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

**Лабораторная работа №8 по курсу**  
**«Операционные системы»**

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# Постановка задачи

## Вариант 18.

Цель работы: Приобретение практических навыков диагностики работы программного обеспечения.

Задание: 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

Для демонстрации системных вызовов будем использовать утилиту `strace` в операционной системе `linux`.

`Strace` — это диагностическая, отладочная и обучающая утилита пользовательского пространства для `Linux`. Она используется для мониторинга и вмешательства во взаимодействия между процессами и ядром `Linux`, включая системные вызовы, доставку сигналов и изменение состояния процесса. Работа `strace` возможна благодаря функции ядра, известной как `ptrace`. Наиболее часто он используется для запуска программы и вывода списка системных вызовов, которые она выполняет. Это особенно полезно, когда программа часто аварийно завершает работу или ведет себя непредсказуемо; например, `strace` может показать, что программа пытается получить доступ к несуществующему или недоступному файлу.

Еще одно полезное применение `strace` — это использование флага `-p` для присоединения к уже запущенному процессу. Это может быть полезно, если процесс перестал отвечать, и `strace` может помочь определить, что процесс заблокирован при попытке установить сетевое соединение.

Кроме того, `strace` предоставляет множество других возможностей:

- **Фильтрация системных вызовов:** Вы можете указать, какие системные вызовы следует отслеживать, используя параметр `-e trace=`. Это можно сделать по имени (например, `clone`, `fork`, `vfork`), с использованием предопределенных групп (например, `%ipc` или `%file`) или с помощью регулярных выражений (начиная с версии `strace 4.17`, например, `-e trace=/clock_.*`).
- **Трассировка путей:** Вы можете указать список путей для трассировки, используя параметр `-P` (например, `-P /etc/ld.so.cache`).
- **Выгрузка ввода-вывода:** Вы можете указать список файловых дескрипторов для выгрузки ввода-вывода, используя параметры `-e read=` и `-e write=`.
- **Подсчет времени выполнения:** `Strace` позволяет подсчитывать время выполнения системных вызовов и их количество, используя параметры `-T`, `-c`, `-C` и `-w`. Параметр `-U` позволяет выводить дополнительную информацию, такую как минимальное и максимальное время выполнения системного вызова.
- **Временные метки:** `Strace` может печатать относительные или абсолютные временные метки, используя опции `-t` и `-r`.
- **Изменение системных вызовов:** `Strace` позволяет изменять выполняемые системные вызовы, включая изменение возвращаемого значения и кода ошибки, внедрение сигналов, задержек и изменение данных, на которые указывают аргументы системных вызовов. Это достигается с помощью опции `-e inject=syscall specification:tampering specification:retval=:error=:signal=:delay_enter=:delay_exit=:poke_enter=:poke_exit=`.
- **Информация о дескрипторах файлов:** `Strace` может извлекать информацию о дескрипторах файлов, включая сокеты, используя опцию `-u`. Опция `-uu` предоставляет дополнительную информацию, такую как адреса конечных точек для сокетов, пути и основные/дополнительные номера устройств для файлов.
- **Трассировка стека:** `Strace` может печатать трассировки стека, включая разборку символов (начиная с версии `strace 4.21`, используя опцию `-k`).

`Strace` также поддерживает множество других опций и параметров, которые делают его мощным инструментом для диагностики и отладки программного обеспечения.

# Протокол работы программы

## Лабораторная работа №1.

```
luckyabatur@DESKTOP-92P4UEK:~/CLionProjects/OS_labs/lab1$ echo numbers.txt | strace -f  
./parent
```

```
execve("./parent", [ "./parent" ], 0x7ffea0b8fea8 /* 36 vars */) = 0
```

```
brk(NULL) = 0x559879d14000
```

```
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7ff47dfec000
```

```
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
```

```
fstat(3, {st_mode=S_IFREG|0644, st_size=22955, ...}) = 0
```

```
mmap(NULL, 22955, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7ff47dfe6000
```

```
close(3) = 0
```

```
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6", O_RDONLY|O_CLOEXEC) = 3
```

```
read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\220\243\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\0\0"..., 784, 64) =  
784
```

```
fstat(3, {st_mode=S_IFREG|0755, st_size=2125328, ...}) = 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"..., 784, 64) =  
784
```

```
mmap(NULL, 2170256, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7ff47ddd4000
```

```
mmap(0x7ff47ddfc000, 1605632, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,  
0x28000) = 0x7ff47ddfc000
```

```
mmap(0x7ff47df84000, 323584, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1b0000) =  
0x7ff47df84000
```

```
mmap(0x7ff47dfd3000, 24576, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,  
0x1fe000) = 0x7ff47dfd3000
```

```
mmap(0x7ff47dfd9000, 52624, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1,  
0) = 0x7ff47dfd9000
```

```
close(3) = 0
```

```
mmap(NULL, 12288, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7ff47ddd1000
```

```
arch_prctl(ARCH_SET_FS, 0x7ff47ddd1740) = 0
```

```
set_tid_address(0x7ff47ddd1a10) = 23134
```

```
set_robust_list(0x7ff47ddd1a20, 24) = 0
```

```
rseq(0x7ff47ddd2060, 0x20, 0, 0x53053053) = 0
```

```
mprotect(0x7ff47dfd3000, 16384, PROT_READ) = 0
```

```

mprotect(0x5598782ad000, 4096, PROT_READ) = 0
mprotect(0x7ff47e024000, 8192, PROT_READ) = 0
prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) = 0
munmap(0x7ff47dfe6000, 22955) = 0
fstat(0, {st_mode=S_IFIFO|0600, st_size=0, ...}) = 0
getrandom("\xb4\x90\x3c\xe3\x77\x69\x10\x67", 8, GRND_NONBLOCK) = 8
brk(NULL) = 0x559879d14000
brk(0x559879d35000) = 0x559879d35000
read(0, "numbers.txt\n", 4096) = 12
openat(AT_FDCWD, "numbers.txt", O_RDONLY) = 3
pipe2([4, 5], 0) = 0
clone(child_stack=NULL, flags=CLONE_CHILD_CLEARTID|CLONE_CHILD_SETTID|SIGCHLDstrace: Process
23135 attached
, child_tidptr=0x7ff47ddd1a10) = 23135
[pid 23135] set_robust_list(0x7ff47ddd1a20, 24 <unfinished ...>
[pid 23134] close(3 <unfinished ...>
[pid 23135] <... set_robust_list resumed>) = 0
[pid 23134] <... close resumed>) = 0
[pid 23135] close(4 <unfinished ...>
[pid 23134] close(5 <unfinished ...>
[pid 23135] <... close resumed>) = 0
[pid 23134] <... close resumed>) = 0
[pid 23135] dup2(3, 0 <unfinished ...>
[pid 23134] read(4, <unfinished ...>
[pid 23135] <... dup2 resumed>) = 0
[pid 23135] close(3) = 0
[pid 23135] dup2(5, 1) = 1
[pid 23135] execve("child", ["child"], 0x7ffec79471a8 /* 36 vars */) = 0
[pid 23135] brk(NULL) = 0x55b3c4f3d000
[pid 23135] mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x7f7786396000
[pid 23135] access("/etc/ld.so.preload", R_OK) = -1 ENOENT (No such file or directory)
[pid 23135] openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC) = 3
[pid 23135] fstat(3, {st_mode=S_IFREG|0644, st_size=22955, ...}) = 0

```

```

[pid 23135] mmap(NULL, 22955, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7f7786390000

[pid 23135] close(3) = 0

[pid 23135] openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6", O_RDONLY|O_CLOEXEC) = 3

[pid 23135] read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\220\243\2\0\0\0\0"... ,
832) = 832

[pid 23135] 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

[pid 23135] fstat(3, {st_mode=S_IFREG|0755, st_size=2125328, ...}) = 0

[pid 23135] 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

[pid 23135] mmap(NULL, 2170256, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f778617e000

[pid 23135] mmap(0x7f77861a6000, 1605632, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000) = 0x7f77861a6000

[pid 23135] mmap(0x7f778632e000, 323584, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0x1b0000) = 0x7f778632e000

[pid 23135] mmap(0x7f778637d000, 24576, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1fe000) = 0x7f778637d000

[pid 23135] mmap(0x7f7786383000, 52624, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f7786383000

[pid 23135] close(3) = 0

[pid 23135] mmap(NULL, 12288, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x7f778617b000

[pid 23135] arch_prctl(ARCH_SET_FS, 0x7f778617b740) = 0

[pid 23135] set_tid_address(0x7f778617ba10) = 23135

[pid 23135] set_robust_list(0x7f778617ba20, 24) = 0

[pid 23135] rseq(0x7f778617c060, 0x20, 0, 0x53053053) = 0

[pid 23135] mprotect(0x7f778637d000, 16384, PROT_READ) = 0

[pid 23135] mprotect(0x55b3c49e9000, 4096, PROT_READ) = 0

[pid 23135] mprotect(0x7f77863ce000, 8192, PROT_READ) = 0

[pid 23135] prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY})
= 0

[pid 23135] munmap(0x7f7786390000, 22955) = 0

[pid 23135] fstat(0, {st_mode=S_IFREG|0644, st_size=53, ...}) = 0

[pid 23135] getrandom("\x03\xd8\x9b\xa8\xa6\xc2\x65\x49", 8, GRND_NONBLOCK) = 8

[pid 23135] brk(NULL) = 0x55b3c4f3d000

[pid 23135] brk(0x55b3c4f5e000) = 0x55b3c4f5e000

[pid 23135] read(0, "212\n32\n43221242\n34\n42\n18\n8\n98888"... , 4096) = 53

```

```

[pid 23135] fstat(1, {st_mode=S_IFIFO|0600, st_size=0, ...}) = 0
[pid 23135] write(1, "212\n32\n43221242\n34\n42\n18\n8\n98888"..., 40) = 40
[pid 23134] <... read resumed>"2", 1) = 1
[pid 23135] lseek(0, -12, SEEK_CUR <unfinished ...>
[pid 23134] read(4, <unfinished ...>
[pid 23135] <... lseek resumed>) = 41
[pid 23134] <... read resumed>"1", 1) = 1
[pid 23135] exit_group(0 <unfinished ...>
[pid 23134] read(4, <unfinished ...>
[pid 23135] <... exit_group resumed>) = ?
[pid 23134] <... read resumed>"2", 1) = 1
[pid 23134] read(4, "\n", 1) = 1
[pid 23135] +++ exited with 0 +++
--- SIGCHLD {si_signo=SIGCHLD, si_code=CLD_EXITED, si_pid=23135, si_uid=1000, si_status=0,
si_utime=0, si_stime=0} ---
fstat(1, {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0x2), ...}) = 0
write(1, "212\n", 4212
) = 4
read(4, "3", 1) = 1
read(4, "2", 1) = 1
read(4, "\n", 1) = 1
write(1, "32\n", 332
) = 3
read(4, "4", 1) = 1
read(4, "3", 1) = 1
read(4, "2", 1) = 1
read(4, "2", 1) = 1
read(4, "1", 1) = 1
read(4, "2", 1) = 1
read(4, "4", 1) = 1
read(4, "2", 1) = 1
read(4, "\n", 1) = 1
write(1, "43221242\n", 943221242

```

```

)          = 9

read(4, "3", 1)          = 1

read(4, "4", 1)          = 1

read(4, "\n", 1)         = 1

write(1, "34\n", 334

)          = 3

read(4, "4", 1)          = 1

read(4, "2", 1)          = 1

read(4, "\n", 1)         = 1

write(1, "42\n", 342

)          = 3

read(4, "1", 1)          = 1

read(4, "8", 1)          = 1

read(4, "\n", 1)         = 1

write(1, "18\n", 318

)          = 3

read(4, "8", 1)          = 1

read(4, "\n", 1)         = 1

write(1, "8\n", 28

)          = 2

read(4, "9", 1)          = 1

read(4, "8", 1)          = 1

read(4, "8", 1)          = 1

read(4, "8", 1)          = 1

read(4, "8", 1)          = 1

read(4, "8", 1)          = 1

read(4, "8", 1)          = 1

read(4, "8", 1)          = 1

read(4, "\n", 1)         = 1

write(1, "98888888\n", 998888888

)          = 9

read(4, "1", 1)          = 1

read(4, "2", 1)          = 1

```

```

read(4, "4", 1)                = 1
read(4, "\n", 1)                = 1
write(1, "124\n", 4124
)                                = 4
read(4, "", 1)                  = 0
close(4)                        = 0
wait4(-1, NULL, 0, NULL)        = 23135
lseek(0, -1, SEEK_CUR)          = -1 ESPIPE (Illegal seek)
exit_group(0)                   = ?
+++ exited with 0 +++

```

## Лабораторная работа №2.

```

execve("./main", ["/main", "4", "120000000"], 0x7ffc4caaba08 /* 36 vars */) = 0
brk(NULL)                        = 0x5577600cd000
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x7f1f9441a000
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
fstat(3, {st_mode=S_IFREG|0644, st_size=23499, ...}) = 0
mmap(NULL, 23499, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7f1f94414000
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\0\220\243\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\0\0"..., 784, 64) = 784
fstat(3, {st_mode=S_IFREG|0755, st_size=2125328, ...}) = 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"..., 784, 64) = 784
mmap(NULL, 2170256, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f1f94202000
mmap(0x7f1f9422a000, 1605632, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000) = 0x7f1f9422a000
mmap(0x7f1f943b2000, 323584, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE,
3, 0x1b0000) = 0x7f1f943b2000
mmap(0x7f1f94401000, 24576, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1fe000) = 0x7f1f94401000
mmap(0x7f1f94407000, 52624, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f1f94407000

```



```

close(3) = 0
mmap(NULL, 12288, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x7f1f941ff000
arch_prctl(ARCH_SET_FS, 0x7f1f941ff740) = 0
set_tid_address(0x7f1f941ffa10) = 219542
set_robust_list(0x7f1f941ffa20, 24) = 0
rseq(0x7f1f94200060, 0x20, 0, 0x53053053) = 0
mprotect(0x7f1f94401000, 16384, PROT_READ) = 0
mprotect(0x55775e844000, 4096, PROT_READ) = 0
mprotect(0x7f1f94452000, 8192, PROT_READ) = 0
prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) = 0
munmap(0x7f1f94414000, 23499) = 0
getrandom("\x3b\xc2\xe0\xfd\x89\x8e\x90\xf4", 8, GRND_NONBLOCK) = 8
brk(NULL) = 0x5577600cd000
brk(0x5577600ee000) = 0x5577600ee000
rt_sigaction(SIGRT_1, {sa_handler=0x7f1f9429b520, sa_mask=[],
sa_flags=SA_RESTORER|SA_ONSTACK|SA_RESTART|SA_SIGINFO,
sa_restorer=0x7f1f94247320}, 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)
= 0x7f1f939fe000
mprotect(0x7f1f939ff000, 8388608, PROT_READ|PROT_WRITE) = 0
rt_sigprocmask(SIG_BLOCK, ~[], [QUIT], 8) = 0
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THREAD|
CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_CLEARTI
D, child_tid=0x7f1f941fe990, parent_tid=0x7f1f941fe990, exit_signal=0, stack=0x7f1f939fe000,
stack_size=0x7fff80, tls=0x7f1f941fe6c0}strace: Process 219543 attached
=> {parent_tid=[219543]}, 88) = 219543
[pid 219543] rseq(0x7f1f941fefe0, 0x20, 0, 0x53053053 <unfinished ...>
[pid 219542] rt_sigprocmask(SIG_SETMASK, [QUIT], <unfinished ...>
[pid 219543] <... rseq resumed>) = 0
[pid 219542] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 219543] set_robust_list(0x7f1f941fe9a0, 24 <unfinished ...>
[pid 219542] mmap(NULL, 8392704, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0 <unfinished ...>
[pid 219543] <... set_robust_list resumed>) = 0

```

```

[pid 219542] <... mmap resumed>)    = 0x7f1f931fd000
[pid 219543] rt_sigprocmask(SIG_SETMASK, [QUIT], <unfinished ...>
[pid 219542] mprotect(0x7f1f931fe000, 8388608, PROT_READ|PROT_WRITE <unfinished ...>
[pid 219543] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 219542] <... mprotect resumed>)  = 0
[pid 219542] rt_sigprocmask(SIG_BLOCK, ~[], [QUIT], 8) = 0
[pid 219542]
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THREAD|
CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_CLEAR
TID, child_tid=0x7f1f939fd990, parent_tid=0x7f1f939fd990, exit_signal=0, stack=0x7f1f931fd000,
stack_size=0x7fff80, tls=0x7f1f939fd6c0})strace: Process 219544 attached

=> {parent_tid=[219544]}, 88) = 219544
[pid 219544] rseq(0x7f1f939fdfe0, 0x20, 0, 0x53053053 <unfinished ...>
[pid 219542] rt_sigprocmask(SIG_SETMASK, [QUIT], <unfinished ...>
[pid 219544] <... rseq resumed>)      = 0
[pid 219542] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 219544] set_robust_list(0x7f1f939fd9a0, 24 <unfinished ...>
[pid 219542] mmap(NULL, 8392704, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0 <unfinished ...>
[pid 219544] <... set_robust_list resumed>) = 0
[pid 219542] <... mmap resumed>)      = 0x7f1f929fc000
[pid 219544] rt_sigprocmask(SIG_SETMASK, [QUIT], <unfinished ...>
[pid 219542] mprotect(0x7f1f929fd000, 8388608, PROT_READ|PROT_WRITE <unfinished ...>
[pid 219544] <... rt_sigprocmask resumed>NULL, 8) = 0
[pid 219542] <... mprotect resumed>)  = 0
[pid 219542] rt_sigprocmask(SIG_BLOCK, ~[], [QUIT], 8) = 0
[pid 219542]
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THREAD|
CLONE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_CLEAR
TID, child_tid=0x7f1f931fc990, parent_tid=0x7f1f931fc990, exit_signal=0, stack=0x7f1f929fc000,
stack_size=0x7fff80, tls=0x7f1f931fc6c0})strace: Process 219545 attached

=> {parent_tid=[219545]}, 88) = 219545
[pid 219545] rseq(0x7f1f931fcfe0, 0x20, 0, 0x53053053 <unfinished ...>
[pid 219542] rt_sigprocmask(SIG_SETMASK, [QUIT], <unfinished ...>
[pid 219545] <... rseq resumed>)      = 0
[pid 219542] <... rt_sigprocmask resumed>NULL, 8) = 0

```

```

[pid 219545] set_robust_list(0x7f1f931fc9a0, 24 <unfinished ...>
[pid 219542] futex(0x7f1f941fe990, FUTEX_WAIT_BITSET|FUTEX_CLOCK_REALTIME,
219543, NULL, FUTEX_BITSET_MATCH_ANY <unfinished ...>
[pid 219545] <... set_robust_list resumed>) = 0
[pid 219545] rt_sigprocmask(SIG_SETMASK, [QUIT], NULL, 8) = 0
[pid 219545] rt_sigprocmask(SIG_BLOCK, ~[RT_1], NULL, 8) = 0
[pid 219545] madvise(0x7f1f929fc000, 8368128, MADV_DONTNEED) = 0
[pid 219545] exit(0) = ?
[pid 219545] +++ exited with 0 +++
[pid 219543] rt_sigprocmask(SIG_BLOCK, ~[RT_1], NULL, 8) = 0
[pid 219543] madvise(0x7f1f939fe000, 8368128, MADV_DONTNEED) = 0
[pid 219543] exit(0) = ?
[pid 219542] <... futex resumed>) = 0
[pid 219543] +++ exited with 0 +++
[pid 219542] futex(0x7f1f939fd990, FUTEX_WAIT_BITSET|FUTEX_CLOCK_REALTIME,
219544, NULL, FUTEX_BITSET_MATCH_ANY <unfinished ...>
[pid 219544] rt_sigprocmask(SIG_BLOCK, ~[RT_1], NULL, 8) = 0
[pid 219544] madvise(0x7f1f931fd000, 8368128, MADV_DONTNEED) = 0
[pid 219544] exit(0) = ?
[pid 219542] <... futex resumed>) = 0
[pid 219544] +++ exited with 0 +++
fstat(1, {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0x2), ...}) = 0
write(1, "Probability = 7.14%\n", 20Probability = 7.14%
) = 20
write(1, "Program executed in 10945 ms.\n", 30Program executed in 10945 ms.
) = 30
exit_group(0) = ?
+++ exited with 0 +++

```

### Лабораторная работа №3.

```

luckyabatur@Luckyabatur:~/projects/OS_labs/lab3/src$ echo ../test/numbers.txt | strace -f
./main
execve("./main", ["/main"], 0x7ffffae8d6458 /* 36 vars */) = 0
brk(NULL) = 0x55b73c3c8000
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7fe2691d2000

```

```

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

fstat(3, {st_mode=S_IFREG|0644, st_size=24775, ...}) = 0

mmap(NULL, 24775, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7fe2691cb000

close(3) = 0

openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6", O_RDONLY|O_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\220\243\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\0\0\0"... , 784, 64) = 784

fstat(3, {st_mode=S_IFREG|0755, st_size=2125328, ...}) = 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, 2170256, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7fe268fb9000

mmap(0x7fe268fe1000, 1605632, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000) = 0x7fe268fe1000

mmap(0x7fe269169000, 323584, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1b0000) = 0x7fe269169000

mmap(0x7fe2691b8000, 24576, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1fe000) = 0x7fe2691b8000

mmap(0x7fe2691be000, 52624, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7fe2691be000

close(3) = 0

mmap(NULL, 12288, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7fe268fb6000

arch_prctl(ARCH_SET_FS, 0x7fe268fb6740) = 0

set_tid_address(0x7fe268fb6a10) = 4732

set_robust_list(0x7fe268fb6a20, 24) = 0

rseq(0x7fe268fb7060, 0x20, 0, 0x53053053) = 0

mprotect(0x7fe2691b8000, 16384, PROT_READ) = 0

mprotect(0x55b73b4ea000, 4096, PROT_READ) = 0

mprotect(0x7fe26920a000, 8192, PROT_READ) = 0

prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) = 0

munmap(0x7fe2691cb000, 24775) = 0

unlink("/dev/shm/sem.mysem") = -1 ENOENT (No such file or directory)

getrandom("\x68\x6b\x27\xab\x3b\x7a\x88\xe4", 8, GRND_NONBLOCK) = 8

newfstatat(AT_FDCWD, "/dev/shm/sem.ITeM2P", 0x7ffc0d625210, AT_SYMLINK_NOFOLLOW) = -1 ENOENT (No such file or directory)

openat(AT_FDCWD, "/dev/shm/sem.ITeM2P", O_RDWR|O_CREAT|O_EXCL|O_NOFOLLOW|O_CLOEXEC, 0666) = 3

write(3, "\0\0\0\0\0\0\0\0\200\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0", 32) = 32

```

```

mmap(NULL, 32, PROT_READ|PROT_WRITE, MAP_SHARED, 3, 0) = 0x7fe2691d1000
link("/dev/shm/sem.ITeM2P", "/dev/shm/sem.mysem") = 0
fstat(3, {st_mode=S_IFREG|0644, st_size=32, ...}) = 0
getrandom("\x41\x53\x0a\xd2\xfc\x0e\x83\x80", 8, GRND_NONBLOCK) = 8
brk(NULL) = 0x55b73c3c8000
brk(0x55b73c3e9000) = 0x55b73c3e9000
unlink("/dev/shm/sem.ITeM2P") = 0
close(3) = 0
openat(AT_FDCWD, "temp", O_RDWR|O_CREAT|O_TRUNC, 0666) = 3
ftruncate(3, 4096) = 0
mmap(NULL, 4096, PROT_READ|PROT_WRITE, MAP_SHARED, 3, 0) = 0x7fe2691d0000
fstat(0, {st_mode=S_IFIFO|0600, st_size=0, ...}) = 0
read(0, "../test/numbers.txt\n", 4096) = 20
openat(AT_FDCWD, "../test/numbers.txt", O_RDONLY) = 4
clone(child_stack=NULL, flags=CLONE_CHILD_CLEARTID|CLONE_CHILD_SETTID|SIGCHLDstrace: Process
4733 attached
, child_tidptr=0x7fe268fb6a10) = 4733
[pid 4733] set_robust_list(0x7fe268fb6a20, 24 <unfinished ...>
[pid 4732] close(4 <unfinished ...>
[pid 4733] <... set_robust_list resumed>) = 0
[pid 4732] <... close resumed> = 0
[pid 4732] futex(0x7fe2691d1000, FUTEX_WAIT_BITSET|FUTEX_CLOCK_REALTIME, 0, NULL,
FUTEX_BITSET_MATCH_ANY <unfinished ...>
[pid 4733] dup2(4, 0) = 0
[pid 4733] close(4) = 0
[pid 4733] execve("child", ["child"], 0x7ffc0d625768 /* 36 vars */) = 0
[pid 4733] brk(NULL) = 0x555ad330c000
[pid 4733] mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x7fa8737bc000
[pid 4733] access("/etc/ld.so.preload", R_OK) = -1 ENOENT (No such file or directory)
[pid 4733] openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC) = 4
[pid 4733] fstat(4, {st_mode=S_IFREG|0644, st_size=24775, ...}) = 0
[pid 4733] mmap(NULL, 24775, PROT_READ, MAP_PRIVATE, 4, 0) = 0x7fa8737b5000
[pid 4733] close(4) = 0
[pid 4733] openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6", O_RDONLY|O_CLOEXEC) = 4
[pid 4733] read(4, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\220\243\2\0\0\0\0"...
, 832) = 832

```

```

[pid 4733] pread64(4, "\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

[pid 4733] fstat(4, {st_mode=S_IFREG|0755, st_size=2125328, ...}) = 0

[pid 4733] pread64(4, "\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

[pid 4733] mmap(NULL, 2170256, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 4, 0) = 0x7fa8735a3000

[pid 4733] mmap(0x7fa8735cb000, 1605632, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 4, 0x28000) = 0x7fa8735cb000

[pid 4733] mmap(0x7fa873753000, 323584, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 4,
0x1b0000) = 0x7fa873753000

[pid 4733] mmap(0x7fa8737a2000, 24576, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 4, 0x1fe000) = 0x7fa8737a2000

[pid 4733] mmap(0x7fa8737a8000, 52624, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7fa8737a8000

[pid 4733] close(4) = 0

[pid 4733] mmap(NULL, 12288, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x7fa8735a0000

[pid 4733] arch_prctl(ARCH_SET_FS, 0x7fa8735a0740) = 0

[pid 4733] set_tid_address(0x7fa8735a0a10) = 4733

[pid 4733] set_robust_list(0x7fa8735a0a20, 24) = 0

[pid 4733] rseq(0x7fa8735a1060, 0x20, 0, 0x53053053) = 0

[pid 4733] mprotect(0x7fa8737a2000, 16384, PROT_READ) = 0

[pid 4733] mprotect(0x555ad2e75000, 4096, PROT_READ) = 0

[pid 4733] mprotect(0x7fa8737f4000, 8192, PROT_READ) = 0

[pid 4733] prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY})
= 0

[pid 4733] munmap(0x7fa8737b5000, 24775) = 0

[pid 4733] openat(AT_FDCWD, "temp", O_RDWR) = 4

[pid 4733] mmap(NULL, 4096, PROT_READ|PROT_WRITE, MAP_SHARED, 4, 0) = 0x7fa8737bb000

[pid 4733] openat(AT_FDCWD, "/dev/shm/sem.mysem", O_RDWR|O_NOFOLLOW|O_CLOEXEC) = 5

[pid 4733] fstat(5, {st_mode=S_IFREG|0644, st_size=32, ...}) = 0

[pid 4733] getrandom("\x21\xd6\x72\x16\x8d\xc8\xb1\x3a", 8, GRND_NONBLOCK) = 8

[pid 4733] brk(NULL) = 0x555ad330c000

[pid 4733] brk(0x555ad332d000) = 0x555ad332d000

[pid 4733] mmap(NULL, 32, PROT_READ|PROT_WRITE, MAP_SHARED, 5, 0) = 0x7fa8737ba000

[pid 4733] close(5) = 0

[pid 4733] read(0, "212\n32\n43221242\n34\n42\n18\n8\n98888"... , 10000) = 53

[pid 4733] futex(0x7fa8737ba000, FUTEX_WAKE, 1 <unfinished ...>

[pid 4732] <... futex resumed> = 0

```

```

[pid 4733] <... futex resumed>)          = 1
[pid 4732] fstat(1, <unfinished ...>
[pid 4733] munmap(0x7fa8737ba000, 32 <unfinished ...>
[pid 4732] <... fstat resumed>{st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0x2), ...}) = 0
[pid 4733] <... munmap resumed>)          = 0
[pid 4732] write(1, "212\n", 4 <unfinished ...>
212
[pid 4733] munmap(0x7fa8737bb000, 4096 <unfinished ...>
[pid 4732] <... write resumed>)           = 4
[pid 4733] <... munmap resumed>)          = 0
[pid 4732] write(1, "32\n", 3 <unfinished ...>
32
[pid 4733] close(4 <unfinished ...>
[pid 4732] <... write resumed>)           = 3
[pid 4733] <... close resumed>)           = 0
[pid 4732] write(1, "43221242\n", 943221242
<unfinished ...>
[pid 4733] exit_group(0 <unfinished ...>
[pid 4732] <... write resumed>)           = 9
[pid 4733] <... exit_group resumed>)      = ?
[pid 4732] write(1, "34\n", 334
)          = 3
[pid 4733] +++ exited with 0 +++
--- SIGCHLD {si_signo=SIGCHLD, si_code=CLD_EXITED, si_pid=4733, si_uid=1000, si_status=0,
si_utime=0, si_stime=0} ---
write(1, "42\n", 342
)          = 3
write(1, "18\n", 318
)          = 3
write(1, "8\n", 28
)          = 2
write(1, "98888888\n", 998888888
)          = 9
write(1, "124\n", 4124
)          = 4
wait4(4733, [{WIFEXITED(s) && WEXITSTATUS(s) == 0}], 0, NULL) = 4733

```

```

munmap(0x7fe2691d0000, 4096)          = 0
close(3)                             = 0
munmap(0x7fe2691d1000, 32)           = 0
unlink("/dev/shm/sem.mysem")          = 0
unlink("temp")                       = 0
lseek(0, -1, SEEK_CUR)                = -1 ESPIPE (Illegal seek)
exit_group(0)                        = ?
+++ exited with 0 +++

```

## Лабораторная работа №4.

### Program 1

```

luckyabatur@Luckyabatur:~/projects/OS_labs/lab4/src$ echo "1 2 3 2 9 8 7 6 5 4 3 2 1 0 d"| strace -f
./prog_static
execve("./prog_static", ["/prog_static"], 0x7ffe8355ede8 /* 36 vars */) = 0
brk(NULL)                          = 0x55ecc98e9000
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x7f6f07332000
access("/etc/ld.so.preload", R_OK)  = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "./glibc-hwcaps/x86-64-v3/libLib1.so", O_RDONLY|O_CLOEXEC) = -1
ENOENT (No such file or directory)
openat(AT_FDCWD, "./glibc-hwcaps/x86-64-v2/libLib1.so", O_RDONLY|O_CLOEXEC) = -1
ENOENT (No such file or directory)
openat(AT_FDCWD, "./libLib1.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"...
, 832) = 832
fstat(3, {st_mode=S_IFREG|0755, st_size=15536, ...}) = 0
getcwd("/home/luckyabatur/projects/OS_labs/lab4/src", 128) = 44
mmap(NULL, 16408, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f6f0732d000
mmap(0x7f6f0732e000, 4096, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1000) = 0x7f6f0732e000
mmap(0x7f6f0732f000, 4096, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0x2000) = 0x7f6f0732f000
mmap(0x7f6f07330000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f6f07330000
close(3)                            = 0
openat(AT_FDCWD, "./glibc-hwcaps/x86-64-v3/libc.so.6", O_RDONLY|O_CLOEXEC) = -1 ENOENT
(No such file or directory)
openat(AT_FDCWD, "./glibc-hwcaps/x86-64-v2/libc.so.6", O_RDONLY|O_CLOEXEC) = -1 ENOENT
(No such file or directory)
openat(AT_FDCWD, "./libc.so.6", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or
directory)

```



```

openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC) = 3
fstat(3, {st_mode=S_IFREG|0644, st_size=24775, ...}) = 0
mmap(NULL, 24775, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7f6f07326000
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\0\220\243\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\0\0\0"..., 784, 64) = 784
fstat(3, {st_mode=S_IFREG|0755, st_size=2125328, ...}) = 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, 2170256, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f6f07114000
mmap(0x7f6f0713c000, 1605632, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000) = 0x7f6f0713c000
mmap(0x7f6f072c4000, 323584, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE,
3, 0x1b0000) = 0x7f6f072c4000
mmap(0x7f6f07313000, 24576, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1fe000) = 0x7f6f07313000
mmap(0x7f6f07319000, 52624, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f6f07319000
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\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
fstat(3, {st_mode=S_IFREG|0644, st_size=952616, ...}) = 0
mmap(NULL, 950296, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f6f0702b000
mmap(0x7f6f0703b000, 520192, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x10000) = 0x7f6f0703b000
mmap(0x7f6f070ba000, 360448, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE,
3, 0x8f000) = 0x7f6f070ba000
mmap(0x7f6f07112000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xe7000) = 0x7f6f07112000
close(3) = 0
mmap(NULL, 12288, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x7f6f07028000
arch_prctl(ARCH_SET_FS, 0x7f6f07028740) = 0
set_tid_address(0x7f6f07028a10) = 9307
set_robust_list(0x7f6f07028a20, 24) = 0
rseq(0x7f6f07029060, 0x20, 0, 0x53053053) = 0
mprotect(0x7f6f07313000, 16384, PROT_READ) = 0
mprotect(0x7f6f07112000, 4096, PROT_READ) = 0
mprotect(0x7f6f07330000, 4096, PROT_READ) = 0
mprotect(0x55ecc7f26000, 4096, PROT_READ) = 0
mprotect(0x7f6f0736a000, 8192, PROT_READ) = 0

```

```

prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) = 0
munmap(0x7f6f07326000, 24775)          = 0
fstat(1, {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0x2), ...}) = 0
getrandom("\xa0\xe0\xdc\x47\xe8\x0c\x2d\xfc", 8, GRND_NONBLOCK) = 8
brk(NULL)                             = 0x55ecc98e9000
brk(0x55ecc990a000)                   = 0x55ecc990a000
write(1, "Choose the action:\n", 19Choose the action:
) = 19
write(1, "1 (float) A (float) deltaX - fin"..., 641 (float) A (float) deltaX - find the derivative in the point A
) = 64
write(1, "2 (int) el1 (int) el2... (int) e"..., 782 (int) el1 (int) el2... (int) el10 - sort the array with elements
el1...el10
) = 78
write(1, "other value - exit\n", 19other value - exit
) = 19
fstat(0, {st_mode=S_IFIFO|0600, st_size=0, ...}) = 0
read(0, "1 2 3 2 9 8 7 6 5 4 3 2 1 0 d\n", 4096) = 30
write(1, "derivative: 0.233270\n", 21derivative: 0.233270
) = 21
write(1, "Choose the action:\n1 (float) A ("..., 161Choose the action:
1 (float) A (float) deltaX - find the derivative in the point A
2 (int) el1 (int) el2... (int) el10 - sort the array with elements el1...el10
) = 161
write(1, "other value - exit\n", 19other value - exit
) = 19
write(1, "sorted array: 0 1 2 3 4 5 6 7 8 "..., 35sorted array: 0 1 2 3 4 5 6 7 8 9
) = 35
write(1, "Choose the action:\n1 (float) A ("..., 161Choose the action:
1 (float) A (float) deltaX - find the derivative in the point A
2 (int) el1 (int) el2... (int) el10 - sort the array with elements el1...el10
) = 161
write(1, "other value - exit\n", 19other value - exit
) = 19
lseek(0, -2, SEEK_CUR)                = -1 ESPIPE (Illegal seek)
exit_group(0)                        = ?
+++ exited with 0 +++

```

## Program 2

```
luckyabatur@Luckyabatur:~/projects/OS_labs/lab4/src$ echo "1 4 1 0 ./libLib2.so 2 9 8 7 6 5 4 3 2 1 0 d" |
```

```

strace -f ./prog_dynamic
execve("./prog_dynamic", ["./prog_dynamic"], 0x7ffdde750778 /* 36 vars */) = 0
brk(NULL)                                = 0x561904727000
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x7f048e3b1000
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
fstat(3, {st_mode=S_IFREG|0644, st_size=24775, ...}) = 0
mmap(NULL, 24775, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7f048e3aa000
close(3)                                = 0
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6", O_RDONLY|O_CLOEXEC) = 3
read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\220\243\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
fstat(3, {st_mode=S_IFREG|0755, st_size=2125328, ...}) = 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, 2170256, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f048e198000
mmap(0x7f048e1c0000,                                1605632,                                PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000) = 0x7f048e1c0000
mmap(0x7f048e348000, 323584, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0x1b0000) = 0x7f048e348000
mmap(0x7f048e397000,                                24576,                                PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1fe000) = 0x7f048e397000
mmap(0x7f048e39d000,                                52624,                                PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f048e39d000
close(3)                                = 0
mmap(NULL, 12288, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x7f048e195000
arch_prctl(ARCH_SET_FS, 0x7f048e195740) = 0
set_tid_address(0x7f048e195a10)          = 9435
set_robust_list(0x7f048e195a20, 24)     = 0
rseq(0x7f048e196060, 0x20, 0, 0x53053053) = 0
mprotect(0x7f048e397000, 16384, PROT_READ) = 0
mprotect(0x561903373000, 4096, PROT_READ) = 0
mprotect(0x7f048e3e9000, 8192, PROT_READ) = 0
prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) = 0
munmap(0x7f048e3aa000, 24775)            = 0
getrandom("\x66\x57\x4c\xb9\xa8\xc5\x32\x51", 8, GRND_NONBLOCK) = 8

```

```

brk(NULL) = 0x561904727000
brk(0x561904748000) = 0x561904748000
openat(AT_FDCWD, "./libLib1.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"..., 832) = 832
fstat(3, {st_mode=S_IFREG|0755, st_size=15536, ...}) = 0
getcwd("/home/luckyabatur/projects/OS_labs/lab4/src", 128) = 44
mmap(NULL, 16408, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f048e3ac000
mmap(0x7f048e3ad000, 4096, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1000) = 0x7f048e3ad000
mmap(0x7f048e3ae000, 4096, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f048e3ae000
mmap(0x7f048e3af000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f048e3af000
close(3) = 0
openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC) = 3
fstat(3, {st_mode=S_IFREG|0644, st_size=24775, ...}) = 0
mmap(NULL, 24775, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7f048e18e000
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\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832
fstat(3, {st_mode=S_IFREG|0644, st_size=952616, ...}) = 0
mmap(NULL, 950296, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f048e0a5000
mmap(0x7f048e0b5000, 520192, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x10000) = 0x7f048e0b5000
mmap(0x7f048e134000, 360448, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x8f000) = 0x7f048e134000
mmap(0x7f048e18c000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xe7000) = 0x7f048e18c000
close(3) = 0
mprotect(0x7f048e18c000, 4096, PROT_READ) = 0
mprotect(0x7f048e3af000, 4096, PROT_READ) = 0
munmap(0x7f048e18e000, 24775) = 0
fstat(1, {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0x2), ...}) = 0
write(1, "Choose the action:\n", 19Choose the action:
) = 19
write(1, "0 path - change library\n", 240 path - change library
) = 24

```

```

write(1, "1 (float) A (float) deltaX - fin"..., 641 (float) A (float) deltaX - find the derivative in the point A
) = 64
write(1, "2 (int) el1 (int) el2... (int) e"..., 782 (int) el1 (int) el2... (int) el10 - sort the array with elements
el1...el10
) = 78
write(1, "other value - exit\n", 19other value - exit
) = 19
fstat(0, {st_mode=S_IFIFO|0600, st_size=0, ...}) = 0
read(0, "1 4 1 0 ./libLib2.so 2 9 8 7 6 5"..., 4096) = 45
write(1, "derivative: 0.937306\n", 21derivative: 0.937306
) = 21
write(1, "Choose the action:\n0 path - chan"..., 185Choose the action:
0 path - change library
1 (float) A (float) deltaX - find the derivative in the point A
2 (int) el1 (int) el2... (int) el10 - sort the array with elements el1...el10
) = 185
write(1, "other value - exit\n", 19other value - exit
) = 19
munmap(0x7f048e3ac000, 16408) = 0
munmap(0x7f048e0a5000, 950296) = 0
openat(AT_FDCWD, "./libLib2.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
fstat(3, {st_mode=S_IFREG|0755, st_size=15624, ...}) = 0
getcwd("/home/luckyabatur/projects/OS_labs/lab4/src", 128) = 44
mmap(NULL, 16408, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f048e3ac000
mmap(0x7f048e3ad000, 4096, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1000) = 0x7f048e3ad000
mmap(0x7f048e3ae000, 4096, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3,
0x2000) = 0x7f048e3ae000
mmap(0x7f048e3af000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f048e3af000
close(3) = 0
openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC) = 3
fstat(3, {st_mode=S_IFREG|0644, st_size=24775, ...}) = 0
mmap(NULL, 24775, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7f048e18e000
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\\3\\0>\\0\\1\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0"..., 832) = 832
fstat(3, {st_mode=S_IFREG|0644, st_size=952616, ...}) = 0
mmap(NULL, 950296, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f048e0a5000
mmap(0x7f048e0b5000, 520192, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x10000) = 0x7f048e0b5000
mmap(0x7f048e134000, 360448, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x8f000) = 0x7f048e134000
mmap(0x7f048e18c000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xe7000) = 0x7f048e18c000
close(3) = 0
mprotect(0x7f048e18c000, 4096, PROT_READ) = 0
mprotect(0x7f048e3af000, 4096, PROT_READ) = 0
munmap(0x7f048e18e000, 24775) = 0
write(1, "Choose the action:\\n0 path - chan"..., 185Choose the action:
0 path - change library
1 (float) A (float) deltaX - find the derivative in the point A
2 (int) el1 (int) el2... (int) el10 - sort the array with elements el1...el10
) = 185
write(1, "other value - exit\\n", 19other value - exit
) = 19
write(1, "sorted array: 0 1 2 3 4 5 6 7 8 "..., 35sorted array: 0 1 2 3 4 5 6 7 8 9
) = 35
write(1, "Choose the action:\\n0 path - chan"..., 185Choose the action:
0 path - change library
1 (float) A (float) deltaX - find the derivative in the point A
2 (int) el1 (int) el2... (int) el10 - sort the array with elements el1...el10
) = 185
write(1, "other value - exit\\n", 19other value - exit
) = 19
lseek(0, -2, SEEK_CUR) = -1 ESPIPE (Illegal seek)
exit_group(0) = ?
+++ exited with 0 +++

```

## Лабораторная работа 5-7.

```

18662 execve("./control", ["/control"], 0x7fff4d077b8 /* 36 vars */) = 0
18662 brk(NULL) = 0x561953d13000
18662 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0)
= 0x7fbfb006c000

```

18662 access("/etc/ld.so.preload", R\_OK) = -1 ENOENT (No such file or directory)  
18662 openat(AT\_FDCWD, "/etc/ld.so.cache", O\_RDONLY|O\_CLOEXEC) = 3  
18662 fstat(3, {st\_mode=S\_IFREG|0644, st\_size=24775, ...}) = 0  
18662 mmap(NULL, 24775, PROT\_READ, MAP\_PRIVATE, 3, 0) = 0x7fbfb0065000  
18662 close(3) = 0  
18662 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libzmq.so.5", O\_RDONLY|O\_CLOEXEC) = 3  
18662 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"..., 832) = 832  
18662 fstat(3, {st\_mode=S\_IFREG|0644, st\_size=663584, ...}) = 0  
18662 mmap(NULL, 661336, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7fbfaffc3000  
18662 mmap(0x7fbfaffdc000, 425984, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x19000) = 0x7fbfaffdc000  
18662 mmap(0x7fbfb0044000, 98304, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x81000) = 0x7fbfb0044000  
18662 mmap(0x7fbfb005c000, 36864, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x99000) = 0x7fbfb005c000  
18662 close(3) = 0  
18662 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libstdc++.so.6", O\_RDONLY|O\_CLOEXEC) = 3  
18662 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"..., 832) = 832  
18662 fstat(3, {st\_mode=S\_IFREG|0644, st\_size=2592224, ...}) = 0  
18662 mmap(NULL, 2609472, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7fbfafd45000  
18662 mmap(0x7fbfafde2000, 1343488, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x9d000) = 0x7fbfafde2000  
18662 mmap(0x7fbfaff2a000, 552960, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1e5000) = 0x7fbfaff2a000  
18662 mmap(0x7fbfaffb1000, 57344, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x26b000) = 0x7fbfaffb1000  
18662 mmap(0x7fbfaffbf000, 12608, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7fbfaffbf000  
18662 close(3) = 0  
18662 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libgcc\_s.so.1", O\_RDONLY|O\_CLOEXEC) = 3  
18662 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"..., 832) = 832  
18662 fstat(3, {st\_mode=S\_IFREG|0644, st\_size=183024, ...}) = 0  
18662 mmap(NULL, 185256, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7fbfafd17000  
18662 mmap(0x7fbfafd1b000, 147456, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4000) = 0x7fbfafd1b000  
18662 mmap(0x7fbfafd3f000, 16384, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x28000) = 0x7fbfafd3f000  
18662 mmap(0x7fbfafd43000, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2b000) = 0x7fbfafd43000  
18662 close(3) = 0  
18662 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libc.so.6", O\_RDONLY|O\_CLOEXEC) = 3  
18662 read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\220\243\2\0\0\0\0"..., 832) = 832  
18662 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  
18662 fstat(3, {st\_mode=S\_IFREG|0755, st\_size=2125328, ...}) = 0  
18662 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  
18662 mmap(NULL, 2170256, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7fbfafb05000  
18662 mmap(0x7fbfafb2d000, 1605632, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x28000) = 0x7fbfafb2d000  
18662 mmap(0x7fbfafcb5000, 323584, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1b0000) = 0x7fbfafcb5000  
18662 mmap(0x7fbfafd04000, 24576, PROT\_READ|PROT\_WRITE,

```
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1fe000) = 0x7fbfafd04000
18662 mmap(0x7fbfafd0a000, 52624, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7fbfafd0a000
18662 close(3) = 0
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libbsd.so.0", O_RDONLY|O_CLOEXEC) = 3
18662 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"..., 832) = 832
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=80888, ...}) = 0
18662 mmap(NULL, 86208, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fbfafaef000
18662 mmap(0x7fbfafaf3000, 49152, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7fbfafaf3000
18662 mmap(0x7fbfafaff000, 12288, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x10000) = 0x7fbfafaff000
18662 mmap(0x7fbfafb02000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x12000) = 0x7fbfafb02000
18662 mmap(0x7fbfafb04000, 192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7fbfafb04000
18662 close(3) = 0
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libsodium.so.23", O_RDONLY|O_CLOEXEC) = 3
18662 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"..., 832) = 832
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=355040, ...}) = 0
18662 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0)
= 0x7fbfafaed000
18662 mmap(NULL, 353336, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fbfafa96000
18662 mmap(0x7fbfafa2000, 233472, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xc000) = 0x7fbfafa2000
18662 mmap(0x7fbfafadb000, 65536, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x45000) = 0x7fbfafadb000
18662 mmap(0x7fbfafaeb000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x55000) = 0x7fbfafaeb000
18662 close(3) = 0
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libpgm-5.3.so.0", O_RDONLY|O_CLOEXEC) = 3
18662 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"..., 832) = 832
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=285568, ...}) = 0
18662 mmap(NULL, 301040, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fbfafa4c000
18662 mmap(0x7fbfafa50000, 159744, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7fbfafa50000
18662 mmap(0x7fbfafa77000, 102400, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2b000) = 0x7fbfafa77000
18662 mmap(0x7fbfafa90000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x44000) = 0x7fbfafa90000
18662 mmap(0x7fbfafa92000, 14320, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7fbfafa92000
18662 close(3) = 0
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libnorm.so.1", O_RDONLY|O_CLOEXEC) = 3
18662 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"..., 832) = 832
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=366760, ...}) = 0
18662 mmap(NULL, 1092032, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fbfaf941000
18662 mmap(0x7fbfaf94a000, 274432, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x9000) = 0x7fbfaf94a000
18662 mmap(0x7fbfaf98d000, 45056, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4c000) = 0x7fbfaf98d000
```



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18662 mmap(0x7fbfaf998000, 16384, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x56000) = 0x7fbfaf998000
18662 mmap(0x7fbfaf99c000, 719296, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7fbfaf99c000
18662 close(3) = 0
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libgssapi_krb5.so.2", O_RDONLY|O_CLOEXEC) =
3
18662 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
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=338696, ...}) = 0
18662 mmap(NULL, 341080, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fbfaf8ed000
18662 mmap(0x7fbfaf8f9000, 237568, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xc000) = 0x7fbfaf8f9000
18662 mmap(0x7fbfaf933000, 40960, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x46000) = 0x7fbfaf933000
18662 mmap(0x7fbfaf93d000, 16384, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4f000) = 0x7fbfaf93d000
18662 close(3) = 0
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libm.so.6", O_RDONLY|O_CLOEXEC) = 3
18662 read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=952616, ...}) = 0
18662 mmap(NULL, 950296, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fbfaf804000
18662 mmap(0x7fbfaf814000, 520192, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x10000) = 0x7fbfaf814000
18662 mmap(0x7fbfaf893000, 360448, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x8f000) = 0x7fbfaf893000
18662 mmap(0x7fbfaf8eb000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xe7000) = 0x7fbfaf8eb000
18662 close(3) = 0
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libmd.so.0", O_RDONLY|O_CLOEXEC) = 3
18662 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
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=55536, ...}) = 0
18662 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0)
= 0x7fbfaf802000
18662 mmap(NULL, 57448, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fbfaf7f3000
18662 mmap(0x7fbfaf7f5000, 36864, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7fbfaf7f5000
18662 mmap(0x7fbfaf7fe000, 8192, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE,
3, 0xb000) = 0x7fbfaf7fe000
18662 mmap(0x7fbfaf800000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xc000) = 0x7fbfaf800000
18662 close(3) = 0
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libkrb5.so.3", O_RDONLY|O_CLOEXEC) = 3
18662 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
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=823488, ...}) = 0
18662 mmap(NULL, 822032, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fbfaf72a000
18662 mmap(0x7fbfaf74a000, 397312, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x20000) = 0x7fbfaf74a000
18662 mmap(0x7fbfaf7ab000, 233472, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x81000) = 0x7fbfaf7ab000
18662 mmap(0x7fbfaf7e4000, 61440, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xba000) = 0x7fbfaf7e4000
```

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18662 close(3) = 0
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libk5crypto.so.3", O_RDONLY|O_CLOEXEC) = 3
18662 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
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=178648, ...}) = 0
18662 mmap(NULL, 176392, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fbfaf6fe000
18662 mmap(0x7fbfaf702000, 110592, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7fbfaf702000
18662 mmap(0x7fbfaf71d000, 45056, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1f000) = 0x7fbfaf71d000
18662 mmap(0x7fbfaf728000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2a000) = 0x7fbfaf728000
18662 close(3) = 0
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libcom_err.so.2", O_RDONLY|O_CLOEXEC) = 3
18662 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
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=18504, ...}) = 0
18662 mmap(NULL, 20552, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fbfaf6f8000
18662 mmap(0x7fbfaf6fa000, 4096, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7fbfaf6fa000
18662 mmap(0x7fbfaf6fb000, 4096, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE,
3, 0x3000) = 0x7fbfaf6fb000
18662 mmap(0x7fbfaf6fc000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7fbfaf6fc000
18662 close(3) = 0
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libkrb5support.so.0", O_RDONLY|O_CLOEXEC) =
3
18662 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
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=47904, ...}) = 0
18662 mmap(NULL, 50128, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fbfaf6eb000
18662 mmap(0x7fbfaf6ee000, 24576, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7fbfaf6ee000
18662 mmap(0x7fbfaf6f4000, 8192, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE,
3, 0x9000) = 0x7fbfaf6f4000
18662 mmap(0x7fbfaf6f6000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xa000) = 0x7fbfaf6f6000
18662 close(3) = 0
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libkeyutils.so.1", O_RDONLY|O_CLOEXEC) = 3
18662 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
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=22600, ...}) = 0
18662 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x7fbfaf6e9000
18662 mmap(NULL, 24592, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fbfaf6e2000
18662 mmap(0x7fbfaf6e4000, 8192, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7fbfaf6e4000
18662 mmap(0x7fbfaf6e6000, 4096, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE,
3, 0x4000) = 0x7fbfaf6e6000
18662 mmap(0x7fbfaf6e7000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7fbfaf6e7000
18662 close(3) = 0
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libresolv.so.2", O_RDONLY|O_CLOEXEC) = 3
18662 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
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=68104, ...}) = 0
```

[illegible]

[illegible]

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flags=CLONE_CHILD_CLEARTID|CLONE_CHILD_SETTID|SIGCHLD, child_tidptr=0x7fbfaf6cac90)
= 18664
18662 getpid() = 18662
18662 openat(AT_FDCWD, "/sys/devices/system/cpu/online", O_RDONLY|O_CLOEXEC) = 3
18662 read(3, "0-11\n", 1024) = 5
18662 close(3) = 0
18662 openat(AT_FDCWD, "/sys/devices/system/cpu/possible", O_RDONLY|O_CLOEXEC) = 3
18662 read(3, "0-11\n", 1024) = 5
18662 close(3) = 0
18662 getpid() = 18662
18662 sched_getaffinity(18662, 128, [0 1 2 3 4 5 6 7 8 9 10 11]) = 32
18662 newfstatat(AT_FDCWD, "/etc/nsswitch.conf", {st_mode=S_IFREG|0644, st_size=526, ...}, 0) = 0
18662 newfstatat(AT_FDCWD, "/", {st_mode=S_IFDIR|0755, st_size=4096, ...}, 0) = 0
18662 openat(AT_FDCWD, "/etc/nsswitch.conf", O_RDONLY|O_CLOEXEC) = 3
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=526, ...}) = 0
18662 read(3, "# /etc/nsswitch.conf\n#\n# Example"..., 4096) = 526
18662 read(3, "", 4096) = 0
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=526, ...}) = 0
18662 close(3 <unfinished ...>)
18664 set_robust_list(0x7fbfaf6caca0, 24 <unfinished ...>)
18662 <... close resumed> = 0
18662 openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC <unfinished ...>)
18664 <... set_robust_list resumed> = 0
18662 <... openat resumed> = 3
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=24775, ...}) = 0
18664 execve("./computing", ["computing", "1"], 0x7ffd69a2fd68 /* 36 vars */ <unfinished ...>)
18662 mmap(NULL, 24775, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7fbfb0065000
18662 close(3) = 0
18662 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)
18662 newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v3/", 0x7ffd69a2c700, 0) = -
1 ENOENT (No such file or directory)
18662 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)
18662 newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v2/", 0x7ffd69a2c700, 0) = -
1 ENOENT (No such file or directory)
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1
ENOENT (No such file or directory)
18662 newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/", {st_mode=S_IFDIR|0755, st_size=36864, ...}, 0)
= 0
18664 <... execve resumed> = 0
18662 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)
18662 newfstatat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v3/", <unfinished ...>)
18664 brk(NULL <unfinished ...>)
18662 <... newfstatat resumed> 0x7ffd69a2c700, 0) = -1 ENOENT (No such file or directory)
18662 openat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v2/libnss_db.so.2",
O_RDONLY|O_CLOEXEC <unfinished ...>)
18664 <... brk resumed> = 0x55b5206a7000
18662 <... openat resumed> = -1 ENOENT (No such file or directory)
18662 newfstatat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v2/", 0x7ffd69a2c700, 0)
= -1 ENOENT (No such file or directory)
18664 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0
<unfinished ...>)
18662 openat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1

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```

ENOENT (No such file or directory)
18664 <... mmap resumed>          = 0x7f52a3e40000
18662 newfstatat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/", {st_mode=S_IFDIR|0755, st_size=36864,
...}, 0) = 0
18664 access("/etc/ld.so.preload", R_OK <unfinished ...>)
18662 openat(AT_FDCWD, "/lib/glibc-hwcaps/x86-64-v3/libnss_db.so.2", O_RDONLY|O_CLOEXEC) =
-1 ENOENT (No such file or directory)
18664 <... access resumed>          = -1 ENOENT (No such file or directory)
18662 newfstatat(AT_FDCWD, "/lib/glibc-hwcaps/x86-64-v3/", 0x7ffd69a2c700, 0) = -1 ENOENT (No
such file or directory)
18664 openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC <unfinished ...>)
18662 openat(AT_FDCWD, "/lib/glibc-hwcaps/x86-64-v2/libnss_db.so.2", O_RDONLY|O_CLOEXEC) =
-1 ENOENT (No such file or directory)
18664 <... openat resumed>          = 3
18662 newfstatat(AT_FDCWD, "/lib/glibc-hwcaps/x86-64-v2/", 0x7ffd69a2c700, 0) = -1 ENOENT (No
such file or directory)
18664 fstat(3, <unfinished ...>)
18662 openat(AT_FDCWD, "/lib/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such
file or directory)
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=24775, ...}) = 0
18662 newfstatat(AT_FDCWD, "/lib/", {st_mode=S_IFDIR|0755, st_size=4096, ...}, 0) = 0
18664 mmap(NULL, 24775, PROT_READ, MAP_PRIVATE, 3, 0 <unfinished ...>)
18662          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)
18664 <... mmap resumed>          = 0x7f52a3e39000
18662 newfstatat(AT_FDCWD, "/usr/lib/glibc-hwcaps/x86-64-v3/", 0x7ffd69a2c700, 0) = -1 ENOENT (No
such file or directory)
18664 close(3 <unfinished ...>)
18662          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)
18664 <... close resumed>          = 0
18662 newfstatat(AT_FDCWD, "/usr/lib/glibc-hwcaps/x86-64-v2/", 0x7ffd69a2c700, 0) = -1 ENOENT (No
such file or directory)
18664 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libzmq.so.5", O_RDONLY|O_CLOEXEC <unfinished
...>)
18662 openat(AT_FDCWD, "/usr/lib/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No
such file or directory)
18664 <... openat resumed>          = 3
18662 newfstatat(AT_FDCWD, "/usr/lib/", {st_mode=S_IFDIR|0755, st_size=4096, ...}, 0) = 0
18664 read(3, <unfinished ...>)
18662 munmap(0x7fbfb0065000, 24775) = 0
18662 openat(AT_FDCWD, "/etc/protocols", O_RDONLY|O_CLOEXEC) = 3
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=3144, ...}) = 0
18662 lseek(3, 0, SEEK_SET) = 0
18662 read(3, "# Internet (IP) protocols\n#\n# Up"..., 4096) = 3144
18662 read(3, <unfinished ...>)
18664 <... read resumed>"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
18662 <... read resumed>"", 4096) = 0
18664 fstat(3, <unfinished ...>)
18662 close(3) = 0
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=663584, ...}) = 0
18662 eventfd2(0, EFD_CLOEXEC <unfinished ...>)
18664 mmap(NULL, 661336, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>)
18662 <... eventfd2 resumed>          = 3
18662 fcntl(3, F_GETFL) = 0x2 (flags O_RDWR)

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18662 fcntl(3, F_SETFL, O_RDWR|O_NONBLOCK) = 0
18662 fcntl(3, F_GETFL) = 0x802 (flags O_RDWR|O_NONBLOCK)
18662 fcntl(3, F_SETFL, O_RDWR|O_NONBLOCK) = 0
18662 getpid() = 18662
18662 getpid() = 18662
18662 getrandom(<unfinished ...>)
18664 <... mmap resumed>) = 0x7f52a3d97000
18662 <... getrandom resumed>"\xa7\x5b\xda\x64\x81\xaf\x04\xcc\x04\x02\xd8\xfa\xee\xa1\x31\x5a", 16,
0) = 16
18662 getrandom(<unfinished ...>)
18664 mmap(0x7f52a3db0000, 425984, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x19000 <unfinished ...>)
18662 <... getrandom resumed>"\xdd\xe6\x95\x23\xb9\xcb\xbe\xfa\x1d\x9e\x52\x47\x50\x9e\xca", 16,
0) = 16
18662 eventfd2(0, EFD_CLOEXEC <unfinished ...>)
18664 <... mmap resumed>) = 0x7f52a3db0000
18662 <... eventfd2 resumed>) = 4
18662 fcntl(4, F_GETFL <unfinished ...>)
18664 mmap(0x7f52a3e18000, 98304, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x81000 <unfinished ...>)
18662 <... fcntl resumed>) = 0x2 (flags O_RDWR)
18662 fcntl(4, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>)
18664 <... mmap resumed>) = 0x7f52a3e18000
18662 <... fcntl resumed>) = 0
18662 fcntl(4, F_GETFL <unfinished ...>)
18664 mmap(0x7f52a3e30000, 36864, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x99000 <unfinished ...>)
18662 <... fcntl resumed>) = 0x802 (flags O_RDWR|O_NONBLOCK)
18662 fcntl(4, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>)
18664 <... mmap resumed>) = 0x7f52a3e30000
18662 <... fcntl resumed>) = 0
18662 getpid() = 18662
18664 close(3 <unfinished ...>)
18662 epoll_create1(EPoll_CLOEXEC) = 5
18664 <... close resumed>) = 0
18662 epoll_ctl(5, EPOLL_CTL_ADD, 4, {events=0, data={u32=1406294672, u64=94666780465808}})
= 0
18664 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libstdc++.so.6", O_RDONLY|O_CLOEXEC
<unfinished ...>)
18662 epoll_ctl(5, EPOLL_CTL_MOD, 4, {events=EPOLLIN, data={u32=1406294672,
u64=94666780465808}}) = 0
18664 <... openat resumed>) = 3
18662 getpid() = 18662
18664 read(3, <unfinished ...>)
18662 rt_sigaction(SIGRT_1, {sa_handler=0x7fbfafb9e530, sa_mask=[],
sa_flags=SA_RESTORER|SA_ONSTACK|SA_RESTART|SA_SIGINFO, sa_restorer=0x7fbfafb4a330},
NULL, 8) = 0
18664 <... read resumed>"\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\0\0\0"... , 832) = 832
18662 rt_sigprocmask(SIG_UNBLOCK, [RTMIN RT_1], NULL, 8) = 0
18664 fstat(3, <unfinished ...>)
18662 mmap(NULL, 8392704, PROT_NONE, MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1,
0) = 0x7fbfaec7000
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=2592224, ...}) = 0
18662 mprotect(0x7fbfaec8000, 8388608, PROT_READ|PROT_WRITE) = 0
18664 mmap(NULL, 2609472, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>)

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18662 rt_sigprocmask(SIG_BLOCK, ~[], [QUIT], 8) = 0
18664 <... mmap resumed>          = 0x7f52a3b19000
18662
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=0x7fbfaf6c7990, parent_tid=0x7fbfaf6c7990, exit_signal=0, stack=0x7fbfaec7000,
stack_size=0x7ffd00, tls=0x7fbfaf6c76c0} <unfinished ...>
18664      mmap(0x7f52a3bb6000,          1343488,          PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x9d000 <unfinished ...>
18662 <... clone3 resumed> => {parent_tid=[18665]}, 88) = 18665
18662 rt_sigprocmask(SIG_SETMASK, [QUIT], <unfinished ...>
18664 <... mmap resumed>          = 0x7f52a3bb6000
18662 <... rt_sigprocmask resumed>NULL, 8) = 0
18665 rseq(0x7fbfaf6c7fe0, 0x20, 0, 0x53053053 <unfinished ...>
18662 eventfd2(0, EFD_CLOEXEC <unfinished ...>
18664      mmap(0x7f52a3cfe000,          552960,          PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1e5000 <unfinished ...>
18662 <... eventfd2 resumed>)      = 6
18665 <... rseq resumed>          = 0
18662 fcntl(6, F_GETFL <unfinished ...>
18664 <... mmap resumed>          = 0x7f52a3cfe000
18662 <... fcntl resumed>          = 0x2 (flags O_RDWR)
18665 set_robust_list(0x7fbfaf6c79a0, 24 <unfinished ...>
18662 fcntl(6, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
18664      mmap(0x7f52a3d85000,          57344,          PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x26b000 <unfinished ...>
18662 <... fcntl resumed>)          = 0
18665 <... set_robust_list resumed>) = 0
18662 fcntl(6, F_GETFL <unfinished ...>
18664 <... mmap resumed>          = 0x7f52a3d85000
18662 <... fcntl resumed>          = 0x802 (flags O_RDWR|O_NONBLOCK)
18665 rt_sigprocmask(SIG_SETMASK, [QUIT], <unfinished ...>
18662 fcntl(6, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
18664      mmap(0x7f52a3d93000,          12608,          PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0 <unfinished ...>
18662 <... fcntl resumed>)          = 0
18665 <... rt_sigprocmask resumed>NULL, 8) = 0
18662 getpid( <unfinished ...>
18664 <... mmap resumed>          = 0x7f52a3d93000
18662 <... getpid resumed>          = 18662
18662 epoll_create1(EPOLL_CLOEXEC <unfinished ...>
18665 rt_sigprocmask(SIG_BLOCK, ~[RTMIN RT_1], <unfinished ...>
18662 <... epoll_create1 resumed>) = 7
18664 close(3 <unfinished ...>
18662 epoll_ctl(7, EPOLL_CTL_ADD, 6, {events=0, data={u32=1406296784, u64=94666780467920}} <unfinished ...>
18665 <... rt_sigprocmask resumed>NULL, 8) = 0
18662 <... epoll_ctl resumed>) = 0
18664 <... close resumed>          = 0
18662  epoll_ctl(7, EPOLL_CTL_MOD, 6, {events=EPOLLIN, data={u32=1406296784, u64=94666780467920}} <unfinished ...>
18665 sched_getparam(18665, <unfinished ...>
18662 <... epoll_ctl resumed>) = 0
18664  openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libgcc_s.so.1", O_RDONLY|O_CLOEXEC
<unfinished ...>

```



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18662 mmap(NULL, 8392704, PROT_NONE, MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1,
0) = 0x7fbfae6c6000
18665 <... sched_getparam resumed>[0]) = 0
18664 <... openat resumed> = 3
18662 mprotect(0x7fbfae6c7000, 8388608, PROT_READ|PROT_WRITE <unfinished ...>
18665 sched_getscheduler(18665 <unfinished ...>
18662 <... mprotect resumed> = 0
18664 read(3, <unfinished ...>
18662 rt_sigprocmask(SIG_BLOCK, ~[], <unfinished ...>
18665 <... sched_getscheduler resumed>) = 0 (SCHED_OTHER)
18662 <... rt_sigprocmask resumed>[QUIT], 8) = 0
18664 <... read resumed>"\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
18662
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=0x7fbfae6c6990, parent_tid=0x7fbfae6c6990, exit_signal=0, stack=0x7fbfae6c6000,
stack_size=0x7ffd00, tls=0x7fbfae6c66c0} <unfinished ...>
18665 sched_setscheduler(18665, SCHED_OTHER, [0] <unfinished ...>
18664 fstat(3, <unfinished ...>
18662 <... clone3 resumed> => {parent_tid=[18666]}, 88) = 18666
18665 <... sched_setscheduler resumed>) = 0
18662 rt_sigprocmask(SIG_SETMASK, [QUIT], <unfinished ...>
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=183024, ...}) = 0
18662 <... rt_sigprocmask resumed>NULL, 8) = 0
18665 prctl(PR_SET_NAME, "ZMQbg/Reaper" <unfinished ...>
18662 eventfd2(0, EFD_CLOEXEC <unfinished ...>
18664 mmap(NULL, 185256, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>
18662 <... eventfd2 resumed> = 8
18662 fcntl(8, F_GETFL <unfinished ...>
18665 <... prctl resumed> = 0
18662 <... fcntl resumed> = 0x2 (flags O_RDWR)
18664 <... mmap resumed> = 0x7f52a3aeb000
18662 fcntl(8, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
18665 epoll_wait(5, <unfinished ...>
18662 <... fcntl resumed> = 0
18666 rseq(0x7fbfae6c6fe0, 0x20, 0, 0x53053053 <unfinished ...>
18664 mmap(0x7f52a3aef000, 147456, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000 <unfinished ...>
18662 fcntl(8, F_GETFL <unfinished ...>
18666 <... rseq resumed> = 0
18662 <... fcntl resumed> = 0x802 (flags O_RDWR|O_NONBLOCK)
18664 <... mmap resumed> = 0x7f52a3aef000
18662 fcntl(8, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
18666 set_robust_list(0x7fbfae6c69a0, 24 <unfinished ...>
18662 <... fcntl resumed> = 0
18664 mmap(0x7f52a3b13000, 16384, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000 <unfinished ...>
18662 getpid() = 18662
18662 getpid() = 18662
18666 <... set_robust_list resumed>) = 0
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18664 <... mmap resumed> = 0x7f52a3b13000
18662 <... poll resumed> = 0 (Timeout)
18662 socket(AF_NETLINK, SOCK_RAW|SOCK_CLOEXEC, NETLINK_ROUTE <unfinished ...>
18666 rt_sigprocmask(SIG_SETMASK, [QUIT], <unfinished ...>

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18664          mmap(0x7f52a3b17000,          8192,          PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2b000 <unfinished ...>
18662 <... socket resumed>)          = 9
18666 <... rt_sigprocmask resumed>NULL, 8) = 0
18662 bind(9, {sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000}, 12) = 0
18662 getsockname(9, {sa_family=AF_NETLINK, nl_pid=18662, nl_groups=00000000}, [12]) = 0
18662          sendto(9,          [{nlmsg_len=20,          nlmsg_type=RTM_GETLINK,
nlmsg_flags=NLM_F_REQUEST|NLM_F_DUMP,          nlmsg_seq=1741797306,          nlmsg_pid=0},
{ifi_family=AF_UNSPEC, ...}], 20, 0, {sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000}, 12
<unfinished ...>
18664 <... mmap resumed>)          = 0x7f52a3b17000
18662 <... sendto resumed>)          = 20
18666 rt_sigprocmask(SIG_BLOCK, ~[RTMIN RT_1], <unfinished ...>
18662  recvmsg(9, {msg_name={sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000},
msg_namelen=12, msg_iov=[{iov_base=[[{nlmsg_len=1348, nlmsg_type=RTM_NEWLINK,
nlmsg_flags=NLM_F_MULTI, nlmsg_seq=1741797306, nlmsg_pid=18662},
{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=574915, tx_packets=574915, rx_bytes=98193605, tx_bytes=98193605, 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=574915, tx_packets=574915, rx_bytes=98193605,
tx_bytes=98193605, 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=792,
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]=0, [IPV4_DEVCONF_ACCEPT_SOURCE_ROUTE-1]=1,
[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,

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[IPV4\_DEVCONF\_PROMOTE\_SECONDARIES-1]=0, [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=652, 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=24250, retrans\_time=1000}], [{nla\_len=240, 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\_INNOROUTES]=0, [IPSTATS\_MIB\_INADDRERRORS]=0, [IPSTATS\_MIB\_INUNKNOWNPROTOS]=0, [IPSTATS\_MIB\_INTRUNCATEDPKTS]=0, [IPSTATS\_MIB\_INDISCARDS]=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\_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=1416, nlmsg\_type=RTM\_NEWLINK, nlmsg\_flags=NLM\_F\_MULTI, nlmsg\_seq=1741797306, nlmsg\_pid=18662}, {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, nla\_type=IFLA\_LINKMODE}, 0], [{nla\_len=8, nla\_type=IFLA\_MTU}, 1280], [{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}, 3], [{nla\_len=8, nla\_type=IFLA\_CARRIER\_UP\_COUNT}, 2], [{nla\_len=8, nla\_type=IFLA\_CARRIER\_DOWN\_COUNT}, 1], [{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:1b:d9:32], [{nla\_len=10, nla\_type=IFLA\_BROADCAST}, ff:ff:ff:ff:ff:ff], [{nla\_len=196, nla\_type=IFLA\_STATS64}, {rx\_packets=13875, tx\_packets=7315, rx\_bytes=9401503, tx\_bytes=1379933, rx\_errors=0, tx\_errors=0, rx\_dropped=0, tx\_dropped=0, multicast=3704, 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=13875, tx\_packets=7315, rx\_bytes=9401503, tx\_bytes=1379933, rx\_errors=0, tx\_errors=0, rx\_dropped=0, tx\_dropped=0, multicast=3704, 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}, XDP\_ATTACHED\_NONE], [{nla\_len=5, nla\_type=IFLA\_XDP\_ATTACHED}, XDP\_ATTACHED\_NONE], [{nla\_len=10, nla\_type=IFLA\_PERM\_ADDRESS}, 00:15:5d:1b:d9:32], [{nla\_len=792, 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]=0, [IPV4\_DEVCONF\_ACCEPT\_SOURCE\_ROUTE-1]=1, [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]=0, [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=652, 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, tstamp=55, reachable\_time=29770, retrans\_time=1000}], [{nla\_len=240, nla\_type=IFLA\_INET6\_CONF}, [[DEVCONF\_FORWARDING]=0, [DEVCONF\_HOPLIMIT]=64, [DEVCONF\_MTU6]=1280, [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]=0, [DEVCONF\_TEMP\_VALID\_LFT]=604800,

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[DEVCONF_TEMP_PREFERED_LFT]=86400,
[DEVCONF_MAX_DESYNC_FACTOR]=600,
[DEVCONF_FORCE_MLD_VERSION]=0,
[DEVCONF_ACCEPT_RA_PINFO]=1,
[DEVCONF_RTR_PROBE_INTERVAL]=0,
[DEVCONF_ACCEPT_RA_RT_INFO_MAX_PLEN]=0,
[DEVCONF_OPTIMISTIC_DAD]=0,
[DEVCONF_MC_FORWARDING]=0,
[DEVCONF_ACCEPT_DAD]=1,
[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]=1852,
[IPSTATS_MIB_INOCTETS]=348631, [IPSTATS_MIB_INDELIVERS]=0,
[IPSTATS_MIB_OUTFORWDATAGRAMS]=0, [IPSTATS_MIB_OUTPKTS]=27,
[IPSTATS_MIB_OUTOCTETS]=1684, [IPSTATS_MIB_INHDRERRORS]=0,
[IPSTATS_MIB_INTTOOBIGERRORS]=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]=1852,
[IPSTATS_MIB_OUTMCASTPKTS]=27, [IPSTATS_MIB_INBCASTPKTS]=0,
[IPSTATS_MIB_OUTBCASTPKTS]=0, [IPSTATS_MIB_INMCASTOCTETS]=348631,
[IPSTATS_MIB_OUTMCASTOCTETS]=1684, [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]=27, [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},
"902d75e4-7cf6-4b9d-af9e-1be7f565"...], [{nla_len=10,
nla_type=IFLA_PARENT_DEV_BUS_NAME}, "vmbus"]]], iov_len=8192}}, msg_iovlen=1,
msg_controllen=0, msg_flags=0}, 0) = 2764
18666 <... rt_sigprocmask resumed>NULL, 8) = 0
18662 recvmsg(9, <unfinished ...>
18664 close(3 <unfinished ...>
18662 <... recvmsg resumed>{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=NLMSG_F_MULTI, nlmsg_seq=1741797306, nlmsg_pid=18662}, 0], iov_len=8192}],
msg_iovlen=1, msg_controllen=0, msg_flags=0}, 0) = 20
18666 sched_getparam(18666, <unfinished ...>
18662 sendto(9, [{nlmsg_len=20, nlmsg_type=RTM_GETADDR,
nlmsg_flags=NLMSG_F_REQUEST|NLMSG_F_DUMP, nlmsg_seq=1741797307, nlmsg_pid=0},
{ifa_family=AF_UNSPEC, ...}], 20, 0, {sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000}, 12
<unfinished ...>
18664 <... close resumed>) = 0
18662 <... sendto resumed>) = 20
18666 <... sched_getparam resumed>[0]) = 0
18662 recvmsg(9, <unfinished ...>
18664 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6", O_RDONLY|O_CLOEXEC <unfinished
...>
18662 <... recvmsg resumed>{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=1741797307, nlmsg_pid=18662}, {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_prefered=4294967295, ifa_valid=4294967295, cstamp=44,
tstamp=44}]]], [{nlmsg_len=84, nlmsg_type=RTM_NEWADDR, nlmsg_flags=NLM_F_MULTI,
nlmsg_seq=1741797307, nlmsg_pid=18662}, {ifa_family=AF_INET, ifa_prefixlen=32,
ifa_flags=IFA_F_PERMANENT, ifa_scope=RT_SCOPE_UNIVERSE, ifa_index=if_nametoindex("lo")},
[{nla_len=8, nla_type=IFA_ADDRESS}, inet_addr("10.255.255.254")], [{nla_len=8,
nla_type=IFA_LOCAL}, inet_addr("10.255.255.254")], [{nla_len=8, nla_type=IFA_BROADCAST},
inet_addr("10.255.255.254")], [{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_prefered=4294967295, ifa_valid=4294967295, cstamp=44, tstamp=44}]]], [{nlmsg_len=88,
nlmsg_type=RTM_NEWADDR, nlmsg_flags=NLM_F_MULTI, nlmsg_seq=1741797307,
nlmsg_pid=18662}, {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("172.17.162.92")], [{nla_len=8, nla_type=IFA_LOCAL},
inet_addr("172.17.162.92")], [{nla_len=8, nla_type=IFA_BROADCAST}, inet_addr("172.17.175.255")],
[{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_prefered=4294967295,
ifa_valid=4294967295, cstamp=55, tstamp=55}]]], iov_len=8192}}, msg_iovlen=1, msg_controllen=0,
msg_flags=0}, 0) = 248
```

```
18666 sched_getscheduler(18666 <unfinished ...>
```

```
18662 recvmsg(9, <unfinished ...>
```

```
18664 <... openat resumed>      = 3
```

```
18662 <... recvmsg resumed>{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=1741797307, nlmsg_pid=18662}, {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_prefered=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=1741797307, nlmsg_pid=18662}, {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:fe1b:d932")],
[{nla_len=20, nla_type=IFA_CACHEINFO}, {ifa_prefered=4294967295, ifa_valid=4294967295,
cstamp=55, tstamp=55}], [{nla_len=8, nla_type=IFA_FLAGS}, IFA_F_PERMANENT]]],
iov_len=8192}}, msg_iovlen=1, msg_controllen=0, msg_flags=0}, 0) = 144
```

```
18666 <... sched_getscheduler resumed>) = 0 (SCHED_OTHER)
```

```
18662 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=1741797307, nlmsg_pid=18662}, 0], iov_len=8192}},
msg_iovlen=1, msg_controllen=0, msg_flags=0}, 0) = 20
```

```
18666 sched_setscheduler(18666, SCHED_OTHER, [0] <unfinished ...>
```

```
18662 close(9 <unfinished ...>
```

```
18664 read(3, <unfinished ...>
```

```
18662 <... close resumed>      = 0
```

```
18662 socket(AF_INET, SOCK_STREAM|SOCK_CLOEXEC, IPPROTO_TCP) = 9
```

```
18666 <... sched_setscheduler resumed>) = 0
```

```
18662 setsockopt(9, SOL_SOCKET, SO_REUSEADDR, [1], 4) = 0
```

```
18666 prctl(PR_SET_NAME, "ZMQbg/IO/0" <unfinished ...>
```

```
18662 bind(9, {sa_family=AF_INET, sin_port=htons(5556), sin_addr=inet_addr("127.0.0.1")}, 16) = 0
```

```

18662 listen(9, 100 <unfinished ...>
18666 <... prctl resumed>) = 0
18662 <... listen resumed>) = 0
18662 getsockname(9, <unfinished ...>
18666 epoll_wait(7, <unfinished ...>
18662 <... getsockname resumed>{sa_family=AF_INET, sin_port=htons(5556),
sin_addr=inet_addr("127.0.0.1")}, [128 => 16]) = 0
18662 getsockname(9, {sa_family=AF_INET, sin_port=htons(5556), sin_addr=inet_addr("127.0.0.1")},
[128 => 16]) = 0
18662 getpid() = 18662
18662 write(6, "\1\0\0\0\0\0\0", 8) = 8
18664 <... read resumed>"\177ELF\2\1\1\3\0\0\0\0\0\0\3\0>\0\1\0\0\0\220\243\2\0\0\0\0"..., 832) =
832
18662 getpid() = 18662
18662 write(8, "\1\0\0\0\0\0\0", 8) = 8
18662 fstat(1, <unfinished ...>
18666 <... epoll_wait resumed>[{events=EPOLLIN, data={u32=1406296784, u64=94666780467920}}],
256, -1) = 1
18662 <... fstat resumed>{st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0x2), ...}) = 0
18662 write(1, "Ok: 18664\n", 10) = 10
18662 getpid() = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 1 ([{fd=8, revents=POLLIN}])
18662 getpid() = 18662
18662 read(8, "\1\0\0\0\0\0\0", 8) = 8
18664 pread64(3, <unfinished ...>
18662 getpid( <unfinished ...>
18666 getpid( <unfinished ...>
18664 <... pread64 resumed>"\6\0\0\0\4\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0"..., 784, 64) =
784
18662 <... getpid resumed>) = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18664 fstat(3, <unfinished ...>
18662 <... poll resumed>) = 0 (Timeout)
18666 <... getpid resumed>) = 18662
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 <... fstat resumed>{st_mode=S_IFREG|0755, st_size=2125328, ...}) = 0
18662 <... pselect6 resumed>) = 0 (Timeout)
18662 getpid() = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18666 poll([{fd=6, events=POLLIN}], 1, 0 <unfinished ...>
18662 <... poll resumed>) = 0 (Timeout)
18664 pread64(3, <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 getpid( <unfinished ...>
18666 <... poll resumed>) = 1 ([{fd=6, revents=POLLIN}])
18662 <... getpid resumed>) = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18666 getpid( <unfinished ...>
18662 <... poll resumed>) = 0 (Timeout)
18664 <... pread64 resumed>"\6\0\0\0\4\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0"..., 784, 64) =
784
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18666 <... getpid resumed>) = 18662
18662 <... pselect6 resumed>) = 0 (Timeout)
18664 mmap(NULL, 2170256, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>

```

```

18662 getpid( <unfinished ...>
18666 read(6, <unfinished ...>
18662 <... getpid resumed>)          = 18662
18666 <... read resumed>"\1\0\0\0\0\0\0", 8) = 8
18664 <... mmap resumed>)           = 0x7f52a38d9000
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18666 mmap(NULL, 134217728, PROT_NONE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0
<unfinished ...>
18664          mmap(0x7f52a3901000,          1605632,          PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000 <unfinished ...>
18662 <... poll resumed>)            = 0 (Timeout)
18666 <... mmap resumed>)           = 0x7fbfa66c6000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18666 munmap(0x7fbfa66c6000, 26451968 <unfinished ...>
18662 getpid( <unfinished ...>
18666 <... munmap resumed>)          = 0
18664 <... mmap resumed>)           = 0x7f52a3901000
18662 <... getpid resumed>)         = 18662
18666 munmap(0x7fbfac000000, 40656896 <unfinished ...>
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18664          mmap(0x7f52a3a89000,          323584,          PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1b0000 <unfinished ...>
18662 <... poll resumed>)            = 0 (Timeout)
18666 <... munmap resumed>)          = 0
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18666 mprotect(0x7fbfa8000000, 135168, PROT_READ|PROT_WRITE <unfinished ...>
18662 getpid()                     = 18662
18666 <... mprotect resumed>)        = 0
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18666 epoll_ctl(7, EPOLL_CTL_ADD, 9, {events=0, data={u32=2818575216, u64=140461134056304}}
<unfinished ...>
18662 <... pselect6 resumed>)        = 0 (Timeout)
18662 getpid( <unfinished ...>
18666 <... epoll_ctl resumed>)      = 0
18662 <... getpid resumed>)          = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18666  epoll_ctl(7,  EPOLL_CTL_MOD,  9,  {events=EPOLLIN,  data={u32=2818575216,
u64=140461134056304}} <unfinished ...>
18662 getpid()                     = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18666 <... epoll_ctl resumed>)      = 0
18662 <... pselect6 resumed>)        = 0 (Timeout)
18662 getpid( <unfinished ...>
18666 getpid( <unfinished ...>
18662 <... getpid resumed>)          = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18666 <... getpid resumed>)          = 18662
18662 getpid()                     = 18662
18666 poll([{fd=6, events=POLLIN}], 1, 0 <unfinished ...>
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)

```



```

18662 getpid() = 18662
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18666 <... poll resumed> = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18666 epoll_wait(7, <unfinished ...>
18664 <... mmap resumed> = 0x7f52a3a89000
18662 getpid() = 18662
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 mmap(0x7f52a3ad8000, 24576, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1fe000 <unfinished ...>
18662 getpid() = 18662
18664 <... mmap resumed> = 0x7f52a3ad8000
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 mmap(0x7f52a3ade000, 52624, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0 <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed> = 0x7f52a3ade000
18662 getpid() = 18662
18662 poll([fd=8, events=POLLIN], 1, 0 <unfinished ...>
18664 close(3 <unfinished ...>
18662 <... poll resumed> = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 getpid() = 18662
18662 poll([fd=8, events=POLLIN], 1, 0 <unfinished ...>
18664 <... close resumed> = 0
18662 <... poll resumed> = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libbsd.so.0", O_RDONLY|O_CLOEXEC <unfinished
...>
18662 <... pselect6 resumed> = 0 (Timeout)
18662 getpid() = 18662
18664 <... openat resumed> = 3
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 read(3, <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... read resumed>"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\0\0\3\0\0\0\1\0\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
18662 getpid() = 18662
18664 fstat(3, <unfinished ...>
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=80888, ...} = 0
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 mmap(NULL, 86208, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>
18662 getpid() = 18662
18664 <... mmap resumed> = 0x7f52a38c3000
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 mmap(0x7f52a38c7000, 49152, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000 <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed> = 0x7f52a38c7000
18662 getpid() = 18662
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 mmap(0x7f52a38d3000, 12288, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x10000 <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)

```

```

18664 <... mmap resumed>)          = 0x7f52a38d3000
18662 getpid()                    = 18662
18664      mmap(0x7f52a38d6000,      8192,      PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x12000 <unfinished ...>
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 <... mmap resumed>)          = 0x7f52a38d6000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664      mmap(0x7f52a38d8000,      192,      PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0 <unfinished ...>
18662 getpid()                    = 18662
18664 <... mmap resumed>)          = 0x7f52a38d8000
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 close(3 <unfinished ...>)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... close resumed>)          = 0
18662 getpid()                    = 18662
18664      openat(AT_FDCWD,      "/lib/x86_64-linux-gnu/libsodium.so.23",      O_RDONLY|O_CLOEXEC
<unfinished ...>
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 <... openat resumed>)          = 3
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 read(3, <unfinished ...>)
18662 getpid()                    = 18662
18664 <... read resumed>"\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
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 fstat(3, <unfinished ...>)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=355040, ...}) = 0
18662 getpid()                    = 18662
18664 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0
<unfinished ...>
18662 poll([fd=8, events=POLLIN], 1, 0 <unfinished ...>
18664 <... mmap resumed>)          = 0x7f52a38c1000
18662 <... poll resumed>)          = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 mmap(NULL, 353336, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>
18662 <... pselect6 resumed>)          = 0 (Timeout)
18662 getpid( <unfinished ...>)
18664 <... mmap resumed>)          = 0x7f52a386a000
18662 <... getpid resumed>)          = 18662
18662 poll([fd=8, events=POLLIN], 1, 0 <unfinished ...>
18664      mmap(0x7f52a3876000,      233472,      PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xc000 <unfinished ...>
18662 <... poll resumed>)          = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 <... mmap resumed>)          = 0x7f52a3876000
18662 <... pselect6 resumed>)          = 0 (Timeout)
18662 getpid( <unfinished ...>)
18664      mmap(0x7f52a38af000,      65536,      PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x45000 <unfinished ...>
18662 <... getpid resumed>)          = 18662
18664 <... mmap resumed>)          = 0x7f52a38af000
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664      mmap(0x7f52a38bf000,      8192,      PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x55000 <unfinished ...>

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18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>) = 0x7f52a38bf000
18662 getpid() = 18662
18662 poll([fd=8, events=POLLIN], 1, 0 <unfinished ...>
18664 close(3 <unfinished ...>
18662 <... poll resumed>) = 0 (Timeout)
18664 <... close resumed>) = 0
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libpgm-5.3.so.0", O_RDONLY|O_CLOEXEC
<unfinished ...>
18662 <... pselect6 resumed>) = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... openat resumed>) = 3
18662 <... getpid resumed>) = 18662
18662 poll([fd=8, events=POLLIN], 1, 0 <unfinished ...>
18664 read(3, <unfinished ...>
18662 <... poll resumed>) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 <... read resumed>"\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0\0\0\1\0\0\0\0\0\0\0\0"..., 832) = 832
18662 <... pselect6 resumed>) = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 fstat(3, <unfinished ...>
18662 <... getpid resumed>) = 18662
18662 poll([fd=8, events=POLLIN], 1, 0 <unfinished ...>
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=285568, ...}) = 0
18662 <... poll resumed>) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 mmap(NULL, 301040, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>
18662 getpid() = 18662
18664 <... mmap resumed>) = 0x7f52a3820000
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 mmap(0x7f52a3824000, 159744, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000 <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>) = 0x7f52a3824000
18662 getpid() = 18662
18664 mmap(0x7f52a384b000, 102400, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2b000 <unfinished ...>
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 <... mmap resumed>) = 0x7f52a384b000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 mmap(0x7f52a3864000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x44000 <unfinished ...>
18662 getpid() = 18662
18662 poll([fd=8, events=POLLIN], 1, 0 <unfinished ...>
18664 <... mmap resumed>) = 0x7f52a3864000
18662 <... poll resumed>) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 mmap(0x7f52a3866000, 14320, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0 <unfinished ...>
18662 <... pselect6 resumed>) = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... mmap resumed>) = 0x7f52a3866000
18662 <... getpid resumed>) = 18662
18662 poll([fd=8, events=POLLIN], 1, 0 <unfinished ...>

```

```

18664 close(3 <unfinished ...>
18662 <... poll resumed>)          = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 <... close resumed>)          = 0
18662 <... pselect6 resumed>)        = 0 (Timeout)
18662 getpid( <unfinished ...>
18664   openat(AT_FDCWD,    "/lib/x86_64-linux-gnu/libnorm.so.1",    O_RDONLY|O_CLOEXEC
<unfinished ...>
18662 <... getpid resumed>)          = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18664 <... openat resumed>)          = 3
18662 <... poll resumed>)          = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 read(3, <unfinished ...>
18662 <... pselect6 resumed>)        = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... read resumed>"\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0"..., 832) = 832
18662 <... getpid resumed>)          = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18664 fstat(3, <unfinished ...>
18662 <... poll resumed>)          = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=366760, ...}) = 0
18662 <... pselect6 resumed>)        = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 mmap(NULL, 1092032, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>
18662 <... getpid resumed>)          = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18664 <... mmap resumed>)            = 0x7f52a3715000
18662 <... poll resumed>)          = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664   mmap(0x7f52a371e000,    274432,    PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x9000 <unfinished ...>
18662 <... pselect6 resumed>)        = 0 (Timeout)
18664 <... mmap resumed>)            = 0x7f52a371e000
18662 getpid()                    = 18662
18664   mmap(0x7f52a3761000,    45056,    PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4c000 <unfinished ...>
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 <... mmap resumed>)            = 0x7f52a3761000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664   mmap(0x7f52a376c000,    16384,    PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x56000 <unfinished ...>
18662 getpid()                    = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18664 <... mmap resumed>)            = 0x7f52a376c000
18662 <... poll resumed>)          = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664   mmap(0x7f52a3770000,    719296,    PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0 <unfinished ...>
18662 <... pselect6 resumed>)        = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... mmap resumed>)            = 0x7f52a3770000
18662 <... getpid resumed>)          = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)

```

```

18664 close(3 <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 <... close resumed>) = 0
18662 <... pselect6 resumed>) = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libgssapi_krb5.so.2", O_RDONLY|O_CLOEXEC
<unfinished ...>
18662 <... getpid resumed>) = 18662
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 <... openat resumed>) = 3
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 read(3, <unfinished ...>
18662 <... pselect6 resumed>) = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... read resumed> "\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
18662 <... getpid resumed>) = 18662
18662 poll([fd=8, events=POLLIN], 1, 0 <unfinished ...>
18664 fstat(3, <unfinished ...>
18662 <... poll resumed>) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 <... fstat resumed> {st_mode=S_IFREG|0644, st_size=338696, ...}) = 0
18662 <... pselect6 resumed>) = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 mmap(NULL, 341080, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>
18662 <... getpid resumed>) = 18662
18662 poll([fd=8, events=POLLIN], 1, 0 <unfinished ...>
18664 <... mmap resumed>) = 0x7f52a36c1000
18662 <... poll resumed>) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 mmap(0x7f52a36cd000, 237568, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xc000 <unfinished ...>
18662 <... pselect6 resumed>) = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... mmap resumed>) = 0x7f52a36cd000
18662 <... getpid resumed>) = 18662
18662 poll([fd=8, events=POLLIN], 1, 0 <unfinished ...>
18664 mmap(0x7f52a3707000, 40960, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x46000 <unfinished ...>
18662 <... poll resumed>) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 <... mmap resumed>) = 0x7f52a3707000
18662 <... pselect6 resumed>) = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 mmap(0x7f52a3711000, 16384, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4f000 <unfinished ...>
18662 <... getpid resumed>) = 18662
18662 poll([fd=8, events=POLLIN], 1, 0 <unfinished ...>
18664 <... mmap resumed>) = 0x7f52a3711000
18662 <... poll resumed>) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 close(3 <unfinished ...>
18662 getpid() = 18662
18664 <... close resumed>) = 0
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libm.so.6", O_RDONLY|O_CLOEXEC <unfinished

```

```

...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... openat resumed>) = 3
18662 getpid() = 18662
18664 read(3, <unfinished ...>
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 <... read resumed>"\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"..., 832) = 832
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 fstat(3, <unfinished ...>
18662 getpid() = 18662
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=952616, ...}) = 0
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 mmap(NULL, 950296, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>) = 0x7f52a35d8000
18662 getpid() = 18662
18664 mmap(0x7f52a35e8000, 520192, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x10000 <unfinished ...>
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 <... mmap resumed>) = 0x7f52a35e8000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 mmap(0x7f52a3667000, 360448, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x8f000 <unfinished ...>
18662 getpid() = 18662
18664 <... mmap resumed>) = 0x7f52a3667000
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18664 mmap(0x7f52a36bf000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xe7000 <unfinished ...>
18662 <... poll resumed>) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 <... mmap resumed>) = 0x7f52a36bf000
18662 <... pselect6 resumed>) = 0 (Timeout)
18662 getpid() = 18662
18664 close(3 <unfinished ...>
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 <... close resumed>) = 0
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libmd.so.0", O_RDONLY|O_CLOEXEC <unfinished
...>
18662 getpid() = 18662
18664 <... openat resumed>) = 3
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 read(3, <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... read resumed>"\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
18662 getpid() = 18662
18664 fstat(3, <unfinished ...>
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=55536, ...}) = 0
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0
<unfinished ...>
18662 getpid() = 18662
18664 <... mmap resumed>) = 0x7f52a35d6000
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)

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18664 mmap(NULL, 57448, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>          = 0x7f52a35c7000
18662 getpid()                   = 18662
18664          mmap(0x7f52a35c9000,          36864,          PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000 <unfinished ...>
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 <... mmap resumed>          = 0x7f52a35c9000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664          mmap(0x7f52a35d2000,          8192,          PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xb000 <unfinished ...>
18662 getpid()                   = 18662
18662 poll([fd=8, events=POLLIN], 1, 0 <unfinished ...>
18664 <... mmap resumed>          = 0x7f52a35d2000
18662 <... poll resumed>         = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664          mmap(0x7f52a35d4000,          8192,          PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xc000 <unfinished ...>
18662 <... pselect6 resumed>      = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... mmap resumed>          = 0x7f52a35d4000
18662 <... getpid resumed>       = 18662
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 close(3 <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... close resumed>         = 0
18662 getpid()                   = 18662
18664  openat(AT_FDCWD,  "/lib/x86_64-linux-gnu/libkrb5.so.3",  O_RDONLY|O_CLOEXEC
<unfinished ...>
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 <... openat resumed>        = 3
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 read(3, <unfinished ...>
18662 getpid()                   = 18662
18664 <... read resumed> "\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
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 fstat(3, <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... fstat resumed> {st_mode=S_IFREG|0644, st_size=823488, ...} = 0
18662 getpid()                   = 18662
18664 mmap(NULL, 822032, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 <... mmap resumed>          = 0x7f52a34fe000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664          mmap(0x7f52a351e000,          397312,          PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x20000 <unfinished ...>
18662 getpid()                   = 18662
18664 <... mmap resumed>          = 0x7f52a351e000
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664          mmap(0x7f52a357f000,          233472,          PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x81000 <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>          = 0x7f52a357f000
18662 getpid()                   = 18662
18664          mmap(0x7f52a35b8000,          61440,          PROT_READ|PROT_WRITE,

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MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xba000 <unfinished ...>
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 <... mmap resumed>                = 0x7f52a35b8000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 close(3 <unfinished ...>
18662 <... getpid resumed>                = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18664 <... close resumed>                = 0
18662 <... poll resumed>                = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664  openat(AT_FDCWD,  "/lib/x86_64-linux-gnu/libcrypto.so.3",  O_RDONLY|O_CLOEXEC
<unfinished ...>
18662 <... pselect6 resumed>              = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... openat resumed>                = 3
18662 <... getpid resumed>                = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18664 read(3, <unfinished ...>
18662 <... poll resumed>                = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 <... read resumed>"\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
18662 <... pselect6 resumed>              = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 fstat(3, <unfinished ...>
18662 <... getpid resumed>                = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=178648, ...}) = 0
18662 <... poll resumed>                = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 mmap(NULL, 176392, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>
18662 <... pselect6 resumed>              = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... mmap resumed>                = 0x7f52a34d2000
18662 <... getpid resumed>                = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18664      mmap(0x7f52a34d6000,          110592,          PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000 <unfinished ...>
18662 <... poll resumed>                = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 <... mmap resumed>                = 0x7f52a34d6000
18662 <... pselect6 resumed>              = 0 (Timeout)
18662 getpid( <unfinished ...>
18664      mmap(0x7f52a34f1000,          45056,          PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1f000 <unfinished ...>
18662 <... getpid resumed>                = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18664 <... mmap resumed>                = 0x7f52a34f1000
18662 <... poll resumed>                = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664      mmap(0x7f52a34fc000,          8192,          PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2a000 <unfinished ...>
18662 <... pselect6 resumed>              = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... mmap resumed>                = 0x7f52a34fc000

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18662 <... getpid resumed>          = 18662
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 close(3 <unfinished ...>)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... close resumed>          = 0
18662 getpid()                     = 18662
18664  openat(AT_FDCWD,  "/lib/x86_64-linux-gnu/libcom_err.so.2",  O_RDONLY|O_CLOEXEC
<unfinished ...>
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 <... openat resumed>          = 3
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 read(3, <unfinished ...>)
18662 getpid()                     = 18662
18664 <... read resumed>"\177ELF2\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
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18664 fstat(3, <unfinished ...>)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=18504, ...}) = 0
18662 getpid( <unfinished ...>)
18664 mmap(NULL, 20552, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>)
18662 <... getpid resumed>          = 18662
18662 poll([fd=8, events=POLLIN], 1, 0 <unfinished ...>)
18664 <... mmap resumed>            = 0x7f52a34cc000
18662 <... poll resumed>           = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 getpid()                     = 18662
18662 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>)
18664      mmap(0x7f52a34ce000,      4096,      PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000 <unfinished ...>)
18662 <... pselect6 resumed>        = 0 (Timeout)
18662 getpid( <unfinished ...>)
18664 <... mmap resumed>            = 0x7f52a34ce000
18662 <... getpid resumed>          = 18662
18662 poll([fd=8, events=POLLIN], 1, 0 <unfinished ...>)
18664 mmap(0x7f52a34cf000, 4096, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE,
3, 0x3000 <unfinished ...>)
18662 <... poll resumed>            = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>)
18664 <... mmap resumed>            = 0x7f52a34cf000
18662 <... pselect6 resumed>        = 0 (Timeout)
18662 getpid( <unfinished ...>)
18664      mmap(0x7f52a34d0000,      8192,      PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000 <unfinished ...>)
18662 <... getpid resumed>          = 18662
18662 poll([fd=8, events=POLLIN], 1, 0 <unfinished ...>)
18664 <... mmap resumed>            = 0x7f52a34d0000
18662 <... poll resumed>           = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>)
18664 close(3 <unfinished ...>)
18662 <... pselect6 resumed>        = 0 (Timeout)
18662 getpid( <unfinished ...>)
18664 <... close resumed>           = 0
18662 <... getpid resumed>          = 18662
18662 poll([fd=8, events=POLLIN], 1, 0 <unfinished ...>)

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18664 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libkrb5support.so.0", O_RDONLY|O_CLOEXEC
<unfinished ...>
18662 <... poll resumed>) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 <... openat resumed>) = 3
18662 <... pselect6 resumed>) = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 read(3, <unfinished ...>
18662 <... getpid resumed>) = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18664 <... read resumed>"\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"..., 832) = 832
18662 <... poll resumed>) = 0 (Timeout)
18664 fstat(3, <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=47904, ...}) = 0
18662 getpid() = 18662
18664 mmap(NULL, 50128, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 <... mmap resumed>) = 0x7f52a34bf000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 mmap(0x7f52a34c2000, 24576, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000 <unfinished ...>
18662 getpid() = 18662
18664 <... mmap resumed>) = 0x7f52a34c2000
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 mmap(0x7f52a34c8000, 8192, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x9000 <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>) = 0x7f52a34c8000
18662 getpid( <unfinished ...>
18664 mmap(0x7f52a34ca000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xa000 <unfinished ...>
18662 <... getpid resumed>) = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18664 <... mmap resumed>) = 0x7f52a34ca000
18662 <... poll resumed>) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 close(3 <unfinished ...>
18662 getpid() = 18662
18664 <... close resumed>) = 0
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libkeyutils.so.1", O_RDONLY|O_CLOEXEC
<unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... openat resumed>) = 3
18662 getpid() = 18662
18664 read(3, <unfinished ...>
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 <... read resumed>"\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"..., 832) = 832
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 fstat(3, <unfinished ...>
18662 getpid() = 18662
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=22600, ...}) = 0
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0

```

```

<unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>)          = 0x7f52a34bd000
18662 getpid()                    = 18662
18664 mmap(NULL, 24592, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 <... mmap resumed>)          = 0x7f52a34b6000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664          mmap(0x7f52a34b8000,          8192,          PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000 <unfinished ...>
18662 getpid()                    = 18662
18664 <... mmap resumed>)          = 0x7f52a34b8000
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664          mmap(0x7f52a34ba000,          4096,          PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000 <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>)          = 0x7f52a34ba000
18662 getpid()                    = 18662
18664          mmap(0x7f52a34bb000,          8192,          PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000 <unfinished ...>
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 <... mmap resumed>)          = 0x7f52a34bb000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 close(3 <unfinished ...>)
18662 getpid()                    = 18662
18664 <... close resumed>)          = 0
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libresolv.so.2", O_RDONLY|O_CLOEXEC

```

## Вывод

При выполнении лабораторных работ по курсу “Операционные Системы” мне часто приходилось пользоваться утилитой strace. Она показывает выполняемые процессы, команды, взаимосвязи: одним словом, необходимые разработчику вещи для отладки любой программы. А наличие у strace возможности задавать флаги, указывающие, что именно следует сохранять, делает эту утилиту особенно удобной! Мне было приятно познакомиться с strace и я буду и дальше использовать его в работе!