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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 и 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 ASCII-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;

- **-с** - подсчитывать количество ошибок, вызовов и время выполнения для каждого системного вызова;
- **-О** - добавить определённое количество микросекунд к счетчику времени для каждого вызова;
- **-S** - сортировать информацию выводимую при опции -с. 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

ЛР-1:

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execve("./main", ["/main"], 0x7ffcd66b0d18 /* 36 vars */) = 0
brk(NULL)                               = 0x565070f07000
arch_prctl(0x3001 /* ARCH_??? */, 0x7ffe5544dce0) = -1 EINVAL (Invalid argument)
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f4d8f6b4000
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=19095, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 19095, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7f4d8f6af000
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\3\0>\0\1\0\0\0P\237\2\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"..., 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"..., 48, 848) = 48
pread64(3, "\4\0\0\0\24\0\0\0\3\0\0\0GNU\0 =\340\256\3\265?\356\25x\261\27\313A#\350"..., 68, 896) = 68

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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"..., 784, 64) = 784
mmap(NULL, 2260560, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f4d8f487000
mmap(0x7f4d8f4af000, 1658880, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000) = 0x7f4d8f4af000
mmap(0x7f4d8f644000, 360448, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1bd000) = 0x7f4d8f644000
mmap(0x7f4d8f69c000, 24576, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x214000) = 0x7f4d8f69c000
mmap(0x7f4d8f6a2000, 52816, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f4d8f6a2000
close(3) = 0
mmap(NULL, 12288, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1,
0) = 0x7f4d8f484000
arch_prctl(ARCH_SET_FS, 0x7f4d8f484740) = 0
set_tid_address(0x7f4d8f484a10) = 140089
set_robust_list(0x7f4d8f484a20, 24) = 0
rseq(0x7f4d8f4850e0, 0x20, 0, 0x53053053) = 0
mprotect(0x7f4d8f69c000, 16384, PROT_READ) = 0
mprotect(0x565070598000, 4096, PROT_READ) = 0
mprotect(0x7f4d8f6ee000, 8192, PROT_READ) = 0
prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) =
0
munmap(0x7f4d8f6af000, 19095) = 0
write(1, "Enter the first filename with fi"..., 68Enter the first filename with file extension(.txt or
.doc or .rtf): ) = 68
getrandom("\x44\x70\x10\xe5\xe0\x87\x34\x53", 8, GRND_NONBLOCK) = 8
brk(NULL) = 0x565070f07000
brk(0x565070f28000) = 0x565070f28000
read(0, 1.txt
"1", 1) = 1
read(0, ".", 1) = 1
read(0, "t", 1) = 1
read(0, "x", 1) = 1
read(0, "t", 1) = 1
read(0, "\n", 1) = 1
openat(AT_FDCWD, "1.txt", O_WRONLY|O_CREAT|O_TRUNC, 0200) = 3
pipe2([4, 5], 0) = 0
pipe2([6, 7], 0) = 0
clone(child_stack=NULL,
flags=CLONE_CHILD_CLEARTID|CLONE_CHILD_SETTID|SIGCHLDstrace: Process
140161 attached, child_tidptr=0x7f4d8f484a10) = 140161
[pid 140161] set_robust_list(0x7f4d8f484a20, 24 <unfinished ...>
[pid 140089] write(1, "Enter the second filename with f"..., 69 <unfinished ...>
Enter the second filename with file extension(.txt or .doc or .rtf): [pid 140161] <... set_robust_list

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resumed>) = 0
[pid 140089] <... write resumed>    = 69
[pid 140161] close(5 <unfinished ...>
[pid 140089] read(0, <unfinished ...>
[pid 140161] <... close resumed>)    = 0
[pid 140161] close(6)                = 0
[pid 140161] close(7)                = 0


[pid 140161] dup2(4, 0)                = 0



[pid 140161] dup2(3, 1)                = 1



[pid 140161] dup2(3, 2)                = 2



[pid 140161] execve("./child_1", ["/.child_1"], 0x7ffe5544deb8 /* 36 vars */) = 0


[pid 140161] brk(NULL)                = 0x560f7ab33000
[pid 140161] arch_prectl(0x3001 /* ARCH_??? */, 0x7ffe950d9cc0) = -1 EINVAL (Invalid
argument)
[pid 140161] mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f4b38a42000
[pid 140161] access("/etc/ld.so.preload", R_OK) = -1 ENOENT (No such file or directory)
[pid 140161] openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC) = 5
[pid 140161] newfstatat(5, "", {st_mode=S_IFREG|0644, st_size=19095, ...}, AT_EMPTY_PATH)
= 0
[pid 140161] mmap(NULL, 19095, PROT_READ, MAP_PRIVATE, 5, 0) = 0x7f4b38a3d000
[pid 140161] close(5)                = 0
[pid 140161] openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6", O_RDONLY|O_CLOEXEC)
= 5
[pid 140161] read(5, "\177ELF\2\1\1\3\0\0\0\0\0\0\3\0>\0\1\0\0\0P\237\2\0\0\0\0"..., 832) =
832
[pid 140161] pread64(5, "\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"..., 784,
64) = 784
[pid 140161] pread64(5, "\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"..., 48,
848) = 48
[pid 140161] pread64(5, "\4\0\0\0\24\0\0\0\3\0\0\0GNU\0
=\340\256\3265?\356\25x\261\27\313A#\350"..., 68, 896) = 68
[pid 140161] newfstatat(5, "", {st_mode=S_IFREG|0755, st_size=2216304, ...},
AT_EMPTY_PATH) = 0
[pid 140161] pread64(5, "\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"..., 784,
64) = 784
[pid 140161] mmap(NULL, 2260560, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 5, 0)
= 0x7f4b38815000
[pid 140161] mmap(0x7f4b3883d000, 1658880, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 5, 0x28000) = 0x7f4b3883d000
[pid 140161] mmap(0x7f4b389d2000, 360448, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 5, 0x1bd000) = 0x7f4b389d2000
[pid 140161] mmap(0x7f4b38a2a000, 24576, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 5, 0x214000) = 0x7f4b38a2a000
[pid 140161] mmap(0x7f4b38a30000, 52816, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f4b38a30000

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[pid 140161] close(5) = 0
[pid 140161] mmap(NULL, 12288, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f4b38812000
[pid 140161] arch_prctl(ARCH_SET_FS, 0x7f4b38812740) = 0
[pid 140161] set_tid_address(0x7f4b38812a10) = 140161
[pid 140161] set_robust_list(0x7f4b38812a20, 24) = 0
[pid 140161] rseq(0x7f4b388130e0, 0x20, 0, 0x53053053) = 0
[pid 140161] mprotect(0x7f4b38a2a000, 16384, PROT_READ) = 0
[pid 140161] mprotect(0x560f79ce4000, 4096, PROT_READ) = 0
[pid 140161] mprotect(0x7f4b38a7c000, 8192, PROT_READ) = 0
[pid 140161] prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024,
rlim_max=RLIM64_INFINITY}) = 0
[pid 140161] munmap(0x7f4b38a3d000, 19095) = 0
[pid 140161] getRandom("\x97\x0b\x4c\xf9\x96\xa6\x4a\x3d", 8, GRND_NONBLOCK) = 8
[pid 140161] brk(NULL) = 0x560f7ab33000
[pid 140161] brk(0x560f7ab54000) = 0x560f7ab54000
[pid 140161] read(0, 2.txt
<unfinished ...>
[pid 140089] <... read resumed>"2", 1) = 1
[pid 140089] read(0, ".", 1) = 1
[pid 140089] read(0, "t", 1) = 1
[pid 140089] read(0, "x", 1) = 1
[pid 140089] read(0, "t", 1) = 1
[pid 140089] read(0, "\n", 1) = 1
[pid 140089] openat(AT_FDCWD, "2.txt", O_WRONLY|O_CREAT|O_TRUNC, 0200) = 8
[pid 140089] clone(child_stack=NULL,
flags=CLONE_CHILD_CLEARTID|CLONE_CHILD_SETTID|SIGCHLDstrace: Process
140168 attached, child_tidptr=0x7f4d8f484a10) = 140168
[pid 140168] set_robust_list(0x7f4d8f484a20, 24 <unfinished ...>
[pid 140089] close(4 <unfinished ...>
[pid 140168] <... set_robust_list resumed>) = 0
[pid 140168] close(3 <unfinished ...>
[pid 140089] <... close resumed>) = 0
[pid 140168] <... close resumed>) = 0
[pid 140089] close(6 <unfinished ...>
[pid 140168] close(4 <unfinished ...>
[pid 140089] <... close resumed>) = 0
[pid 140089] write(1, "Enter something you want: \0", 27 <unfinished ...>
Enter something you want: [pid 140168] <... close resumed>) = 0
[pid 140089] <... write resumed>) = 27
[pid 140168] close(5 <unfinished ...>
[pid 140089] read(0, <unfinished ...>
[pid 140168] <... close resumed>) = 0
[pid 140168] close(7) = 0
[pid 140168] dup2(6, 0) = 0
[pid 140168] dup2(8, 1) = 1

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[pid 140168] dup2(8, 2) = 2
[pid 140168] execve("./child_2", ["/child_2"], 0x7ffe5544deb8 /* 36 vars */) = 0
[pid 140168] brk(NULL) = 0x55a635099000
[pid 140168] arch_prctl(0x3001 /* ARCH_??? */, 0x7ffedb295600) = -1 EINVAL (Invalid
argument)
[pid 140168] mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f96c3193000
[pid 140168] access("/etc/ld.so.preload", R_OK) = -1 ENOENT (No such file or directory)
[pid 140168] openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC) = 3
[pid 140168] newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=19095, ...}, AT_EMPTY_PATH)
= 0
[pid 140168] mmap(NULL, 19095, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7f96c318e000
[pid 140168] close(3) = 0
[pid 140168] openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6", O_RDONLY|O_CLOEXEC)
= 3
[pid 140168] read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\3\0>\0\1\0\0\0P\237\2\0\0\0\0"..., 832) =
832
[pid 140168] 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"..., 784,
64) = 784
[pid 140168] 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"..., 48,
848) = 48
[pid 140168] 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
[pid 140168] newfstatat(3, "", {st_mode=S_IFREG|0755, st_size=2216304, ...},
AT_EMPTY_PATH) = 0
[pid 140168] 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"..., 784,
64) = 784
[pid 140168] mmap(NULL, 2260560, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0)
= 0x7f96c2f66000
[pid 140168] mmap(0x7f96c2f8e000, 1658880, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000) = 0x7f96c2f8e000
[pid 140168] mmap(0x7f96c3123000, 360448, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1bd000) = 0x7f96c3123000
[pid 140168] mmap(0x7f96c317b000, 24576, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x214000) = 0x7f96c317b000
[pid 140168] mmap(0x7f96c3181000, 52816, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f96c3181000
[pid 140168] close(3) = 0
[pid 140168] mmap(NULL, 12288, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f96c2f63000
[pid 140168] arch_prctl(ARCH_SET_FS, 0x7f96c2f63740) = 0
[pid 140168] set_tid_address(0x7f96c2f63a10) = 140168
[pid 140168] set_robust_list(0x7f96c2f63a20, 24) = 0
[pid 140168] rseq(0x7f96c2f640e0, 0x20, 0, 0x53053053) = 0
[pid 140168] mprotect(0x7f96c317b000, 16384, PROT_READ) = 0
[pid 140168] mprotect(0x55a6340f4000, 4096, PROT_READ) = 0

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[pid 140168] mprotect(0x7f96c31cd000, 8192, PROT_READ) = 0
[pid 140168] prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024,
rlim_max=RLIM64_INFINITY}) = 0
[pid 140168] munmap(0x7f96c318e000, 19095) = 0
[pid 140168] getrandom("\xa2\x06\xa6\xa9\x90\xdc\x2d\xb8", 8, GRND_NONBLOCK) = 8
[pid 140168] brk(NULL) = 0x55a635099000
[pid 140168] brk(0x55a6350ba000) = 0x55a6350ba000
[pid 140168] read(0, one
<unfinished ...>
[pid 140089] <... read resumed>"o", 1) = 1
[pid 140089] read(0, "n", 1) = 1
[pid 140089] read(0, "e", 1) = 1
[pid 140089] read(0, "\n", 1) = 1
[pid 140089] write(5, "one\n", 4) = 4
[pid 140161] <... read resumed>"o", 1) = 1
[pid 140089] write(7, "-\0", 2) = 2
[pid 140168] <... read resumed>"-", 1) = 1
[pid 140161] read(0, <unfinished ...>
[pid 140089] read(0, <unfinished ...>
[pid 140168] read(0, <unfinished ...>
[pid 140161] <... read resumed>"n", 1) = 1
[pid 140168] <... read resumed>"\0", 1) = 1
[pid 140161] read(0, <unfinished ...>
[pid 140168] read(0, <unfinished ...>
[pid 140161] <... read resumed>"e", 1) = 1
[pid 140161] read(0, "\n", 1) = 1
[pid 140161] write(1, "eno", 3) = 3
[pid 140161] read(0, two
<unfinished ...>
[pid 140089] <... read resumed>"t", 1) = 1
[pid 140089] read(0, "w", 1) = 1
[pid 140089] read(0, "o", 1) = 1
[pid 140089] read(0, "\n", 1) = 1
[pid 140089] write(5, "two\n", 4) = 4
[pid 140161] <... read resumed>"t", 1) = 1
[pid 140089] write(7, "-\0", 2) = 2
[pid 140168] <... read resumed>"-", 1) = 1
[pid 140161] read(0, <unfinished ...>
[pid 140089] read(0, <unfinished ...>
[pid 140161] <... read resumed>"w", 1) = 1
[pid 140168] read(0, <unfinished ...>
[pid 140161] read(0, <unfinished ...>
[pid 140168] <... read resumed>"\0", 1) = 1
[pid 140161] <... read resumed>"o", 1) = 1
[pid 140168] read(0, <unfinished ...>
[pid 140161] read(0, "\n", 1) = 1

```



```

[pid 140161] write(1, "owt", 3)      = 3
[pid 140161] read(0, three
<unfinished ...>
[pid 140089] <... read resumed>"t", 1) = 1
[pid 140089] read(0, "h", 1)        = 1
[pid 140089] read(0, "r", 1)        = 1
[pid 140089] read(0, "e", 1)        = 1
[pid 140089] read(0, "e", 1)        = 1
[pid 140089] read(0, "\n", 1)       = 1
[pid 140089] write(5, "three\n", 6) = 6
[pid 140161] <... read resumed>"t", 1) = 1
[pid 140089] write(7, "-\0", 2 <unfinished ...>
[pid 140161] read(0, "h", 1)        = 1
[pid 140089] <... write resumed>)    = 2
[pid 140168] <... read resumed>"-", 1) = 1
[pid 140089] read(0, <unfinished ...>
[pid 140168] read(0, <unfinished ...>
[pid 140161] read(0, "r", 1)        = 1
[pid 140168] <... read resumed>"\0", 1) = 1
[pid 140168] read(0, <unfinished ...>
[pid 140161] read(0, "e", 1)        = 1
[pid 140161] read(0, "e", 1)        = 1
[pid 140161] read(0, "\n", 1)       = 1
[pid 140161] write(1, "eerht", 5)    = 5
[pid 140161] read(0, four
<unfinished ...>
[pid 140089] <... read resumed>"f", 1) = 1
[pid 140089] read(0, "o", 1)        = 1
[pid 140089] read(0, "u", 1)        = 1
[pid 140089] read(0, "r", 1)        = 1
[pid 140089] read(0, " ", 1)        = 1
[pid 140089] read(0, "\n", 1)       = 1
[pid 140089] write(5, "four\n", 6)  = 6
[pid 140161] <... read resumed>"f", 1) = 1
[pid 140161] read(0, <unfinished ...>
[pid 140089] write(7, "-\0", 2 <unfinished ...>
[pid 140161] <... read resumed>"o", 1) = 1
[pid 140089] <... write resumed>)    = 2
[pid 140168] <... read resumed>"-", 1) = 1
[pid 140089] read(0, <unfinished ...>
[pid 140168] read(0, <unfinished ...>
[pid 140161] read(0, <unfinished ...>
[pid 140168] <... read resumed>"\0", 1) = 1
[pid 140161] <... read resumed>"u", 1) = 1
[pid 140168] read(0, <unfinished ...>
[pid 140161] read(0, "r", 1)        = 1

```

```

[pid 140161] read(0, " ", 1)      = 1
[pid 140161] read(0, "\n", 1)    = 1
[pid 140161] write(1, " ruof", 5) = 5
[pid 140161] read(0,
<unfinished ...>
[pid 140089] <... read resumed> "\n", 1) = 1
[pid 140089] close(5)              = 0
[pid 140161] <... read resumed> "", 1) = 0
[pid 140089] close(7 <unfinished ...>
[pid 140161] exit_group(0 <unfinished ...>
[pid 140089] <... close resumed>)    = 0
[pid 140168] <... read resumed> "", 1) = 0
[pid 140089] close(3 <unfinished ...>
[pid 140168] exit_group(0 <unfinished ...>
[pid 140161] <... exit_group resumed>) = ?
[pid 140089] <... close resumed>)    = 0
[pid 140168] <... exit_group resumed>) = ?
[pid 140089] close(0)              = 0
[pid 140089] write(1, "Programm was ended successfully!"..., 34) = 34
[pid 140089] write(1, "Programm was ended successfully!"..., 34) = 34

```

[pid 140168] +++ exited with 0 +++

```

[pid 140089] --- SIGCHLD {si_signo=SIGCHLD, si_code=CLD_EXITED, si_pid=140168,
si_uid=1000, si_status=0, si_utime=0, si_stime=0} ---
[pid 140089] exit_group(0)          = ?

```

[pid 140161] +++ exited with 0 +++

+++ exited with 0 +++

JP-2:

```

execve("./main", ["/main", "6"], 0x7ffc16adf5b0 /* 35 vars */) = 0
brk(NULL)                  = 0x55fa69f30000
arch_prctl(0x3001 /* ARCH_??? */, 0x7ffeda3f2810) = -1 EINVAL (Invalid argument)
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1,
0) = 0x7fb6bb6e0000
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=19739, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 19739, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7fb6bb6db000
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\3\0>\0\1\0\0\0P\237\2\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"..., 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"..., 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\0"..., 68,
896) = 68
newfstatat(3, "", {st_mode=S_IFREG|0755, st_size=2220400, ...}, 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"..., 784, 64) = 784
mmap(NULL, 2264656, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fb6bb4b2000
mprotect(0x7fb6bb4da000, 2023424, PROT_NONE) = 0
mmap(0x7fb6bb4da000, 1658880, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000) = 0x7fb6bb4da000
mmap(0x7fb6bb66f000, 360448, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1bd000) = 0x7fb6bb66f000
mmap(0x7fb6bb6c8000, 24576, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x215000) = 0x7fb6bb6c8000
mmap(0x7fb6bb6ce000, 52816, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7fb6bb6ce000
close(3) = 0
mmap(NULL, 12288, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1,
0) = 0x7fb6bb4af000
arch_prctl(ARCH_SET_FS, 0x7fb6bb4af740) = 0
set_tid_address(0x7fb6bb4afa10) = 8451
set_robust_list(0x7fb6bb4afa20, 24) = 0
rseq(0x7fb6bb4b00e0, 0x20, 0, 0x53053053) = 0
mprotect(0x7fb6bb6c8000, 16384, PROT_READ) = 0
mprotect(0x55fa21183000, 4096, PROT_READ) = 0
mprotect(0x7fb6bb71a000, 8192, PROT_READ) = 0
prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) =
0
munmap(0x7fb6bb6db000, 19739) = 0
clock_gettime(CLOCK_PROCESS_CPUTIME_ID, {tv_sec=1, tv_nsec=343580500}) = 0
rt_sigaction(SIGRT_1, {sa_handler=0x7fb6bb543870, sa_mask=[],
sa_flags=SA_RESTORER|SA_ONSTACK|SA_RESTART|SA_SIGINFO,
sa_restorer=0x7fb6bb4f4520}, 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) = 0x7fb6bacae000
mprotect(0x7fb6bacaf000, 8388608, PROT_READ|PROT_WRITE) = 0
getrandom("\xc6\x3e\x15\x6a\xde\xea\x91\x14", 8, GRND_NONBLOCK) = 8
brk(NULL) = 0x55fa69f30000
brk(0x55fa69f51000) = 0x55fa69f51000
rt_sigprocmask(SIG_BLOCK, ~[], [], 8) = 0

clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THR
EAD|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_
CLEARTID, child_tid=0x7fb6bb4ae910, parent_tid=0x7fb6bb4ae910, exit_signal=0,
stack=0x7fb6bacae000, stack_size=0x7fff00, tls=0x7fb6bb4ae640} => {parent_tid=[8469]},
88) = 8469
rt_sigprocmask(SIG_SETMASK, [], NULL, 8) = 0
mmap(NULL, 8392704, PROT_NONE, MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK,
-1, 0) = 0x7fb6ba4ad000
mprotect(0x7fb6ba4ae000, 8388608, PROT_READ|PROT_WRITE)
strace: Process 8469 attached

```

```

) = 0
[pid 8469] rseq(0x7fb6bb4aefe0, 0x20, 0, 0x53053053 <unfinished ...>
[pid 8451] rt_sigprocmask(SIG_BLOCK, ~[], [], 8) = 0
[pid 8451]
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THR
EAD|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD
CLEARTID, child_tid=0x7fb6bacad910, parent_tid=0x7fb6bacad910, exit_signal=0,
stack=0x7fb6ba4ad000, stack_size=0x7fff00, tls=0x7fb6bacad640} <unfinished ...>
[pid 8469] <... rseq resumed>) = 0
strace: Process 8470 attached
[pid 8469] set_robust_list(0x7fb6bb4ae920, 24 <unfinished ...>
[pid 8451] <... clone3 resumed> => {parent_tid=[8470]}, 88) = 8470
[pid 8451] rt_sigprocmask(SIG_SETMASK, [], <unfinished ...>
[pid 8470] rseq(0x7fb6bacadfe0, 0x20, 0, 0x53053053 <unfinished ...>
[pid 8469] <... set_robust_list resumed>) = 0
[pid 8470] <... rseq resumed>) = 0
[pid 8451] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 8469] rt_sigprocmask(SIG_SETMASK, [], <unfinished ...>
[pid 8451] mmap(NULL, 8392704, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0 <unfinished ...>
[pid 8470] set_robust_list(0x7fb6bacad920, 24 <unfinished ...>
[pid 8451] <... mmap resumed>) = 0x7fb6b9cac000
[pid 8469] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 8451] mprotect(0x7fb6b9cad000, 8388608, PROT_READ|PROT_WRITE <unfinished ...>
[pid 8470] <... set_robust_list resumed>) = 0
[pid 8451] <... mprotect resumed>) = 0
[pid 8470] rt_sigprocmask(SIG_SETMASK, [], <unfinished ...>
[pid 8451] rt_sigprocmask(SIG_BLOCK, ~[], <unfinished ...>
[pid 8470] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 8451] <... rt_sigprocmask resumed>[], 8) = 0
[pid 8451]
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THR
EAD|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD
CLEARTID, child_tid=0x7fb6ba4ac910, parent_tid=0x7fb6ba4ac910, exit_signal=0,
stack=0x7fb6b9cac000, stack_size=0x7fff00, tls=0x7fb6ba4ac640}strace: Process 8471
attached => {parent_tid=[8471]}, 88) = 8471
[pid 8471] rseq(0x7fb6ba4acfe0, 0x20, 0, 0x53053053 <unfinished ...>
[pid 8451] rt_sigprocmask(SIG_SETMASK, [], <unfinished ...>
[pid 8471] <... rseq resumed>) = 0
[pid 8451] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 8451] mmap(NULL, 8392704, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0 <unfinished ...>
[pid 8471] set_robust_list(0x7fb6ba4ac920, 24) = 0
[pid 8451] <... mmap resumed>) = 0x7fb6b94ab000
[pid 8471] rt_sigprocmask(SIG_SETMASK, [], <unfinished ...>
[pid 8451] mprotect(0x7fb6b94ac000, 8388608, PROT_READ|PROT_WRITE) = 0

```

```

[pid 8471] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 8451] rt_sigprocmask(SIG_BLOCK, ~[], [], 8) = 0
[pid 8451]
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THR
EAD|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_
CLEARTID, child_tid=0x7fb6b9cab910, parent_tid=0x7fb6b9cab910, exit_signal=0,
stack=0x7fb6b94ab000, stack_size=0x7fff00, tls=0x7fb6b9cab640}strace: Process 8472
attached => {parent_tid=[8472]}, 88) = 8472
[pid 8472] rseq(0x7fb6b9cabfe0, 0x20, 0, 0x53053053 <unfinished ...>
[pid 8451] rt_sigprocmask(SIG_SETMASK, [], <unfinished ...>
[pid 8472] <... rseq resumed>) = 0
[pid 8451] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 8472] set_robust_list(0x7fb6b9cab920, 24 <unfinished ...>
[pid 8451] mmap(NULL, 8392704, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0 <unfinished ...>
[pid 8472] <... set_robust_list resumed>) = 0
[pid 8451] <... mmap resumed>) = 0x7fb6b8caa000
[pid 8472] rt_sigprocmask(SIG_SETMASK, [], <unfinished ...>
[pid 8451] mprotect(0x7fb6b8cab000, 8388608, PROT_READ|PROT_WRITE <unfinished ...>
[pid 8472] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 8451] <... mprotect resumed>) = 0
[pid 8451] rt_sigprocmask(SIG_BLOCK, ~[], [], 8) = 0
[pid 8451]
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THR
EAD|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_
CLEAR
TID, child_tid=0x7fb6b94aa910, parent_tid=0x7fb6b94aa910, exit_signal=0,
stack=0x7fb6b8caa000, stack_size=0x7fff00, tls=0x7fb6b94aa640}strace: Process 8473
attached=> {parent_tid=[8473]}, 88) = 8473
[pid 8473] rseq(0x7fb6b94aafe0, 0x20, 0, 0x53053053 <unfinished ...>
[pid 8451] rt_sigprocmask(SIG_SETMASK, [], <unfinished ...>
[pid 8473] <... rseq resumed>) = 0
[pid 8451] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 8451] mmap(NULL, 8392704, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0 <unfinished ...>
[pid 8473] set_robust_list(0x7fb6b94aa920, 24 <unfinished ...>
[pid 8451] <... mmap resumed>) = 0x7fb6b84a9000
[pid 8473] <... set_robust_list resumed>) = 0
[pid 8451] mprotect(0x7fb6b84aa000, 8388608, PROT_READ|PROT_WRITE <unfinished ...>
[pid 8473] rt_sigprocmask(SIG_SETMASK, [], <unfinished ...>
[pid 8451] <... mprotect resumed>) = 0
[pid 8473] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 8451] rt_sigprocmask(SIG_BLOCK, ~[], [], 8) = 0
[pid 8451]
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THR
EAD|CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_

```

```
CLEARTID, child_tid=0x7fb6b8ca9910, parent_tid=0x7fb6b8ca9910, exit_signal=0,  
stack=0x7fb6b84a9000, stack_size=0x7fff00, tls=0x7fb6b8ca9640}strace: Process 8474  
attached => {parent_tid=[8474]}, 88) = 8474  
[pid 8474] rseq(0x7fb6b8ca9fe0, 0x20, 0, 0x53053053 <unfinished ...>  
[pid 8451] rt_sigprocmask(SIG_SETMASK, [], <unfinished ...>  
[pid 8474] <... rseq resumed>)      = 0  
[pid 8451] <... rt_sigprocmask resumed>NULL, 8) = 0  
[pid 8474] set_robust_list(0x7fb6b8ca9920, 24 <unfinished ...>  
[pid 8451] futex(0x7fb6bb4ae910, FUTEX_WAIT_BITSET|FUTEX_CLOCK_REALTIME,  
8469, NULL, FUTEX_BITSET_MATCH_ANY <unfinished ...>  
[pid 8474] <... set_robust_list resumed>) = 0  
[pid 8474] rt_sigprocmask(SIG_SETMASK, [], NULL, 8) = 0  
[pid 8472] openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC) = 3  
[pid 8472] newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=19739, ...}, AT_EMPTY_PATH) =  
0  
[pid 8472] mmap(NULL, 19739, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7fb6bb6db000  
[pid 8469] futex(0x7fb6bb71ca48, FUTEX_WAIT_PRIVATE, 2, NULL <unfinished ...>  
[pid 8472] close(3)                = 0  
[pid 8472] mmap(NULL, 134217728, PROT_NONE,  
MAP_PRIVATE|MAP_ANONYMOUS|MAP_NORESERVE, -1, 0) = 0x7fb6b04a9000  
[pid 8472] munmap(0x7fb6b04a9000, 62222336) = 0  
[pid 8472] munmap(0x7fb6b8000000, 4886528) = 0  
[pid 8472] mprotect(0x7fb6b4000000, 135168, PROT_READ|PROT_WRITE) = 0  
[pid 8472] openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libgcc_s.so.1",  
O_RDONLY|O_CLOEXEC) = 3  
[pid 8472] read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"... , 832) = 832  
[pid 8472] newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=125488, ...}, AT_EMPTY_PATH)  
= 0  
[pid 8472] mmap(NULL, 127720, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0  
<unfinished ...>  
[pid 8470] futex(0x7fb6bb71ca48, FUTEX_WAIT_PRIVATE, 2, NULL <unfinished ...>  
[pid 8472] <... mmap resumed>)      = 0x7fb6b8489000  
[pid 8472] mmap(0x7fb6b848c000, 94208, PROT_READ|PROT_EXEC,  
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7fb6b848c000  
[pid 8472] mmap(0x7fb6b84a3000, 16384, PROT_READ,  
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1a000) = 0x7fb6b84a3000  
[pid 8472] mmap(0x7fb6b84a7000, 8192, PROT_READ|PROT_WRITE,  
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1d000) = 0x7fb6b84a7000  
[pid 8472] close(3)                = 0  
[pid 8472] mprotect(0x7fb6b84a7000, 4096, PROT_READ) = 0  
[pid 8472] munmap(0x7fb6bb6db000, 19739) = 0  
[pid 8472] futex(0x7fb6bb71ca48, FUTEX_WAKE_PRIVATE, 1) = 1  
[pid 8469] <... futex resumed>)      = 0  
[pid 8472] futex(0x7fb6b84a8210, FUTEX_WAKE_PRIVATE, 2147483647 <unfinished ...>  
[pid 8469] futex(0x7fb6bb71ca48, FUTEX_WAKE_PRIVATE, 1 <unfinished ...>  
[pid 8472] <... futex resumed>)      = 0
```

```

[pid 8470] <... futex resumed>)      = 0
[pid 8469] <... futex resumed>)      = 1
[pid 8472] rt_sigprocmask(SIG_BLOCK, ~[RT_1], <unfinished ...>
[pid 8470] futex(0x7fb6bb71ca48, FUTEX_WAKE_PRIVATE, 1 <unfinished ...>
[pid 8472] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 8469] rt_sigprocmask(SIG_BLOCK, ~[RT_1], <unfinished ...>
[pid 8472] madvise(0x7fb6b94ab000, 8368128, MADV_DONTNEED <unfinished ...>
[pid 8470] <... futex resumed>)      = 0
[pid 8472] <... madvise resumed>)    = 0
[pid 8469] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 8472] exit(0 <unfinished ...>
[pid 8470] rt_sigprocmask(SIG_BLOCK, ~[RT_1], <unfinished ...>
[pid 8472] <... exit resumed>)      = ?
[pid 8469] madvise(0x7fb6bacae000, 8368128, MADV_DONTNEED <unfinished ...>
[pid 8472] +++ exited with 0 +++
[pid 8470] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 8469] <... madvise resumed>)    = 0
[pid 8469] exit(0 <unfinished ...>
[pid 8470] madvise(0x7fb6ba4ad000, 8368128, MADV_DONTNEED <unfinished ...>
[pid 8469] <... exit resumed>)      = ?
[pid 8473] rt_sigprocmask(SIG_BLOCK, ~[RT_1], <unfinished ...>
[pid 8470] <... madvise resumed>)    = 0
[pid 8451] <... futex resumed>)      = 0
[pid 8473] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 8469] +++ exited with 0 +++
[pid 8451] futex(0x7fb6bacad910, FUTEX_WAIT_BITSET|FUTEX_CLOCK_REALTIME,
8470, NULL, FUTEX_BITSET_MATCH_ANY <unfinished ...>
[pid 8473] madvise(0x7fb6b8caa000, 8368128, MADV_DONTNEED <unfinished ...>
[pid 8470] exit(0 <unfinished ...>
[pid 8473] <... madvise resumed>)    = 0
[pid 8470] <... exit resumed>)      = ?
[pid 8451] <... futex resumed>)      = 0
[pid 8473] exit(0 <unfinished ...>
[pid 8470] +++ exited with 0 +++
[pid 8451] futex(0x7fb6ba4ac910, FUTEX_WAIT_BITSET|FUTEX_CLOCK_REALTIME,
8471, NULL, FUTEX_BITSET_MATCH_ANY <unfinished ...>
[pid 8473] <... exit resumed>)      = ?
[pid 8473] +++ exited with 0 +++
[pid 8474] rt_sigprocmask(SIG_BLOCK, ~[RT_1], NULL, 8) = 0
[pid 8474] madvise(0x7fb6b84a9000, 8368128, MADV_DONTNEED) = 0
[pid 8474] exit(0)                  = ?
[pid 8474] +++ exited with 0 +++
[pid 8471] rt_sigprocmask(SIG_BLOCK, ~[RT_1], NULL, 8) = 0
[pid 8471] madvise(0x7fb6b9cac000, 8368128, MADV_DONTNEED) = 0
[pid 8471] exit(0)                  = ?
[pid 8471] +++ exited with 0 +++

```

```

<... futex resumed>) = 0
munmap(0x7fb6bacae000, 8392704) = 0
munmap(0x7fb6ba4ad000, 8392704) = 0
clock_gettime(CLOCK_PROCESS_CPUTIME_ID, {tv_sec=1, tv_nsec=491704600}) = 0
newfstatat(1, "", {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0x4), ...},
AT_EMPTY_PATH) = 0
write(1, "\320\222\321\200\320\265\320\274\321\217
\320\262\321\213\320\277\320\276\320\273\320\275\320\265\320\275\320\270\321\217:"...,
48Время выполнения: 0.14812 сек
) = 48
write(1,
"\320\234\320\270\320\275\320\270\320\274\320\260\320\273\321\214\320\275\321\213\320\271
\321\215\320\273\320\265\320\274\320"..., 41Минимальный элемент: 7
) = 41
write(1,
"\320\234\320\260\320\272\321\201\320\270\320\274\320\260\320\273\321\214\320\275\321\213\320\271
\321\215\320\273\320\265\320"..., 52Максимальный элемент: 2147483611
) = 52
exit_group(0) = ?
+++ exited with 0 +++

```

ЛР-3:

```

execve("./main", ["/main"], 0x7ffc618760c0 /* 35 vars */) = 0
brk(NULL) = 0x55975ad52000
arch_prctl(0x3001 /* ARCH_??? */, 0x7ffec4654c10) = -1 EINVAL (Invalid argument)
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1,
0) = 0x7fc0d01ef000
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=19095, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 19095, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7fc0d01ea000
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\3\0>\0\1\0\0\0P\237\2\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"..., 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"..., 48, 848) = 48
pread64(3, "\4\0\0\0\24\0\0\0\3\0\0\0GNU\0 =\340\256\3\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"..., 784, 64) = 784
mmap(NULL, 2260560, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fc0cffe2000
mmap(0x7fc0cffe2000, 1658880, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000) = 0x7fc0cffe2000
mmap(0x7fc0d017f000, 360448, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1bd000) = 0x7fc0d017f000
mmap(0x7fc0d01d7000, 24576, PROT_READ|PROT_WRITE,

```



```

MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x214000) = 0x7fc0d01d7000
mmap(0x7fc0d01dd000, 52816, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7fc0d01dd000
close(3) = 0
mmap(NULL, 12288, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1,
0) = 0x7fc0cffbf000
arch_prctl(ARCH_SET_FS, 0x7fc0cffbf740) = 0
set_tid_address(0x7fc0cffbfa10) = 23902
set_robust_list(0x7fc0cffbfa20, 24) = 0
rseq(0x7fc0cffc00e0, 0x20, 0, 0x53053053) = 0
mprotect(0x7fc0d01d7000, 16384, PROT_READ) = 0
mprotect(0x55975ab66000, 4096, PROT_READ) = 0
mprotect(0x7fc0d0229000, 8192, PROT_READ) = 0
prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) =
0
munmap(0x7fc0d01ea000, 19095) = 0
write(1, "Enter the first filename with fi"..., 68Enter the first filename with file extension(.txt or
.doc or .rtf): ) = 68
getrandom("\x8c\x4f\x49\xdf\x0e\x4f\x65\x98", 8, GRND_NONBLOCK) = 8
brk(NULL) = 0x55975ad52000
brk(0x55975ad73000) = 0x55975ad73000
newfstatat(0, "", {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0x4), ...},
AT_EMPTY_PATH) = 0
read(0, 1.txt
"1.txt\n", 1024) = 6
openat(AT_FDCWD, "1.txt", O_WRONLY|O_CREAT|O_TRUNC, 0200) = 3
write(1, "Enter the second filename with f"..., 69Enter the second filename with file extension(.txt
or .doc or .rtf): ) = 69
read(0, 2.txt
"2.txt\n", 1024) = 6
openat(AT_FDCWD, "2.txt", O_WRONLY|O_CREAT|O_TRUNC, 0200) = 4
openat(AT_FDCWD, "/dev/shm/fd_virt1",
O_RDWR|O_CREAT|O_TRUNC|O_NOFOLLOW|O_CLOEXEC, 0777) = 5
ftruncate(5, 1000) = 0
mmap(NULL, 1000, PROT_READ|PROT_WRITE, MAP_SHARED, 5, 0) = 0x7fc0d0228000
openat(AT_FDCWD, "/dev/shm/fd_virt2",
O_RDWR|O_CREAT|O_TRUNC|O_NOFOLLOW|O_CLOEXEC, 0777) = 6
ftruncate(6, 1000) = 0
mmap(NULL, 1000, PROT_READ|PROT_WRITE, MAP_SHARED, 6, 0) = 0x7fc0d01ee000
clone(child_stack=NULL,
flags=CLONE_CHILD_CLEARTID|CLONE_CHILD_SETTID|SIGCHLD,
child_tidptr=0x7fc0cffbfa10) = 23957
clone(child_stack=NULL,
flags=CLONE_CHILD_CLEARTID|CLONE_CHILD_SETTID|SIGCHLD,
child_tidptr=0x7fc0cffbfa10) = 23958
read(0, piu piu piu

```

```

"piu piu piu\n", 1024)      = 12
kill(23957, SIGUSR1)        = 0
read(0, pu pu pu
"pu pu pu\n", 1024)        = 9
kill(23957, SIGUSR1)        = 0
read(0, "", 1024)           = 0
kill(23957, SIGUSR2)        = 0
kill(23958, SIGUSR2)        = 0
--- SIGCHLD {si_signo=SIGCHLD, si_code=CLD_EXITED, si_pid=23957, si_uid=1000,
si_status=0, si_utime=215, si_stime=525} ---
close(5)                    = 0
close(6)                    = 0
--- SIGCHLD {si_signo=SIGCHLD, si_code=CLD_EXITED, si_pid=23958, si_uid=1000,
si_status=0, si_utime=216, si_stime=523} ---
close(3)                    = 0
close(4)                    = 0
unlink("/dev/shm/fd_virt1")  = 0
unlink("/dev/shm/fd_virt2")  = 0
munmap(0x7fc0d0228000, 1000)      = 0
munmap(0x7fc0d01ee000, 1000)      = 0
exit_group(0)               = ?
+++ exited with 0 +++

```

JIP-4:

```

execve("./runtime", ["/runtime", "-f"], 0x7ffd9ec1dce8 /* 36 vars */) = 0
brk(NULL)                    = 0x557d9b615000
arch_prctl(0x3001 /* ARCH_??? */, 0x7fff9ada08f0) = -1 EINVAL (Invalid argument)
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1,
0) = 0x7f307f8e4000
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=19739, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 19739, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7f307f8df000
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\3\0>\0\1\0\0\0P\237\2\0\0\0\0"..., 832) = 832
pread64(3, "\6\0\0\04\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\0300\4\0\0\03\0\0\0\0\0\0"..., 48, 848) = 48
pread64(3,
"\4\0\0\024\0\0\03\0\0\0GNU\0\302\211\332Pq\2439\235\350\223\322\257\201\326\243\xf"..., 68,
896) = 68
newfstatat(3, "", {st_mode=S_IFREG|0755, st_size=2220400, ...}, AT_EMPTY_PATH) = 0
pread64(3, "\6\0\0\04\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) =
0x7f307f6b6000
mprotect(0x7f307f6de000, 2023424, PROT_NONE) = 0
mmap(0x7f307f6de000, 1658880, PROT_READ|PROT_EXEC,

```

```

MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000) = 0x7f307f6de000
mmap(0x7f307f873000, 360448, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1bd000) = 0x7f307f873000
mmap(0x7f307f8cc000, 24576, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x215000) = 0x7f307f8cc000
mmap(0x7f307f8d2000, 52816, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f307f8d2000
close(3) = 0
mmap(NULL, 12288, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1,
0) = 0x7f307f6b3000
arch_prctl(ARCH_SET_FS, 0x7f307f6b3740) = 0
set_tid_address(0x7f307f6b3a10) = 82615
set_robust_list(0x7f307f6b3a20, 24) = 0
rseq(0x7f307f6b40e0, 0x20, 0, 0x53053053) = 0
mprotect(0x7f307f8cc000, 16384, PROT_READ) = 0
mprotect(0x557d9aca1000, 4096, PROT_READ) = 0
mprotect(0x7f307f91e000, 8192, PROT_READ) = 0
prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) =
0
munmap(0x7f307f8df000, 19739) = 0
newfstatat(1, "", {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0xa), ...},
AT_EMPTY_PATH) = 0
getrandom("\xa9\x2f\xca\x61\xb8\x13\xfd\x4e", 8, GRND_NONBLOCK) = 8
brk(NULL) = 0x557d9b615000
brk(0x557d9b636000) = 0x557d9b636000
write(1, "Please enter: M arg1 arg2 ... ar"..., 35Please enter: M arg1 arg2 ... argN
) = 35
write(1, "M - Selected function from libra"..., 35M - Selected function from library
) = 35
write(1, "M = -1 - Complete the execution\n", 32M = -1 - Complete the execution
) = 32
write(1, "M = 0 - Change the library \n", 28M = 0 - Change the library
) = 28
write(1, "M = 1 - Count the amount of prim"..., 71M = 1 - Count the amount of prime numbers in
[A, B]; arg1, arg2 - A, B
) = 71
write(1, "M = 2 - Array sorting; arg1 - si"..., 97M = 2 - Array sorting; arg1 - size of unsorted array,
arg2 ... argN - elements of unsorted array
) = 97
openat(AT_FDCWD, "./lib2/lib2.so", O_RDONLY|O_CLOEXEC) = 3
read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
newfstatat(3, "", {st_mode=S_IFREG|0777, st_size=15920, ...}, AT_EMPTY_PATH) = 0
getcwd("/mnt/c/Users/\320\235\320\270\320\272\320\270\321\202\320\260/Desktop/Projects/MAI
8fac_OS/lab4/programs", 128) = 68
mmap(NULL, 16496, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f307f8df000

```

```

mmap(0x7f307f8e0000, 4096, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1000) = 0x7f307f8e0000
mmap(0x7f307f8e1000, 4096, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f307f8e1000
mmap(0x7f307f8e2000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f307f8e2000
close(3) = 0
mprotect(0x7f307f8e2000, 4096, PROT_READ) = 0
write(1, "\n", 1
) = 1
write(1, "2nd dynamic library loaded\n", 272nd dynamic library loaded
) = 27
write(1, "Now Eratosthenes Sieve is used f"..., 58Now Eratosthenes Sieve is used for counting
prime numbers
) = 58
write(1, "Now QuickSort is used to sort th"..., 40Now QuickSort is used to sort the array
) = 40
write(1, "\n", 1
) = 1
newfstatat(0, "", {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0xa), ...},
AT_EMPTY_PATH) = 0
read(0, 1 1 10
"1 1 10\n", 1024) = 7
write(1, "\n", 1
) = 1
write(1, "The amount of prime numbers - 4\n"..., 33The amount of prime numbers - 4
) = 33
read(0, 2 5 5 4 3 2 1
"2 5 5 4 3 2 1\n", 1024) = 14
write(1, "Sorted array - 1 2 3 4 5 \n", 26Sorted array - 1 2 3 4 5
) = 26
write(1, "\n", 1
) = 1
read(0, 0
"0\n", 1024) = 2
write(1, "\n", 1
) = 1
munmap(0x7f307f8df000, 16496) = 0
openat(AT_FDCWD, "./lib1/lib1.so", O_RDONLY|O_CLOEXEC) = 3
read(3, "\177ELF\2\1\1\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|0777, st_size=15528, ...}, AT_EMPTY_PATH) = 0
getcwd("/mnt/c/Users/\320\235\320\270\320\272\320\270\321\202\320\260/Desktop/Projects/MAI
8fac_OS/lab4/programs", 128) = 68
mmap(NULL, 16432, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f307f8df000

```

```

mmap(0x7f307f8e0000, 4096, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1000) = 0x7f307f8e0000
mmap(0x7f307f8e1000, 4096, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f307f8e1000
mmap(0x7f307f8e2000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f307f8e2000
close(3) = 0
mprotect(0x7f307f8e2000, 4096, PROT_READ) = 0
write(1, "1st dynamic library loaded\n", 27) = 27
write(1, "Now The naive algorithm is used "..., 59) = 59
write(1, "Now BubbleSort is used to sort t"..., 41) = 41
write(1, "Your library has been changed su"..., 45) = 45
write(1, "\n", 1) = 1
read(0, 1 1 10 "1 1 10\n", 1024) = 7
write(1, "\n", 1) = 1
write(1, "The amount of prime numbers - 4\n"..., 33) = 33
read(0, 2 5 5 4 3 2 1 "2 5 5 4 3 2 1\n", 1024) = 14
write(1, "Sorted array - 1 2 3 4 5 \n", 26) = 26
write(1, "\n", 1) = 1
read(0, -1 "-1\n", 1024) = 3
munmap(0x7f307f8df000, 16432) = 0
write(1, "The program successfully finished"..., 33) = 33
lseek(0, -1, SEEK_CUR) = -1 ESPIPE (Illegal seek)
exit_group(0) = ?
+++ exited with 0 +++

```

JP-5-7:

```

execve("./server", ["/server", "-f"], 0x7ffd0abe7ab8 /* 35 vars */) = 0
brk(NULL) = 0x558e7d35f000
arch_prctl(0x3001 /* ARCH_??? */, 0x7ffc1e19cdd0) = -1 EINVAL (Invalid argument)
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0)

```

0x7f01bed10000

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=19739, ...}, AT_EMPTY_PATH) = 0

mmap(NULL, 19739, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7f01bed0b000

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\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) = 0x7f01bec6f000

mmap(0x7f01bec87000, 397312, PROT_READ|PROT_EXEC,

MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x18000) = 0x7f01bec87000

mmap(0x7f01bece8000, 106496, PROT_READ,

MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,

0x79000) = 0x7f01bece8000

mmap(0x7f01bed02000, 36864, PROT_READ|PROT_WRITE,

MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x92000) = 0x7f01bed02000

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\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\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\1f"..., 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) = 0x7f01bea46000

mprotect(0x7f01bea6e000, 2023424, PROT_NONE) = 0

mmap(0x7f01bea6e000, 1658880, PROT_READ|PROT_EXEC,

MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000) = 0x7f01bea6e000

mmap(0x7f01bec03000, 360448, PROT_READ,

MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,

0x1bd000) = 0x7f01bec03000

mmap(0x7f01bec5c000, 24576, PROT_READ|PROT_WRITE,

MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x215000) = 0x7f01bec5c000

mmap(0x7f01bec62000, 52816, PROT_READ|PROT_WRITE,

MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f01bec62000

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\3\0>\0\1\0\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) =

0x7f01bea2e000

```
mprotect(0x7f01bea32000, 69632, PROT_NONE) = 0
mmap(0x7f01bea32000, 53248, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f01bea32000
mmap(0x7f01bea3f000, 12288, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0x11000) = 0x7f01bea3f000
mmap(0x7f01bea43000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x14000) = 0x7f01bea43000
mmap(0x7f01bea45000, 224, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f01bea45000
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\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=355040, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 357440, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f01be9d6000
mprotect(0x7f01be9e2000, 303104, PROT_NONE) = 0
mmap(0x7f01be9e2000, 229376, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xc000) = 0x7f01be9e2000
mmap(0x7f01bea1a000, 69632, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0x44000) = 0x7f01bea1a000
mmap(0x7f01bea2c000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x55000) = 0x7f01bea2c000
close(3) = 0
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\3\0>\0\1\0\0\0\340L\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) =
0x7f01be985000
mmap(0x7f01be989000, 172032, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f01be989000
mmap(0x7f01be9b3000, 118784, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0x2e000) = 0x7f01be9b3000
mmap(0x7f01be9d0000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4a000) = 0x7f01be9d0000
mmap(0x7f01be9d2000, 14416, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f01be9d2000
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\3\0>\0\1\0\0\0\255\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) =
0x7f01be85a000
mprotect(0x7f01be864000, 446464, PROT_NONE) = 0
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mmap(0x7f01be864000, 286720, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xa000) = 0x7f01be864000
mmap(0x7f01be8aa000, 155648, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0x50000) = 0x7f01be8aa000
mmap(0x7f01be8d1000, 16384, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x76000) = 0x7f01be8d1000
mmap(0x7f01be8d5000, 719360, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f01be8d5000
close(3) = 0
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0)
0x7f01be858000
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\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=338648, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 340960, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f01be804000
mprotect(0x7f01be80f000, 282624, PROT_NONE) = 0
mmap(0x7f01be80f000, 229376, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xb000) = 0x7f01be80f000
mmap(0x7f01be847000, 49152, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0x43000) = 0x7f01be847000
mmap(0x7f01be854000, 16384, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4f000) = 0x7f01be854000
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\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) =
0x7f01be5d8000
mprotect(0x7f01be672000, 1576960, PROT_NONE) = 0
mmap(0x7f01be672000, 1118208, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x9a000) = 0x7f01be672000
mmap(0x7f01be783000, 454656, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0x1ab000) = 0x7f01be783000
mmap(0x7f01be7f3000, 57344, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x21a000) = 0x7f01be7f3000
mmap(0x7f01be801000, 10432, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f01be801000
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\3\0>\0\1\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

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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) =
0x7f01be5b8000
mmap(0x7f01be5bb000, 94208, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7f01be5bb000
mmap(0x7f01be5d2000, 16384, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0x1a000) = 0x7f01be5d2000
mmap(0x7f01be5d6000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1d000) = 0x7f01be5d6000
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) =
0x7f01be5ab000
mmap(0x7f01be5ad000, 28672, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f01be5ad000
mmap(0x7f01be5b4000, 8192, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0x9000) = 0x7f01be5b4000
mmap(0x7f01be5b6000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xa000) = 0x7f01be5b6000
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, 16424, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f01be5a6000
mmap(0x7f01be5a7000, 4096, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1000) = 0x7f01be5a7000
mmap(0x7f01be5a8000, 4096, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0x2000) = 0x7f01be5a8000
mmap(0x7f01be5a9000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f01be5a9000
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) =
0x7f01be4bf000
mmap(0x7f01be4cd000, 507904, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xe000) = 0x7f01be4cd000
mmap(0x7f01be549000, 372736, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
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0x8a000) = 0x7f01be549000
mmap(0x7f01be5a4000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xe4000) = 0x7f01be5a4000
close(3) = 0
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0)
= 0x7f01be4bd000
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) =
0x7f01be3f2000
mprotect(0x7f01be413000, 634880, PROT_NONE) = 0
mmap(0x7f01be413000, 380928, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x21000) = 0x7f01be413000
mmap(0x7f01be470000, 249856, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0x7e000) = 0x7f01be470000
mmap(0x7f01be4ae000, 61440, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xbb000) = 0x7f01be4ae000
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) =
0x7f01be3c3000
mprotect(0x7f01be3c7000, 163840, PROT_NONE) = 0
mmap(0x7f01be3c7000, 110592, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f01be3c7000
mmap(0x7f01be3e2000, 49152, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0x1f000) = 0x7f01be3e2000
mmap(0x7f01be3ef000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2b000) = 0x7f01be3ef000
mmap(0x7f01be3f1000, 56, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f01be3f1000
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) =
0x7f01be3bd000
mmap(0x7f01be3bf000, 4096, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f01be3bf000
mmap(0x7f01be3c0000, 4096, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,

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0x3000) = 0x7f01be3c0000
mmap(0x7f01be3c1000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7f01be3c1000
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\3\0>\0\1\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) =
0x7f01be3af000
mprotect(0x7f01be3b2000, 36864, PROT_NONE) = 0
mmap(0x7f01be3b2000, 24576, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7f01be3b2000
mmap(0x7f01be3b8000, 8192, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0x9000) = 0x7f01be3b8000
mmap(0x7f01be3bb000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xb000) = 0x7f01be3bb000
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\3\0>\0\1\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, 24592, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f01be3a8000
mmap(0x7f01be3aa000, 8192, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f01be3aa000
mmap(0x7f01be3ac000, 4096, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0x4000) = 0x7f01be3ac000
mmap(0x7f01be3ad000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f01be3ad000
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\3\0>\0\1\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, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0)
0x7f01be3a6000
mmap(NULL, 80456, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f01be392000
mmap(0x7f01be395000, 40960, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7f01be395000
mmap(0x7f01be39f000, 12288, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0xd000) = 0x7f01be39f000
mmap(0x7f01be3a2000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xf000) = 0x7f01be3a2000

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mmap(0x7f01be3a4000, 6728, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f01be3a4000
close(3) = 0
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0)
= 0x7f01be390000
mmap(NULL, 12288, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1,
0) =
0x7f01be38d000
arch_prctl(ARCH_SET_FS, 0x7f01be38d9c0) = 0
set_tid_address(0x7f01be38dc90) = 131424
set_robust_list(0x7f01be38dca0, 24) = 0
rseq(0x7f01be38e360, 0x20, 0, 0x53053053) = 0
mprotect(0x7f01bec5c000, 16384, PROT_READ) = 0
mprotect(0x7f01be3a2000, 4096, PROT_READ) = 0
mprotect(0x7f01be3ad000, 4096, PROT_READ) = 0
mprotect(0x7f01be3bb000, 4096, PROT_READ) = 0
mprotect(0x7f01be3c1000, 4096, PROT_READ) = 0
mprotect(0x7f01be3ef000, 4096, PROT_READ) = 0
mprotect(0x7f01be4ae000, 53248, PROT_READ) = 0
mprotect(0x7f01be5a4000, 4096, PROT_READ) = 0
mprotect(0x7f01be5a9000, 4096, PROT_READ) = 0
mprotect(0x7f01be5b6000, 4096, PROT_READ) = 0
mprotect(0x7f01be5d6000, 4096, PROT_READ) = 0
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0)
=
0x7f01be38b000
mprotect(0x7f01be7f3000, 45056, PROT_READ) = 0
mprotect(0x7f01be854000, 8192, PROT_READ) = 0
mprotect(0x7f01be8d1000, 12288, PROT_READ) = 0
mprotect(0x7f01be9d0000, 4096, PROT_READ) = 0
mprotect(0x7f01bea2c000, 4096, PROT_READ) = 0
mprotect(0x7f01bea43000, 4096, PROT_READ) = 0
mprotect(0x7f01bed02000, 32768, PROT_READ) = 0
mprotect(0x558e7bc21000, 4096, PROT_READ) = 0
mprotect(0x7f01bed4a000, 8192, PROT_READ) = 0
prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) =
0
munmap(0x7f01bed0b000, 19739) = 0
getrandom("\x5b\x71\x96\xf8\xfc\x9b\x6f\x1d", 8, GRND_NONBLOCK) = 8
brk(NULL) = 0x558e7d35f000
brk(0x558e7d380000) = 0x558e7d380000
openat(AT_FDCWD, "/sys/devices/system/cpu/online", O_RDONLY|O_CLOEXEC) = 3
read(3, "0-15\n", 1024) = 5
close(3) = 0
openat(AT_FDCWD, "/sys/devices/system/cpu",

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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, 0x558e7d370ee0 /* 32 entries */, 32768) = 936
getdents64(3, 0x558e7d370ee0 /* 0 entries */, 32768) = 0
close(3) = 0
getpid() = 131424
sched_getaffinity(131424, 128, [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15]) = 32
newfstatat(AT_FDCWD, "/etc/nsswitch.conf", {st_mode=S_IFREG|0644, st_size=510, ...}, 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=510, ...}, AT_EMPTY_PATH) = 0
read(3, "# /etc/nsswitch.conf\n#\n# Example"..., 4096) = 510
read(3, "", 4096) = 0
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=510, ...}, 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=19739, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 19739, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7f01bed0b000
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", 0x7ffc1e199d10, 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", 0x7ffc1e199d10, 0) =
-1
ENOENT (No such file or directory)
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/tls/haswell/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/haswell/x86_64", 0x7ffc1e199d10, 0) = -1
ENOENT
(No such file or directory)
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/tls/haswell/libnss_db.so.2",
O_RDONLY|O_CLOEXEC) =
-1 ENOENT (No such file or directory)
newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/tls/haswell", 0x7ffc1e199d10, 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", 0x7ffc1e199d10, 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", 0x7ffc1e199d10, 0) = -1 ENOENT (No such
file or
directory)
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/haswell/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/haswell/x86_64", 0x7ffc1e199d10, 0) = -1
ENOENT (No
such file or directory)
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/haswell/libnss_db.so.2",
O_RDONLY|O_CLOEXEC) = -1
ENOENT (No such file or directory)
newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/haswell", 0x7ffc1e199d10, 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", 0x7ffc1e199d10, 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=24576, ...},
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", 0x7ffc1e199d10, 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", 0x7ffc1e199d10, 0)
= -1
ENOENT (No such file or directory)
openat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/tls/haswell/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/haswell/x86_64", 0x7ffc1e199d10, 0) = -1
ENOENT (No such file or directory)
openat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/tls/haswell/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/haswell", 0x7ffc1e199d10, 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", 0x7ffc1e199d10, 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", 0x7ffc1e199d10, 0) = -1 ENOENT (No
 such file
 or directory)
 openat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/haswell/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/haswell/x86_64", 0x7ffc1e199d10, 0) = -1
 ENOENT
 (No such file or directory)
 openat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/haswell/libnss_db.so.2",
 O_RDONLY|O_CLOEXEC) =
 -1 ENOENT (No such file or directory)
 newfstatat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/haswell", 0x7ffc1e199d10, 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", 0x7ffc1e199d10, 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=24576,
 ...}, 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", 0x7ffc1e199d10, 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", 0x7ffc1e199d10, 0) = -1 ENOENT (No

such file
or directory)
openat(AT_FDCWD, "/lib/tls/haswell/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1
ENOENT (No such file or directory)
newfstatat(AT_FDCWD, "/lib/tls/haswell/x86_64", 0x7ffc1e199d10, 0) = -1 ENOENT (No such
file or
directory)
openat(AT_FDCWD, "/lib/tls/haswell/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT
(No
such file or directory)
newfstatat(AT_FDCWD, "/lib/tls/haswell", 0x7ffc1e199d10, 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", 0x7ffc1e199d10, 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", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/lib/haswell/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1
ENOENT
(No such file or directory)
newfstatat(AT_FDCWD, "/lib/haswell/x86_64", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file
or
directory)
openat(AT_FDCWD, "/lib/haswell/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT
(No such
file or directory)
newfstatat(AT_FDCWD, "/lib/haswell", 0x7ffc1e199d10, 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", 0x7ffc1e199d10, 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", 0x7ffc1e199d10, 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", 0x7ffc1e199d10, 0) = -1 ENOENT
(No such
file or directory)
openat(AT_FDCWD, "/usr/lib/tls/haswell/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) =
-1
ENOENT (No such file or directory)
newfstatat(AT_FDCWD, "/usr/lib/tls/haswell/x86_64", 0x7ffc1e199d10, 0) = -1 ENOENT (No
such file or
directory)
openat(AT_FDCWD, "/usr/lib/tls/haswell/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1
ENOENT
(No such file or directory)
newfstatat(AT_FDCWD, "/usr/lib/tls/haswell", 0x7ffc1e199d10, 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", 0x7ffc1e199d10, 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", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file or
directory)
openat(AT_FDCWD, "/usr/lib/haswell/x86_64/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1
ENOENT (No such file or directory)
newfstatat(AT_FDCWD, "/usr/lib/haswell/x86_64", 0x7ffc1e199d10, 0) = -1 ENOENT (No such
file or
directory)
openat(AT_FDCWD, "/usr/lib/haswell/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1
ENOENT (No
such file or directory)
newfstatat(AT_FDCWD, "/usr/lib/haswell", 0x7ffc1e199d10, 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", 0x7ffc1e199d10, 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)

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newfstatat(AT_FDCWD, "/usr/lib", {st_mode=S_IFDIR|0755, st_size=4096, ...}, 0) = 0
munmap(0x7f01bed0b000, 19739) = 0
openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC) = 3
newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=19739, ...}, AT_EMPTY_PATH) = 0
mmap(NULL, 19739, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7f01bed0b000
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(0x7f01bed0b000, 19739) = 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_RDONLY)
fcntl(3, F_SETFL, O_RDONLY|O_NONBLOCK) = 0
fcntl(3, F_GETFL) = 0x802 (flags O_RDONLY|O_NONBLOCK)
fcntl(3, F_SETFL, O_RDONLY|O_NONBLOCK) = 0
getpid() = 131424
getpid() = 131424
getrandom("\xa6\xcb\x1c\x96\xbc\xfd\x7f\x92\x2a\x8d\xa0\x6e\x97\x0e\x06\x67", 16, 0) = 16
getrandom("\x1c\xb2\xeb\x1a\x34\x05\xe9\x64\x11\x12\x50\x0f\xce\xfb\xbe\xed", 16, 0) = 16
eventfd2(0, EFD_CLOEXEC) = 4
fcntl(4, F_GETFL) = 0x2 (flags O_RDONLY)
fcntl(4, F_SETFL, O_RDONLY|O_NONBLOCK) = 0
fcntl(4, F_GETFL) = 0x802 (flags O_RDONLY|O_NONBLOCK)
fcntl(4, F_SETFL, O_RDONLY|O_NONBLOCK) = 0
getpid() = 131424
epoll_create1(EPoll_CLOEXEC) = 5
epoll_ctl(5, EPOLL_CTL_ADD, 4, {events=0, data={u32=2100761184, u64=94070474478176}})
= 0
epoll_ctl(5, EPOLL_CTL_MOD, 4, {events=EPOLLIN, data={u32=2100761184,
u64=94070474478176}}) = 0
getpid() = 131424
rt_sigaction(SIGRT_1, {sa_handler=0x7f01bead7870, sa_mask=[],

```

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sa_flags=SA_RESTORER|SA_ONSTACK|SA_RESTART|SA_SIGINFO,
sa_restorer=0x7f01bea88520},
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) =
0x7f01bdb8a000
mprotect(0x7f01bdb8b000, 8388608, PROT_READ|PROT_WRITE) = 0
rt_sigprocmask(SIG_BLOCK, ~[], [], 8) = 0
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THREAD
|CLON
E_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_CLEARTID,
child_tid=0x7f01be38a910, parent_tid=0x7f01be38a910, exit_signal=0, stack=0x7f01bdb8a000,
stack_size=0x7ffc80, tls=0x7f01be38a640} => {parent_tid=[131425]}, 88) = 131425
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() = 131424
epoll_create1(EPOLL_CLOEXEC) = 7
epoll_ctl(7, EPOLL_CTL_ADD, 6, {events=0, data={u32=2100781664, u64=94070474498656}})
= 0
epoll_ctl(7, EPOLL_CTL_MOD, 6, {events=EPOLLIN, data={u32=2100781664,
u64=94070474498656}}) = 0
mmap(NULL, 8392704, PROT_NONE, MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK,
-1, 0) =
0x7f01bd389000
mprotect(0x7f01bd38a000, 8388608, PROT_READ|PROT_WRITE) = 0
rt_sigprocmask(SIG_BLOCK, ~[], [], 8) = 0
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THREAD
|CLON
E_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_CLEARTID,
child_tid=0x7f01bdb89910, parent_tid=0x7f01bdb89910, exit_signal=0, stack=0x7f01bd389000,
stack_size=0x7ffc80, tls=0x7f01bdb89640} => {parent_tid=[131426]}, 88) = 131426
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() = 131424
getpid() = 131424
poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)

```

socket(AF_NETLINK, SOCK_RAW|SOCK_CLOEXEC, NETLINK_ROUTE) = 9

bind(9, {sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000}, 12) = 0

getsockname(9, {sa_family=AF_NETLINK, nl_pid=131424, nl_groups=00000000}, [12]) = 0

**sendto(9, [{nlmsg_len=20, nlmsg_type=RTM_GETLINK,
nlmsg_flags=NLM_F_REQUEST|NLM_F_DUMP, nlmsg_seq=1709268905, nlmsg_pid=0},
{ifi_family=AF_UNSPEC, ...}], 20, 0, {sa_family=AF_NETLINK, nl_pid=0,
nl_groups=00000000}, 12) = 20**

recvmsg(9, {msg_name={sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000},
msg_namelen=12, msg_iov=[{iov_base=[{nlmsg_len=1336, nlmsg_type=RTM_NEWLINK,
nlmsg_flags=NLM_F_MULTI, nlmsg_seq=1709268905, nlmsg_pid=131424},
{ifi_family=AF_UNSPEC, ifi_type=ARPHRD_LOOPBACK, ifi_index=if_nametoindex("lo"),
ifi_flags=IFF_UP|IFF_LOOPBACK|IFF_RUNNING|IFF_LOWER_UP, ifi_change=0},
[{nla_len=7, nla_type=IFLA_IFNAME}, "lo"], [{nla_len=8, nla_type=IFLA_TXQLEN}, 1000],
[{nla_len=5, nla_type=IFLA_OPERSTATE}, 0], [{nla_len=5, nla_type=IFLA_LINKMODE}, 0],
[{nla_len=8, nla_type=IFLA_MTU}, 65536], [{nla_len=8, nla_type=IFLA_MIN_MTU}, 0],
[{nla_len=8, nla_type=IFLA_MAX_MTU}, 0], [{nla_len=8, nla_type=IFLA_GROUP}, 0],
[{nla_len=8, nla_type=IFLA_PROMISCUITY}, 0], [{nla_len=8,
nla_type=IFLA_NUM_TX_QUEUES}, 1], [{nla_len=8, nla_type=IFLA_GSO_MAX_SEGS},
65535], [{nla_len=8, nla_type=IFLA_GSO_MAX_SIZE}, 65536], [{nla_len=8,
nla_type=IFLA_NUM_RX_QUEUES}, 1], [{nla_len=5, nla_type=IFLA_CARRIER}, 1],
[{nla_len=12, nla_type=IFLA_QDISC}, "noqueue"], [{nla_len=8,
nla_type=IFLA_CARRIER_CHANGES}, 0], [{nla_len=8,
nla_type=IFLA_CARRIER_UP_COUNT}, 0], [{nla_len=8,
nla_type=IFLA_CARRIER_DOWN_COUNT}, 0], [{nla_len=5,
nla_type=IFLA_PROTO_DOWN}, 0], [{nla_len=36, nla_type=IFLA_MAP}, {mem_start=0,
mem_end=0, base_addr=0, irq=0, dma=0, port=0}], [{nla_len=10, nla_type=IFLA_ADDRESS},
00:00:00:00:00:00], [{nla_len=10, nla_type=IFLA_BROADCAST}, 00:00:00:00:00:00],
[{nla_len=196, nla_type=IFLA_STATS64}, {rx_packets=213128, tx_packets=213128,
rx_bytes=491245870, tx_bytes=491245870, rx_errors=0, tx_errors=0, rx_dropped=0,
tx_dropped=0, multicast=0, collisions=0, rx_length_errors=0, rx_over_errors=0, rx_crc_errors=0,
rx_frame_errors=0, rx_fifo_errors=0, rx_missed_errors=0, tx_aborted_errors=0,
tx_carrier_errors=0, tx_fifo_errors=0, tx_heartbeat_errors=0, tx_window_errors=0,
rx_compressed=0, tx_compressed=0, rx_nohandler=0}], [{nla_len=100, nla_type=IFLA_STATS},
{rx_packets=213128, tx_packets=213128, rx_bytes=491245870, tx_bytes=491245870,
rx_errors=0, tx_errors=0, rx_dropped=0, tx_dropped=0, multicast=0, collisions=0,
rx_length_errors=0, rx_over_errors=0, rx_crc_errors=0, rx_frame_errors=0, rx_fifo_errors=0,
rx_missed_errors=0, tx_aborted_errors=0, tx_carrier_errors=0, tx_fifo_errors=0,
tx_heartbeat_errors=0, tx_window_errors=0, rx_compressed=0, tx_compressed=0,
rx_nohandler=0}], [{nla_len=12, nla_type=IFLA_XDP}, [{nla_len=5,
nla_type=IFLA_XDP_ATTACHED}, XDP_ATTACHED_NONE]], [{nla_len=780,
nla_type=IFLA_AF_SPEC}, [{nla_len=136, nla_type=AF_INET}, [{nla_len=132,
nla_type=IFLA_INET_CONF}, [IPV4_DEVCONF_FORWARDING-1] = 0,
[IPV4_DEVCONF_MC_FORWARDING-1] = 0, [IPV4_DEVCONF_PROXY_ARP-1] = 0,
[IPV4_DEVCONF_ACCEPT_REDIRECTS-1] = 1,
[IPV4_DEVCONF_SECURE_REDIRECTS-1] = 1, [IPV4_DEVCONF_SEND_REDIRECTS-1] =
1, [IPV4_DEVCONF_SHARED_MEDIA-1] = 1, [IPV4_DEVCONF_RP_FILTER-1] = 2,
[IPV4_DEVCONF_ACCEPT_SOURCE_ROUTE-1] = 0, [IPV4_DEVCONF_BOOTP_RELAY-1]
= 0, [IPV4_DEVCONF_LOG_MARTIANS-1] = 0, [IPV4_DEVCONF_TAG-1] = 0,
[IPV4_DEVCONF_ARPFILTER-1] = 0, [IPV4_DEVCONF_MEDIUM_ID-1] = 0,
[IPV4_DEVCONF_NOXFRM-1] = 1, [IPV4_DEVCONF_NOPOLICY-1] = 1,
[IPV4_DEVCONF_FORCE_IGMP_VERSION-1] = 0, [IPV4_DEVCONF_ARP_ANNOUNCE-1]
= 0, [IPV4_DEVCONF_ARP_IGNORE-1] = 0,
[IPV4_DEVCONF_PROMOTE_SECONDARIES-1] = 1, [IPV4_DEVCONF_ARP_ACCEPT-1] =
0, [IPV4_DEVCONF_ARP_NOTIFY-1] = 0, [IPV4_DEVCONF_ACCEPT_LOCAL-1] = 0,

[IPV4_DEVCONF_SRC_VMARK-1] = 0, [IPV4_DEVCONF_PROXY_ARP_PVLAN-1] = 0,
[IPV4_DEVCONF_ROUTE_LOCALNET-1] = 0,
[IPV4_DEVCONF_IGMPV2_UNSOLICITED_REPORT_INTERVAL-1] = 10000,
[IPV4_DEVCONF_IGMPV3_UNSOLICITED_REPORT_INTERVAL-1] = 1000,
[IPV4_DEVCONF_IGNORE_ROUTES_WITH_LINKDOWN-1] = 0,
[IPV4_DEVCONF_DROP_UNICAST_IN_L2_MULTICAST-1] = 0,
[IPV4_DEVCONF_DROP_GRATUITOUS_ARP-1] = 0,
[IPV4_DEVCONF_BC_FORWARDING-1] = 0]], [{nla_len=640, nla_type=AF_INET6},
[{nla_len=8, nla_type=IFLA_INET6_FLAGS}, IF_READY], [{nla_len=20,
nla_type=IFLA_INET6_CACHEINFO}, {max_reasm_len=65535, tstamp=44,
reachable_time=20270, retrans_time=1000}], [{nla_len=228, nla_type=IFLA_INET6_CONF},
[[DEVCONF_FORWARDING] = 0, [DEVCONF_HOPLIMIT] = 64, [DEVCONF_MTU6] =
65536, [DEVCONF_ACCEPT_RA] = 1, [DEVCONF_ACCEPT_REDIRECTS] = 1,
[DEVCONF_AUTOCONF] = 1, [DEVCONF_DAD_TRANSMITS] = 1,
[DEVCONF_RTR_SOLICITS] = -1, [DEVCONF_RTR_SOLICIT_INTERVAL] = 4000,
[DEVCONF_RTR_SOLICIT_DELAY] = 1000, [DEVCONF_USE_TEMPADDR] = -1,
[DEVCONF_TEMP_VALID_LFT] = 604800, [DEVCONF_TEMP_PREFERRED_LFT] = 86400,
[DEVCONF_REGEN_MAX_RETRY] = 3, [DEVCONF_MAX_DESYNC_FACTOR] = 600,
[DEVCONF_MAX_ADDRESSES] = 16, [DEVCONF_FORCE_MLD_VERSION] = 0,
[DEVCONF_ACCEPT_RA_DEFRTR] = 1, [DEVCONF_ACCEPT_RA_PINFO] = 1,
[DEVCONF_ACCEPT_RA_RTR_PREF] = 0, [DEVCONF_RTR_PROBE_INTERVAL] = 0,
[DEVCONF_ACCEPT_RA_RT_INFO_MAX_PLEN] = 0, [DEVCONF_PROXY_NDP] = 0,
[DEVCONF_OPTIMISTIC_DAD] = 0, [DEVCONF_ACCEPT_SOURCE_ROUTE] = 0,
[DEVCONF_MC_FORWARDING] = 0, [DEVCONF_DISABLE_IPV6] = 0,
[DEVCONF_ACCEPT_DAD] = -1, [DEVCONF_FORCE_TLLAO] = 0,
[DEVCONF_NDISC_NOTIFY] = 0,
[DEVCONF_MLDV1_UNSOLICITED_REPORT_INTERVAL] = 10000,
[DEVCONF_MLDV2_UNSOLICITED_REPORT_INTERVAL] = 1000, ...]], [{nla_len=300,
nla_type=IFLA_INET6_STATS}, [[IPSTATS_MIB_NUM] = 37, [IPSTATS_MIB_INPKTS] = 0,
[IPSTATS_MIB_INOCTETS] = 0, [IPSTATS_MIB_INDELIVERS] = 0,
[IPSTATS_MIB_OUTFORWDATAGRAMS] = 0, [IPSTATS_MIB_OUTPKTS] = 0,
[IPSTATS_MIB_OUTOCTETS] = 0, [IPSTATS_MIB_INHDRERRORS] = 0,
[IPSTATS_MIB_INTOOBIGERRORS] = 0, [IPSTATS_MIB_INNOROUTES] = 0,
[IPSTATS_MIB_INADDRERRORS] = 0, [IPSTATS_MIB_INUNKNOWNPROTOS] = 0,
[IPSTATS_MIB_INTRUNCATEDPKTS] = 0, [IPSTATS_MIB_INDISCARDS] = 0,
[IPSTATS_MIB_OUTDISCARDS] = 0, [IPSTATS_MIB_OUTNOROUTES] = 0,
[IPSTATS_MIB_REASMTIMEOUT] = 0, [IPSTATS_MIB_REASMREQDS] = 0,
[IPSTATS_MIB_REASMOKS] = 0, [IPSTATS_MIB_REASMFAILS] = 0,
[IPSTATS_MIB_FRAGOKS] = 0, [IPSTATS_MIB_FRAGFAILS] = 0,
[IPSTATS_MIB_FRAGCREATES] = 0, [IPSTATS_MIB_INMCASTPKTS] = 0,
[IPSTATS_MIB_OUTMCASTPKTS] = 0, [IPSTATS_MIB_INBCASTPKTS] = 0,
[IPSTATS_MIB_OUTBCASTPKTS] = 0, [IPSTATS_MIB_INMCASTOCTETS] = 0,
[IPSTATS_MIB_OUTMCASTOCTETS] = 0, [IPSTATS_MIB_INBCASTOCTETS] = 0,
[IPSTATS_MIB_OUTBCASTOCTETS] = 0, [IPSTATS_MIB_CSUMERRORS] = 0, ...]],
[{nla_len=52, nla_type=IFLA_INET6_ICMP6STATS}, [[ICMP6_MIB_NUM] = 6,
[ICMP6_MIB_INMSGs] = 0, [ICMP6_MIB_INERRORS] = 0, [ICMP6_MIB_OUTMSGs] = 0,
[ICMP6_MIB_OUTERRORS] = 0, [ICMP6_MIB_CSUMERRORS] = 0]], [{nla_len=20,
nla_type=IFLA_INET6_TOKEN}, inet_pton(AF_INET6, "::"), [{nla_len=5,
nla_type=IFLA_INET6_ADDR_GEN_MODE}, IN6_ADDR_GEN_MODE_EUI64]]]]],
[{nlmsg_len=1404, nlmsg_type=RTM_NEWLINK, nlmsg_flags=NLM_F_MULTI,
nlmsg_seq=1709268905, nlmsg_pid=131424}, {ifi_family=AF_UNSPEC,
ifi_type=ARPHRD_ETHER, ifi_index=if_nametoindex("eth0"),
ifi_flags=IFF_UP|IFF_BROADCAST|IFF_RUNNING|IFF_MULTICAST|IFF_LOWER_UP,
ifi_change=0}, [{nla_len=9, nla_type=IFLA_IFNAME}, "eth0"], [{nla_len=8,
nla_type=IFLA_TXQLEN}, 1000], [{nla_len=5, nla_type=IFLA_OPERSTATE}, 6], [{nla_len=5,

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nla_type=IFLA_LINKMODE}, 0], [{nla_len=8, nla_type=IFLA_MTU}, 1500], [{nla_len=8,
nla_type=IFLA_MIN_MTU}, 68], [{nla_len=8, nla_type=IFLA_MAX_MTU}, 65521],
[{nla_len=8, nla_type=IFLA_GROUP}, 0], [{nla_len=8, nla_type=IFLA_PROMISCUITY}, 0],
[{nla_len=8, nla_type=IFLA_NUM_TX_QUEUES}, 64], [{nla_len=8,
nla_type=IFLA_GSO_MAX_SEGS}, 65535], [{nla_len=8, nla_type=IFLA_GSO_MAX_SIZE},
62780], [{nla_len=8, nla_type=IFLA_NUM_RX_QUEUES}, 64], [{nla_len=5,
nla_type=IFLA_CARRIER}, 1], [{nla_len=7, nla_type=IFLA_QDISC}, "mq"], [{nla_len=8,
nla_type=IFLA_CARRIER_CHANGES}, 1], [{nla_len=8,
nla_type=IFLA_CARRIER_UP_COUNT}, 1], [{nla_len=8,
nla_type=IFLA_CARRIER_DOWN_COUNT}, 0], [{nla_len=5,
nla_type=IFLA_PROTO_DOWN}, 0], [{nla_len=36, nla_type=IFLA_MAP}, {mem_start=0,
mem_end=0, base_addr=0, irq=0, dma=0, port=0}], [{nla_len=10, nla_type=IFLA_ADDRESS},
00:15:5d:6e:81:5d], [{nla_len=10, nla_type=IFLA_BROADCAST}, ff:ff:ff:ff:ff:ff],
[{nla_len=196, nla_type=IFLA_STATS64}, {rx_packets=15816, tx_packets=10540,
rx_bytes=22736340, tx_bytes=3646286, rx_errors=0, tx_errors=0, rx_dropped=0, tx_dropped=0,
multicast=3666, collisions=0, rx_length_errors=0, rx_over_errors=0, rx_crc_errors=0,
rx_frame_errors=0, rx_fifo_errors=0, rx_missed_errors=0, tx_aborted_errors=0,
tx_carrier_errors=0, tx_fifo_errors=0, tx_heartbeat_errors=0, tx_window_errors=0,
rx_compressed=0, tx_compressed=0, rx_nohandler=0}], [{nla_len=100, nla_type=IFLA_STATS},
{rx_packets=15816, tx_packets=10540, rx_bytes=22736340, tx_bytes=3646286, rx_errors=0,
tx_errors=0, rx_dropped=0, tx_dropped=0, multicast=3666, collisions=0, rx_length_errors=0,
rx_over_errors=0, rx_crc_errors=0, rx_frame_errors=0, rx_fifo_errors=0, rx_missed_errors=0,
tx_aborted_errors=0, tx_carrier_errors=0, tx_fifo_errors=0, tx_heartbeat_errors=0,
tx_window_errors=0, rx_compressed=0, tx_compressed=0, rx_nohandler=0}], [{nla_len=12,
nla_type=IFLA_XDP}, [{nla_len=5, nla_type=IFLA_XDP_ATTACHED},
XDP_ATTACHED_NONE]], [{nla_len=10, nla_type=IFLA_PERM_ADDRESS},
00:15:5d:6e:81:5d], [{nla_len=780, nla_type=IFLA_AF_SPEC}, [{nla_len=136,
nla_type=AF_INET}, [{nla_len=132, nla_type=IFLA_INET_CONF},
[[IPV4_DEVCONF_FORWARDING-1] = 0, [IPV4_DEVCONF_MC_FORWARDING-1] = 0,
[IPV4_DEVCONF_PROXY_ARP-1] = 0, [IPV4_DEVCONF_ACCEPT_REDIRECTS-1] = 1,
[IPV4_DEVCONF_SECURE_REDIRECTS-1] = 1, [IPV4_DEVCONF_SEND_REDIRECTS-1] =
1, [IPV4_DEVCONF_SHARED_MEDIA-1] = 1, [IPV4_DEVCONF_RP_FILTER-1] = 2,
[IPV4_DEVCONF_ACCEPT_SOURCE_ROUTE-1] = 0, [IPV4_DEVCONF_BOOTP_RELAY-1]
= 0, [IPV4_DEVCONF_LOG_MARTIANS-1] = 0, [IPV4_DEVCONF_TAG-1] = 0,
[IPV4_DEVCONF_ARPFILTER-1] = 0, [IPV4_DEVCONF_MEDIUM_ID-1] = 0,
[IPV4_DEVCONF_NOXFRM-1] = 0, [IPV4_DEVCONF_NOPOLICY-1] = 0,
[IPV4_DEVCONF_FORCE_IGMP_VERSION-1] = 0, [IPV4_DEVCONF_ARP_ANNOUNCE-1]
= 0, [IPV4_DEVCONF_ARP_IGNORE-1] = 0,
[IPV4_DEVCONF_PROMOTE_SECONDARIES-1] = 1, [IPV4_DEVCONF_ARP_ACCEPT-1] =
0, [IPV4_DEVCONF_ARP_NOTIFY-1] = 0, [IPV4_DEVCONF_ACCEPT_LOCAL-1] = 0,
[IPV4_DEVCONF_SRC_VMARK-1] = 0, [IPV4_DEVCONF_PROXY_ARP_PVLAN-1] = 0,
[IPV4_DEVCONF_ROUTE_LOCALNET-1] = 0,
[IPV4_DEVCONF_IGMPV2_UNSOLICITED_REPORT_INTERVAL-1] = 10000,
[IPV4_DEVCONF_IGMPV3_UNSOLICITED_REPORT_INTERVAL-1] = 1000,
[IPV4_DEVCONF_IGNORE_ROUTES_WITH_LINKDOWN-1] = 0,
[IPV4_DEVCONF_DROP_UNICAST_IN_L2_MULTICAST-1] = 0,
[IPV4_DEVCONF_DROP_GRATUITOUS_ARP-1] = 0,
[IPV4_DEVCONF_BC_FORWARDING-1] = 0]]], [{nla_len=640, nla_type=AF_INET6},
[[{nla_len=8, nla_type=IFLA_INET6_FLAGS}, IF_RS_SENT|IF_READY], [{nla_len=20,
nla_type=IFLA_INET6_CACHEINFO}, {max_reasm_len=65535, timestamp=61,
reachable_time=40530, retrans_time=1000}], [{nla_len=228, nla_type=IFLA_INET6_CONF},
[[DEVCONF_FORWARDING] = 0, [DEVCONF_HOPLIMIT] = 64, [DEVCONF_MTU6] =
1500, [DEVCONF_ACCEPT_RA] = 1, [DEVCONF_ACCEPT_REDIRECTS] = 1,
[DEVCONF_AUTOCONF] = 1, [DEVCONF_DAD_TRANSMITS] = 1,
[DEVCONF_RTR_SOLICITS] = -1, [DEVCONF_RTR_SOLICIT_INTERVAL] = 4000,

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[DEVCONF_RTR_SOLICIT_DELAY] = 1000, [DEVCONF_USE_TEMPADDR] = 0,
[DEVCONF_TEMP_VALID_LFT] = 604800, [DEVCONF_TEMP_PREFERRED_LFT] = 86400,
[DEVCONF_REGEN_MAX_RETRY] = 3, [DEVCONF_MAX_DESYNC_FACTOR] = 600,
[DEVCONF_MAX_ADDRESSES] = 16, [DEVCONF_FORCE_MLD_VERSION] = 0,
[DEVCONF_ACCEPT_RA_DEFRTR] = 1, [DEVCONF_ACCEPT_RA_PINFO] = 1,
[DEVCONF_ACCEPT_RA_RTR_PREF] = 0, [DEVCONF_RTR_PROBE_INTERVAL] = 0,
[DEVCONF_ACCEPT_RA_RT_INFO_MAX_PLEN] = 0, [DEVCONF_PROXY_NDP] = 0,
[DEVCONF_OPTIMISTIC_DAD] = 0, [DEVCONF_ACCEPT_SOURCE_ROUTE] = 0,
[DEVCONF_MC_FORWARDING] = 0, [DEVCONF_DISABLE_IPV6] = 0,
[DEVCONF_ACCEPT_DAD] = 1, [DEVCONF_FORCE_TLLAO] = 0,
[DEVCONF_NDISC_NOTIFY] = 0,
[DEVCONF_MLDV1_UNSOLICITED_REPORT_INTERVAL] = 10000,
[DEVCONF_MLDV2_UNSOLICITED_REPORT_INTERVAL] = 1000, ...]], [{nla_len=300,
nla_type=IFLA_INET6_STATS}, [[IPSTATS_MIB_NUM] = 37, [IPSTATS_MIB_INPKTS] =
703, [IPSTATS_MIB_INOCTETS] = 114914, [IPSTATS_MIB_INDELIVERS] = 0,
[IPSTATS_MIB_OUTFORWDATAGRAMS] = 0, [IPSTATS_MIB_OUTPKTS] = 25,
[IPSTATS_MIB_OUTOCTETS] = 1496, [IPSTATS_MIB_INHDRERRORS] = 0,
[IPSTATS_MIB_INTOOBIGERRORS] = 0, [IPSTATS_MIB_INNOROUTES] = 0,
[IPSTATS_MIB_INADDRERRORS] = 0, [IPSTATS_MIB_INUNKNOWNPROTOS] = 0,
[IPSTATS_MIB_INTRUNCATEDPKTS] = 0, [IPSTATS_MIB_INDISCARDS] = 0,
[IPSTATS_MIB_OUTDISCARDS] = 0, [IPSTATS_MIB_OUTNOROUTES] = 0,
[IPSTATS_MIB_REASMTIMEOUT] = 0, [IPSTATS_MIB_REASMREQDS] = 0,
[IPSTATS_MIB_REASMOKS] = 0, [IPSTATS_MIB_REASMFAILS] = 0,
[IPSTATS_MIB_FRAGOKS] = 0, [IPSTATS_MIB_FRAGFAILS] = 0,
[IPSTATS_MIB_FRAGCREATES] = 0, [IPSTATS_MIB_INMCASTPKTS] = 703,
[IPSTATS_MIB_OUTMCASTPKTS] = 25, [IPSTATS_MIB_INBCASTPKTS] = 0,
[IPSTATS_MIB_OUTBCASTPKTS] = 0, [IPSTATS_MIB_INMCASTOCTETS] = 114914,
[IPSTATS_MIB_OUTMCASTOCTETS] = 1496, [IPSTATS_MIB_INBCASTOCTETS] = 0,
[IPSTATS_MIB_OUTBCASTOCTETS] = 0, [IPSTATS_MIB_CSUMERRORS] = 0, ...]],
[{nla_len=52, nla_type=IFLA_INET6_ICMP6STATS}, [[ICMP6_MIB_NUM] = 6,
[ICMP6_MIB_INMSGs] = 0, [ICMP6_MIB_INERRORS] = 0, [ICMP6_MIB_OUTMSGs] = 25,
[ICMP6_MIB_OUTERRORS] = 0, [ICMP6_MIB_CSUMERRORS] = 0]], [{nla_len=20,
nla_type=IFLA_INET6_TOKEN}, inet_pton(AF_INET6, "::")], [{nla_len=5,
nla_type=IFLA_INET6_ADDR_GEN_MODE}, IN6_ADDR_GEN_MODE_EUI64]]],
[{nla_len=41, nla_type=IFLA_PARENT_DEV_NAME},
"f523660e-b63b-4767-8f10-9894abca"...], [{nla_len=10,
nla_type=IFLA_PARENT_DEV_BUS_NAME}, "vmbus"]], iov_len=4096}], msg_iovlen=1,
msg_controllen=0, msg_flags=0}, 0) = 2740
```

```
recvmsg(9, {msg_name={sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000},
msg_namelen=12, msg_iov=[{iov_base=[{nlmsg_len=20, nlmsg_type=NLMMSG_DONE,
nlmsg_flags=NLM_F_MULTI, nlmsg_seq=1709268905, nlmsg_pid=131424}, 0],
iov_len=4096}], msg_iovlen=1, msg_controllen=0, msg_flags=0}, 0) = 20
```

```
sendto(9, [{nlmsg_len=20, nlmsg_type=RTM_GETADDR,
nlmsg_flags=NLM_F_REQUEST|NLM_F_DUMP, nlmsg_seq=1709268906, nlmsg_pid=0},
{ifa_family=AF_UNSPEC, ...}], 20, 0, {sa_family=AF_NETLINK, nl_pid=0,
nl_groups=00000000}, 12) = 20
```

```
recvmsg(9, {msg_name={sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000},
msg_namelen=12, msg_iov=[{iov_base=[{nlmsg_len=76, nlmsg_type=RTM_NEWADDR,
nlmsg_flags=NLM_F_MULTI, nlmsg_seq=1709268906, nlmsg_pid=131424},
{ifa_family=AF_INET, ifa_prefixlen=8, ifa_flags=IFA_F_PERMANENT,
ifa_scope=RT_SCOPE_HOST, ifa_index=if_nametoindex("lo")}, [{nla_len=8,
nla_type=IFA_ADDRESS}, inet_addr("127.0.0.1")], [{nla_len=8, nla_type=IFA_LOCAL},
inet_addr("127.0.0.1")], [{nla_len=7, nla_type=IFA_LABEL}, "lo"], [{nla_len=8,
```

```

nla_type=IFA_FLAGS}, IFA_F_PERMANENT], [{nla_len=20,
nla_type=IFA_CACHEINFO}, {ifa_preferred=4294967295, ifa_valid=4294967295, cstamp=44,
tstamp=44}]]], [{nlmsg_len=88, nlmsg_type=RTM_NEWADDR,
nlmsg_flags=NLM_F_MULTI, nlmsg_seq=1709268906, nlmsg_pid=131424},
{ifa_family=AF_INET, ifa_prefixlen=20, ifa_flags=IFA_F_PERMANENT,
ifa_scope=RT_SCOPE_UNIVERSE, ifa_index=if_nametoindex("eth0")}, [{nla_len=8,
nla_type=IFA_ADDRESS}, inet_addr("172.28.132.59")], [{nla_len=8,
nla_type=IFA_LOCAL}, inet_addr("172.28.132.59")], [{nla_len=8,
nla_type=IFA_BROADCAST}, inet_addr("172.28.143.255")], [{nla_len=9,
nla_type=IFA_LABEL}, "eth0"], [{nla_len=8, nla_type=IFA_FLAGS},
IFA_F_PERMANENT], [{nla_len=20, nla_type=IFA_CACHEINFO},
{ifa_preferred=4294967295, ifa_valid=4294967295, cstamp=61, tstamp=61}]]]],
iov_len=4096}], msg_iovlen=1, msg_controllen=0, msg_flags=0}, 0) = 164

```

```

recvmsg(9, {msg_name={sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000},
msg_namelen=12, msg_iov=[{iov_base=[{nlmsg_len=72, nlmsg_type=RTM_NEWADDR,
nlmsg_flags=NLM_F_MULTI, nlmsg_seq=1709268906, nlmsg_pid=131424},
{ifa_family=AF_INET6, ifa_prefixlen=128, ifa_flags=IFA_F_PERMANENT,
ifa_scope=RT_SCOPE_HOST, ifa_index=if_nametoindex("lo")}, [{nla_len=20,
nla_type=IFA_ADDRESS}, inet_pton(AF_INET6, "::1")], [{nla_len=20,
nla_type=IFA_CACHEINFO}, {ifa_preferred=4294967295, ifa_valid=4294967295, cstamp=44,
tstamp=44}], [{nla_len=8, nla_type=IFA_FLAGS}, IFA_F_PERMANENT]]], [{nlmsg_len=72,
nlmsg_type=RTM_NEWADDR, nlmsg_flags=NLM_F_MULTI, nlmsg_seq=1709268906,
nlmsg_pid=131424}, {ifa_family=AF_INET6, ifa_prefixlen=64,
ifa_flags=IFA_F_PERMANENT, ifa_scope=RT_SCOPE_LINK,
ifa_index=if_nametoindex("eth0")}, [{nla_len=20, nla_type=IFA_ADDRESS},
inet_pton(AF_INET6, "fe80::215:5dff:fe6e:815d")], [{nla_len=20,
nla_type=IFA_CACHEINFO}, {ifa_preferred=4294967295, ifa_valid=4294967295, cstamp=61,
tstamp=61}], [{nla_len=8, nla_type=IFA_FLAGS}, IFA_F_PERMANENT]]]], iov_len=4096}],
msg_iovlen=1, msg_controllen=0, msg_flags=0}, 0) = 144

```

```

recvmsg(9, {msg_name={sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000},
msg_namelen=12, msg_iov=[{iov_base=[{nlmsg_len=20, nlmsg_type=NLMSG_DONE,
nlmsg_flags=NLM_F_MULTI, nlmsg_seq=1709268906, nlmsg_pid=131424}, 0],
iov_len=4096}], msg_iovlen=1, msg_controllen=0, msg_flags=0}, 0) = 20

```

```

close(9) = 0

```

```

socket(AF_INET, SOCK_STREAM|SOCK_CLOEXEC, IPPROTO_TCP) = 9

```

```

setsockopt(9, SOL_SOCKET, SO_REUSEADDR, [1], 4) = 0

```

```

bind(9, {sa_family=AF_INET, sin_port=htons(5555), sin_addr=inet_addr("127.0.0.1")}, 16) =
0

```

```

listen(9, 100) = 0

```

```

getsockname(9, {sa_family=AF_INET, sin_port=htons(5555), sin_addr=inet_addr("127.0.0.1")},
[128 =>

```

```

16]) = 0

```

```

getsockname(9, {sa_family=AF_INET, sin_port=htons(5555), sin_addr=inet_addr("127.0.0.1")},
[128 =>

```

```

16]) = 0

```

```

getpid() = 131424

```

```

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

```

```

getpid() = 131424

```

```

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

```

```

newfstatat(0, "", {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0x7), ...},

```



```

AT_EMPTY_PATH) = 0
read(0, create 5 -11
"create 5 -11\n", 1024)      = 13
newfstatat(1, "", {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0x7), ...},
AT_EMPTY_PATH) = 0
write(1, "Error: Parent not found\n", 25Error: Parent not found
) = 25
read(0, create 9 5
"create 9 5\n", 1024)      = 11
write(1, "Error: Parent not found\n", 25Error: Parent not found
) = 25
read(0, create 10 5
"create 10 5\n", 1024)     = 12
write(1, "Error: Parent not found\n", 25Error: Parent not found
) = 25
read(0, heartbit 2000
"heartbit 2000\n", 1024)   = 14
clock_nanosleep(CLOCK_REALTIME, 0, {tv_sec=2, tv_nsec=0}, 0x7ffc1e19cbd0) = 0
write(1, "Heartbit: node -1 is fine\n", 26Heartbit: node -1 is fine
) = 26
write(1, "\n", 1
) = 1
read(0, exec 10 start
"exec 10 start\n", 1024)   = 14
write(1, "Error:id Not found\n", 19Error:id Not found
) = 19
read(0, exec 10 stop
"exec 10 stop\n", 1024)   = 13
write(1, "Error:id Not found\n", 19Error:id Not found
) = 19
read(0, exec 10 time
"exec 10 time\n", 1024)   = 13
write(1, "Error:id Not found\n", 19Error:id Not found
) = 19
read(0, kill 10
"kill 10\n", 1024)        = 8
write(1, "Error: id Not Found\n", 20Error: id Not Found
) = 20
read(0, ping 10
"ping 10\n", 1024)        = 8
write(1, "Error: id not found\n", 20Error: id not found
) = 20
read(0, kill 5
"kill 5\n", 1024)         = 7
write(1, "Error: id Not Found\n", 20Error: id Not Found
) = 20

```

```

read(0, "", 1024)          = 0
getpid()                   = 131424
write(4, "\1\0\0\0\0\0\0", 8) = 8
getpid()                   = 131424
getpid()                   = 131424
write(8, "\1\0\0\0\0\0\0", 8) = 8
futex(0x558e7d371388, FUTEX_WAKE_PRIVATE, 1) = 1
getpid()                   = 131424
poll([{fd=3, events=POLLIN}], 1, -1) = 1 ([{fd=3, revents=POLLIN}])
getpid()                   = 131424
read(3, "\1\0\0\0\0\0\0", 8) = 8
getpid()                   = 131424
write(6, "\1\0\0\0\0\0\0", 8) = 8
close(7)                   = 0
close(6)                   = 0
close(5)                   = 0
close(4)                   = 0
close(3)                   = 0
exit_group(0)              = ?
+++ exited with 0 +++

```

Вывод

В результате проделанной работы, я научился использовать утилиту Strace, а также отслеживать с ее помощью использованные в программе системные вызовы. Этот инструмент действительно незаменим для отладки и диагностики программ.