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|

MAP\_FIXED|MAP\_DENYWRITE, 3, 0x28000) = 0x7fa0ffe28000

mmap(0x7fa0fffbd000, 360448, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|

MAP\_DENYWRITE, 3, 0x1bd000) = 0x7fa0fffbd000

mmap(0x7fa100016000, 24576, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|

MAP\_FIXED|MAP\_DENYWRITE, 3, 0x215000) = 0x7fa100016000

mmap(0x7fa10001c000, 52816, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|

MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7fa10001c000

close(3) = 0

mmap(NULL, 12288, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|

MAP\_ANONYMOUS, -1, 0) = 0x7fa10002c000

arch\_prctl(ARCH\_SET\_FS, 0x7fa10002c740) = 0

set\_tid\_address(0x7fa10002ca10) = 7384

set\_robust\_list(0x7fa10002ca20, 24) = 0

rseq(0x7fa10002d0e0, 0x20, 0, 0x53053053) = 0

mprotect(0x7fa100016000, 16384, PROT\_READ) = 0

mprotect(0x561cadb4c000, 4096, PROT\_READ) = 0

mprotect(0x7fa10007b000, 8192, PROT\_READ) = 0

prlimit64(0, RLIMIT\_STACK, NULL, {rlim\_cur=8192\*1024,

rlim\_max=RLIM64\_INFINITY}) = 0

munmap(0x7fa10002f000, 70887) = 0

newfstatat(0, "", {st\_mode=S\_IFCHR|0620, st\_rdev=makedev(0x88, 0), ...},

AT\_EMPTY\_PATH) = 0

getrandom("\xdc\xe0\xc2\x51\x92\x11\xcb\x45", 8, GRND\_NONBLOCK) = 8

brk(NULL) = 0x561cadc45000

brk(0x561cadc66000) = 0x561cadc66000

read(0, 2

"2\n", 1024) = 2

newfstatat(1, "", {st\_mode=S\_IFCHR|0620, st\_rdev=makedev(0x88, 0), ...},

AT\_EMPTY\_PATH) = 0

write(1, "Your choice: calculate Euler's n"..., 38Your choice: calculate Euler's number

) = 38

openat(AT\_FDCWD, "./lib2.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|0664, st\_size=15424, ...}, AT\_EMPTY\_PATH) = 0

getcwd("/home/alex/Desktop/OSLabs/lab4", 128) = 31

mmap(NULL, 16432, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) =

0x7fa10003c000

mmap(0x7fa10003d000, 4096, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|

MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1000) = 0x7fa10003d000

mmap(0x7fa10003e000, 4096, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|

MAP\_DENYWRITE, 3, 0x2000) = 0x7fa10003e000

mmap(0x7fa10003f000, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|

MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2000) = 0x7fa10003f000

close(3) = 0

mprotect(0x7fa10003f000, 4096, PROT\_READ) = 0

write(1, " Please, enter 1 number: ", 25 Please, enter 1 number: ) = 25

read(0, 2

"2\n", 1024) = 2

write(1, "(1 + 1 / x) ^ x method: 2.718282"..., 33(1 + 1 / x) ^ x method: 2.718282

) = 33

write(1, "Sum of series method: 2.718282\n", 31Sum of series method: 2.718282

) = 31

munmap(0x7fa10003c000, 16432) = 0

lseek(0, -1, SEEK\_CUR) = -1 ESPIPE (Illegal seek)

exit\_group(0) = ?

+++ exited with 0 +++

**Лабораторная 5-7:**

alex@alex-HP-ENVY-x360-Convertible-13-ay1xxx:~/Desktop/OSLabs/lab5-7/build$ strace ./control

execve("./control", ["./control"], 0x7ffe6a3041b0 /\* 87 vars \*/) = 0

brk(NULL) = 0x557ec6978000

arch\_prctl(0x3001 /\* ARCH\_??? \*/, 0x7ffe9a80cda0) = -1 EINVAL (Invalid argument)

mmap(NULL, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) = 0x7f40ac220000

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=73283, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 73283, PROT\_READ, MAP\_PRIVATE, 3, 0) = 0x7f40ac20e000

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\0\0\0\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=583920, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 585912, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f40ac17e000

mmap(0x7f40ac196000, 364544, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x18000) = 0x7f40ac196000

mmap(0x7f40ac1ef000, 90112, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x71000) = 0x7f40ac1ef000

mmap(0x7f40ac205000, 36864, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x86000) = 0x7f40ac205000

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) = 0x7f40abe00000

mprotect(0x7f40abe9a000, 1576960, PROT\_NONE) = 0

mmap(0x7f40abe9a000, 1118208, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x9a000) = 0x7f40abe9a000

mmap(0x7f40abfab000, 454656, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1ab000) = 0x7f40abfab000

mmap(0x7f40ac01b000, 57344, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x21a000) = 0x7f40ac01b000

mmap(0x7f40ac029000, 10432, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f40ac029000

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) = 0x7f40ac15e000

mmap(0x7f40ac161000, 94208, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x3000) = 0x7f40ac161000

mmap(0x7f40ac178000, 16384, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1a000) = 0x7f40ac178000

mmap(0x7f40ac17c000, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1d000) = 0x7f40ac17c000

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\302\211\332Pq\2439\235\350\223\322\257\201\326\243\f"..., 68, 896) = 68

newfstatat(3, "", {st\_mode=S\_IFREG|0755, st\_size=2220400, ...}, 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, 2264656, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f40aba00000

mprotect(0x7f40aba28000, 2023424, PROT\_NONE) = 0

mmap(0x7f40aba28000, 1658880, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x28000) = 0x7f40aba28000

mmap(0x7f40abbbd000, 360448, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1bd000) = 0x7f40abbbd000

mmap(0x7f40abc16000, 24576, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x215000) = 0x7f40abc16000

mmap(0x7f40abc1c000, 52816, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f40abc1c000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libunwind.so.8", 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=63744, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 109264, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f40ac143000

mmap(0x7f40ac145000, 40960, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2000) = 0x7f40ac145000

mmap(0x7f40ac14f000, 12288, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xc000) = 0x7f40ac14f000

mmap(0x7f40ac152000, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xe000) = 0x7f40ac152000

mmap(0x7f40ac154000, 39632, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f40ac154000

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) = 0x7f40ac0eb000

mprotect(0x7f40ac0f7000, 303104, PROT\_NONE) = 0

mmap(0x7f40ac0f7000, 229376, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xc000) = 0x7f40ac0f7000

mmap(0x7f40ac12f000, 69632, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x44000) = 0x7f40ac12f000

mmap(0x7f40ac141000, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x55000) = 0x7f40ac141000

close(3) = 0

mmap(NULL, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) = 0x7f40ac0e9000

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) = 0x7f40ac098000

mmap(0x7f40ac09c000, 172032, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4000) = 0x7f40ac09c000

mmap(0x7f40ac0c6000, 118784, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2e000) = 0x7f40ac0c6000

mmap(0x7f40ac0e3000, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4a000) = 0x7f40ac0e3000

mmap(0x7f40ac0e5000, 14416, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f40ac0e5000

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) = 0x7f40abcd5000

mprotect(0x7f40abcdf000, 446464, PROT\_NONE) = 0

mmap(0x7f40abcdf000, 286720, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xa000) = 0x7f40abcdf000

mmap(0x7f40abd25000, 155648, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x50000) = 0x7f40abd25000

mmap(0x7f40abd4c000, 16384, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x76000) = 0x7f40abd4c000

mmap(0x7f40abd50000, 719360, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f40abd50000

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) = 0x7f40ac044000

mprotect(0x7f40ac04f000, 282624, PROT\_NONE) = 0

mmap(0x7f40ac04f000, 229376, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xb000) = 0x7f40ac04f000

mmap(0x7f40ac087000, 49152, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x43000) = 0x7f40ac087000

mmap(0x7f40ac094000, 16384, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4f000) = 0x7f40ac094000

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) = 0x7f40ab919000

mmap(0x7f40ab927000, 507904, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xe000) = 0x7f40ab927000

mmap(0x7f40ab9a3000, 372736, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x8a000) = 0x7f40ab9a3000

mmap(0x7f40ab9fe000, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xe4000) = 0x7f40ab9fe000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/liblzma.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\0\0\0\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=170456, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 172296, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f40abcaa000

mmap(0x7f40abcad000, 110592, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x3000) = 0x7f40abcad000

mmap(0x7f40abcc8000, 45056, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1e000) = 0x7f40abcc8000

mmap(0x7f40abcd3000, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x28000) = 0x7f40abcd3000

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) = 0x7f40ac042000

mmap(NULL, 16424, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f40ac03d000

mmap(0x7f40ac03e000, 4096, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1000) = 0x7f40ac03e000

mmap(0x7f40ac03f000, 4096, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2000) = 0x7f40ac03f000

mmap(0x7f40ac040000, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2000) = 0x7f40ac040000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libkrb5.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\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) = 0x7f40ab84e000

mprotect(0x7f40ab86f000, 634880, PROT\_NONE) = 0

mmap(0x7f40ab86f000, 380928, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x21000) = 0x7f40ab86f000

mmap(0x7f40ab8cc000, 249856, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x7e000) = 0x7f40ab8cc000

mmap(0x7f40ab90a000, 61440, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xbb000) = 0x7f40ab90a000

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\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) = 0x7f40abc7b000

mprotect(0x7f40abc7f000, 163840, PROT\_NONE) = 0

mmap(0x7f40abc7f000, 110592, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4000) = 0x7f40abc7f000

mmap(0x7f40abc9a000, 49152, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1f000) = 0x7f40abc9a000

mmap(0x7f40abca7000, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2b000) = 0x7f40abca7000

mmap(0x7f40abca9000, 56, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f40abca9000

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\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) = 0x7f40ac037000

mmap(0x7f40ac039000, 4096, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2000) = 0x7f40ac039000

mmap(0x7f40ac03a000, 4096, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x3000) = 0x7f40ac03a000

mmap(0x7f40ac03b000, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x3000) = 0x7f40ac03b000

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\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) = 0x7f40abc6d000

mprotect(0x7f40abc70000, 36864, PROT\_NONE) = 0

mmap(0x7f40abc70000, 24576, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x3000) = 0x7f40abc70000

mmap(0x7f40abc76000, 8192, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x9000) = 0x7f40abc76000

mmap(0x7f40abc79000, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xb000) = 0x7f40abc79000

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) = 0x7f40ac035000

mmap(NULL, 24592, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f40ac02e000

mmap(0x7f40ac030000, 8192, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2000) = 0x7f40ac030000

mmap(0x7f40ac032000, 4096, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4000) = 0x7f40ac032000

mmap(0x7f40ac033000, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4000) = 0x7f40ac033000

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) = 0x7f40abc59000

mmap(0x7f40abc5c000, 40960, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x3000) = 0x7f40abc5c000

mmap(0x7f40abc66000, 12288, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xd000) = 0x7f40abc66000

mmap(0x7f40abc69000, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xf000) = 0x7f40abc69000

mmap(0x7f40abc6b000, 6728, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f40abc6b000

close(3) = 0

mmap(NULL, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) = 0x7f40ac02c000

mmap(NULL, 12288, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) = 0x7f40abc56000

arch\_prctl(ARCH\_SET\_FS, 0x7f40abc569c0) = 0

set\_tid\_address(0x7f40abc56c90) = 31720

set\_robust\_list(0x7f40abc56ca0, 24) = 0

rseq(0x7f40abc57360, 0x20, 0, 0x53053053) = 0

mprotect(0x7f40abc16000, 16384, PROT\_READ) = 0

mprotect(0x7f40abc69000, 4096, PROT\_READ) = 0

mprotect(0x7f40ac033000, 4096, PROT\_READ) = 0

mprotect(0x7f40abc79000, 4096, PROT\_READ) = 0

mprotect(0x7f40ac03b000, 4096, PROT\_READ) = 0

mprotect(0x7f40abca7000, 4096, PROT\_READ) = 0

mprotect(0x7f40ab90a000, 53248, PROT\_READ) = 0

mprotect(0x7f40ac040000, 4096, PROT\_READ) = 0

mprotect(0x7f40abcd3000, 4096, PROT\_READ) = 0

mprotect(0x7f40ab9fe000, 4096, PROT\_READ) = 0

mprotect(0x7f40ac094000, 8192, PROT\_READ) = 0

mprotect(0x7f40ac17c000, 4096, PROT\_READ) = 0

mmap(NULL, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) = 0x7f40abc54000

mprotect(0x7f40ac01b000, 45056, PROT\_READ) = 0

mprotect(0x7f40abd4c000, 12288, PROT\_READ) = 0

mprotect(0x7f40ac0e3000, 4096, PROT\_READ) = 0

mprotect(0x7f40ac141000, 4096, PROT\_READ) = 0

mprotect(0x7f40ac152000, 4096, PROT\_READ) = 0

mprotect(0x7f40ac205000, 32768, PROT\_READ) = 0

mprotect(0x557ec49c1000, 4096, PROT\_READ) = 0

mprotect(0x7f40ac25a000, 8192, PROT\_READ) = 0

prlimit64(0, RLIMIT\_STACK, NULL, {rlim\_cur=8192\*1024, rlim\_max=RLIM64\_INFINITY}) = 0

munmap(0x7f40ac20e000, 73283) = 0

getrandom("\xe4\x5a\x47\x24\x20\x72\x9a\xb3", 8, GRND\_NONBLOCK) = 8

brk(NULL) = 0x557ec6978000

brk(0x557ec6999000) = 0x557ec6999000

futex(0x7f40ac02977c, FUTEX\_WAKE\_PRIVATE, 2147483647) = 0

newfstatat(1, "", {st\_mode=S\_IFCHR|0620, st\_rdev=makedev(0x88, 0), ...}, AT\_EMPTY\_PATH) = 0

write(1, "Menu:\n", 6Menu:

) = 6

write(1, "\t-create <child\_id> <parent\_id> "..., 52 -create <child\_id> <parent\_id> - create a new node

) = 52

write(1, "\t-exec <id> <KEY> <VALUE> - save"..., 84 -exec <id> <KEY> <VALUE> - save value in the local dictionary or print saved value

) = 84

write(1, "\t-print <id> - print the content"..., 58 -print <id> - print the contents of the local dictionary

) = 58

write(1, "\t-pingall - availability check\n", 31 -pingall - availability check

) = 31

write(1, "\t-exit - stop programm\n", 23 -exit - stop programm

) = 23

write(1, "Enter your command:\n", 20Enter your command:

) = 20

newfstatat(0, "", {st\_mode=S\_IFCHR|0620, st\_rdev=makedev(0x88, 0), ...}, AT\_EMPTY\_PATH) = 0

read(0, create 1 -1

"create 1 -1\n", 1024) = 12

clone(child\_stack=NULL, flags=CLONE\_CHILD\_CLEARTID|CLONE\_CHILD\_SETTID|SIGCHLD, child\_tidptr=0x7f40abc56c90) = 31739

read(0, Ok: 31739

create 2 1

"create 2 1\n", 1024) = 11

clone(child\_stack=NULL, flags=CLONE\_CHILD\_CLEARTID|CLONE\_CHILD\_SETTID|SIGCHLD, child\_tidptr=0x7f40abc56c90) = 31788

read(0, Ok: 31788

create 3 1

"create 3 1\n", 1024) = 11

clone(child\_stack=NULL, flags=CLONE\_CHILD\_CLEARTID|CLONE\_CHILD\_SETTID|SIGCHLD, child\_tidptr=0x7f40abc56c90) = 31863

read(0, Ok: 31863

exec 3 a 123

"exec 3 a 123\n", 1024) = 13

openat(AT\_FDCWD, "/sys/devices/system/cpu/online", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "0-11\n", 1024) = 5

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, 0x557ec698a820 /\* 30 entries \*/, 32768) = 864

getdents64(3, 0x557ec698a820 /\* 0 entries \*/, 32768) = 0

close(3) = 0

getpid() = 31720

sched\_getaffinity(31720, 128, [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11]) = 8

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=73283, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 73283, PROT\_READ, MAP\_PRIVATE, 3, 0) = 0x7f40ac20e000

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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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", 0x7ffe9a809670, 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(0x7f40ac20e000, 73283) = 0

openat(AT\_FDCWD, "/etc/ld.so.cache", O\_RDONLY|O\_CLOEXEC) = 3

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=73283, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 73283, PROT\_READ, MAP\_PRIVATE, 3, 0) = 0x7f40ac20e000

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(0x7f40ac20e000, 73283) = 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() = 31720

getpid() = 31720

getrandom("\x0e\xd8\xb5\x9a\x1a\x2b\xe5\x47\xb2\x7d\xe9\xdb\x0e\xb9\x06\xaa", 16, 0) = 16

getrandom("\x57\x61\xa4\xcc\xcc\xc2\x98\x1a\x6f\xe7\x18\x5f\x89\x4b\x0c\xdc", 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() = 31720

epoll\_create1(EPOLL\_CLOEXEC) = 5

epoll\_ctl(5, EPOLL\_CTL\_ADD, 4, {events=0, data={u32=3331893120, u64=94002986133376}}) = 0

epoll\_ctl(5, EPOLL\_CTL\_MOD, 4, {events=EPOLLIN, data={u32=3331893120, u64=94002986133376}}) = 0

getpid() = 31720

rt\_sigaction(SIGRT\_1, {sa\_handler=0x7f40aba91870, sa\_mask=[], sa\_flags=SA\_RESTORER|SA\_ONSTACK|SA\_RESTART|SA\_SIGINFO, sa\_restorer=0x7f40aba42520}, 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) = 0x7f40ab04d000

mprotect(0x7f40ab04e000, 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=0x7f40ab84d910, parent\_tid=0x7f40ab84d910, exit\_signal=0, stack=0x7f40ab04d000, stack\_size=0x7ffc80, tls=0x7f40ab84d640} => {parent\_tid=[31947]}, 88) = 31947

rt\_sigprocmask(SIG\_SETMASK, [], NULL, 8) = 0

eventfd2(0, EFD\_CLOEXEC) = 6

fcntl(6, F\_GETFL) = 0x2 (flags O\_RDWR)

fcntl(6, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

fcntl(6, F\_GETFL) = 0x802 (flags O\_RDWR|O\_NONBLOCK)

fcntl(6, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

getpid() = 31720

epoll\_create1(EPOLL\_CLOEXEC) = 7

epoll\_ctl(7, EPOLL\_CTL\_ADD, 6, {events=0, data={u32=3331916592, u64=94002986156848}}) = 0

epoll\_ctl(7, EPOLL\_CTL\_MOD, 6, {events=EPOLLIN, data={u32=3331916592, u64=94002986156848}}) = 0

mmap(NULL, 8392704, PROT\_NONE, MAP\_PRIVATE|MAP\_ANONYMOUS|MAP\_STACK, -1, 0) = 0x7f40aa84c000

mprotect(0x7f40aa84d000, 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=0x7f40ab04c910, parent\_tid=0x7f40ab04c910, exit\_signal=0, stack=0x7f40aa84c000, stack\_size=0x7ffc80, tls=0x7f40ab04c640} => {parent\_tid=[31948]}, 88) = 31948

rt\_sigprocmask(SIG\_SETMASK, [], NULL, 8) = 0

eventfd2(0, EFD\_CLOEXEC) = 8

fcntl(8, F\_GETFL) = 0x2 (flags O\_RDWR)

fcntl(8, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

fcntl(8, F\_GETFL) = 0x802 (flags O\_RDWR|O\_NONBLOCK)

fcntl(8, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

getpid() = 31720

getpid() = 31720

poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)

brk(0x557ec69ba000) = 0x557ec69ba000

futex(0x7f40ac029788, FUTEX\_WAKE\_PRIVATE, 2147483647) = 0

getpid() = 31720

write(6, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

write(8, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

poll([{fd=8, events=POLLIN}], 1, 0) = 1 ([{fd=8, revents=POLLIN}])

getpid() = 31720

read(8, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)

getpid() = 31720

poll([{fd=8, events=POLLIN}], 1, -1) = 1 ([{fd=8, revents=POLLIN}])

getpid() = 31720

read(8, "\1\0\0\0\0\0\0\0", 8) = 8

getpid(Node 3: key awas saved with value 123

) = 31720

poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)

getpid() = 31720

poll([{fd=8, events=POLLIN}], 1, -1) = 1 ([{fd=8, revents=POLLIN}])

getpid() = 31720

read(8, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)

getpid() = 31720

write(6, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

write(4, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

getpid() = 31720

write(8, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

poll([{fd=3, events=POLLIN}], 1, -1) = 1 ([{fd=3, revents=POLLIN}])

getpid() = 31720

read(3, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

write(6, "\1\0\0\0\0\0\0\0", 8) = 8

futex(0x7f40ab04c910, FUTEX\_WAIT\_BITSET|FUTEX\_CLOCK\_REALTIME, 31948, NULL, FUTEX\_BITSET\_MATCH\_ANY) = -1 EAGAIN (Resource temporarily unavailable)

close(7) = 0

close(6) = 0

close(5) = 0

close(4) = 0

close(3) = 0

read(0, exec 3 b 321

"exec 3 b 321\n", 1024) = 13

openat(AT\_FDCWD, "/sys/devices/system/cpu/online", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "0-11\n", 1024) = 5

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, 0x557ec6991970 /\* 30 entries \*/, 32768) = 864

getdents64(3, 0x557ec6991970 /\* 0 entries \*/, 32768) = 0

close(3) = 0

getpid() = 31720

sched\_getaffinity(31720, 128, [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11]) = 8

newfstatat(AT\_FDCWD, "/etc/nsswitch.conf", {st\_mode=S\_IFREG|0644, st\_size=542, ...}, 0) = 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() = 31720

getpid() = 31720

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() = 31720

epoll\_create1(EPOLL\_CLOEXEC) = 5

epoll\_ctl(5, EPOLL\_CTL\_ADD, 4, {events=0, data={u32=3331920416, u64=94002986160672}}) = 0

epoll\_ctl(5, EPOLL\_CTL\_MOD, 4, {events=EPOLLIN, data={u32=3331920416, u64=94002986160672}}) = 0

getpid() = 31720

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=0x7f40ab84d910, parent\_tid=0x7f40ab84d910, exit\_signal=0, stack=0x7f40ab04d000, stack\_size=0x7ffc80, tls=0x7f40ab84d640} => {parent\_tid=[32003]}, 88) = 32003

rt\_sigprocmask(SIG\_SETMASK, [], NULL, 8) = 0

eventfd2(0, EFD\_CLOEXEC) = 6

fcntl(6, F\_GETFL) = 0x2 (flags O\_RDWR)

fcntl(6, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

fcntl(6, F\_GETFL) = 0x802 (flags O\_RDWR|O\_NONBLOCK)

fcntl(6, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

getpid() = 31720

epoll\_create1(EPOLL\_CLOEXEC) = 7

epoll\_ctl(7, EPOLL\_CTL\_ADD, 6, {events=0, data={u32=3331920384, u64=94002986160640}}) = 0

epoll\_ctl(7, EPOLL\_CTL\_MOD, 6, {events=EPOLLIN, data={u32=3331920384, u64=94002986160640}}) = 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=0x7f40ab04c910, parent\_tid=0x7f40ab04c910, exit\_signal=0, stack=0x7f40aa84c000, stack\_size=0x7ffc80, tls=0x7f40ab04c640} => {parent\_tid=[32004]}, 88) = 32004

rt\_sigprocmask(SIG\_SETMASK, [], NULL, 8) = 0

eventfd2(0, EFD\_CLOEXEC) = 8

fcntl(8, F\_GETFL) = 0x2 (flags O\_RDWR)

fcntl(8, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

fcntl(8, F\_GETFL) = 0x802 (flags O\_RDWR|O\_NONBLOCK)

fcntl(8, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

getpid() = 31720

getpid() = 31720

poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)

getpid() = 31720

write(6, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

write(8, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

poll([{fd=8, events=POLLIN}], 1, 0) = 1 ([{fd=8, revents=POLLIN}])

getpid() = 31720

read(8, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)

getpid() = 31720

poll([{fd=8, events=POLLIN}], 1, -1) = 1 ([{fd=8, revents=POLLIN}])

getpid() = 31720

read(8, "\1\0\0\0\0\0\0\0", 8) = 8

Node 3: key bwas saved with value 321

getpid() = 31720

poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)

getpid() = 31720

poll([{fd=8, events=POLLIN}], 1, -1) = 1 ([{fd=8, revents=POLLIN}])

getpid() = 31720

read(8, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)

getpid() = 31720

write(6, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

write(4, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

getpid() = 31720

write(8, "\1\0\0\0\0\0\0\0", 8) = 8

futex(0x557ec698aca8, FUTEX\_WAKE\_PRIVATE, 1) = 1

getpid() = 31720

poll([{fd=3, events=POLLIN}], 1, -1) = 1 ([{fd=3, revents=POLLIN}])

getpid() = 31720

read(3, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

write(6, "\1\0\0\0\0\0\0\0", 8) = 8

futex(0x7f40ab04c910, FUTEX\_WAIT\_BITSET|FUTEX\_CLOCK\_REALTIME, 32004, NULL, FUTEX\_BITSET\_MATCH\_ANY) = -1 EAGAIN (Resource temporarily unavailable)

close(7) = 0

close(6) = 0

close(5) = 0

close(4) = 0

close(3) = 0

read(0, print 3

"print 3\n", 1024) = 8

openat(AT\_FDCWD, "/sys/devices/system/cpu/online", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "0-11\n", 1024) = 5

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, 0x557ec699e0d0 /\* 30 entries \*/, 32768) = 864

getdents64(3, 0x557ec699e0d0 /\* 0 entries \*/, 32768) = 0

close(3) = 0

getpid() = 31720

sched\_getaffinity(31720, 128, [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11]) = 8

newfstatat(AT\_FDCWD, "/etc/nsswitch.conf", {st\_mode=S\_IFREG|0644, st\_size=542, ...}, 0) = 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() = 31720

getpid() = 31720

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() = 31720

epoll\_create1(EPOLL\_CLOEXEC) = 5

epoll\_ctl(5, EPOLL\_CTL\_ADD, 4, {events=0, data={u32=3331956720, u64=94002986196976}}) = 0

epoll\_ctl(5, EPOLL\_CTL\_MOD, 4, {events=EPOLLIN, data={u32=3331956720, u64=94002986196976}}) = 0

getpid() = 31720

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=0x7f40ab84d910, parent\_tid=0x7f40ab84d910, exit\_signal=0, stack=0x7f40ab04d000, stack\_size=0x7ffc80, tls=0x7f40ab84d640} => {parent\_tid=[32046]}, 88) = 32046

rt\_sigprocmask(SIG\_SETMASK, [], NULL, 8) = 0

eventfd2(0, EFD\_CLOEXEC) = 6

fcntl(6, F\_GETFL) = 0x2 (flags O\_RDWR)

fcntl(6, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

fcntl(6, F\_GETFL) = 0x802 (flags O\_RDWR|O\_NONBLOCK)

fcntl(6, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

getpid() = 31720

epoll\_create1(EPOLL\_CLOEXEC) = 7

epoll\_ctl(7, EPOLL\_CTL\_ADD, 6, {events=0, data={u32=3331916624, u64=94002986156880}}) = 0

epoll\_ctl(7, EPOLL\_CTL\_MOD, 6, {events=EPOLLIN, data={u32=3331916624, u64=94002986156880}}) = 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=0x7f40ab04c910, parent\_tid=0x7f40ab04c910, exit\_signal=0, stack=0x7f40aa84c000, stack\_size=0x7ffc80, tls=0x7f40ab04c640} => {parent\_tid=[32047]}, 88) = 32047

rt\_sigprocmask(SIG\_SETMASK, [], NULL, 8) = 0

eventfd2(0, EFD\_CLOEXEC) = 8

fcntl(8, F\_GETFL) = 0x2 (flags O\_RDWR)

fcntl(8, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

fcntl(8, F\_GETFL) = 0x802 (flags O\_RDWR|O\_NONBLOCK)

fcntl(8, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

getpid() = 31720

getpid() = 31720

poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)

getpid() = 31720

write(6, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

write(8, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

poll([{fd=8, events=POLLIN}], 1, 0) = 1 ([{fd=8, revents=POLLIN}])

getpid() = 31720

read(8, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)

getpid() = 31720

write(6, "\1\0\0\0\0\0\0\0", 8) = 8

getpid(Node 3: content of the dictionary:

[a] = 123;

[b] = 321;

) = 31720

poll([{fd=8, events=POLLIN}], 1, -1) = 1 ([{fd=8, revents=POLLIN}])

getpid() = 31720

read(8, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)

getpid() = 31720

write(6, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

write(4, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

getpid() = 31720

write(8, "\1\0\0\0\0\0\0\0", 8) = 8

futex(0x557ec698aca8, FUTEX\_WAKE\_PRIVATE, 1) = 1

getpid() = 31720

poll([{fd=3, events=POLLIN}], 1, -1) = 1 ([{fd=3, revents=POLLIN}])

getpid() = 31720

read(3, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 31720

write(6, "\1\0\0\0\0\0\0\0", 8) = 8

futex(0x7f40ab04c910, FUTEX\_WAIT\_BITSET|FUTEX\_CLOCK\_REALTIME, 32047, NULL, FUTEX\_BITSET\_MATCH\_ANY) = -1 EAGAIN (Resource temporarily unavailable)

close(7) = 0

close(6) = 0

close(5) = 0

close(4) = 0

close(3) = 0

read(0, pingall

"pingall\n", 1024) = 8

write(1, "Ok: -1\n", 7Ok: -1

) = 7

read(0, exit

"exit\n", 1024) = 5

lseek(0, -1, SEEK\_CUR) = -1 ESPIPE (Illegal seek)

exit\_group(0) = ?

+++ exited with 0 +++

**Вывод**

Strace показывает нам все системные вызовы, которые выполняются программой. Это очень важно для отладки и диагностики программы программистом. Я уверен, что буду использовать его в будущем.