

Sandbox:

```
$ sandbox 32768 - cat README
5: syscall 15 rejected by sandbox
cat: cannot open README
$ QEMU: Terminated
hafsalinus@HafsaASUS:~/xv6-labs-2025$ make qemu
```

Sandbox with pathnames:

```
$ sandbox 32768 README grep xv6 README
DEBUG exec: pid=3, name=sh, mask=0
DEBUG exec: pid=4, name=sandbox, mask=32768
xv6 is a re-implementation of Dennis Ritchie's and Ken Thompson's Unix
Version 6 (v6). xv6 loosely follows the structure and style of v6,
xv6 is inspired by John Lions's Commentary on UNIX 6th Edition (Peer
(kaashoek,rtm@mit.edu). The main purpose of xv6 is as a teaching
$ make grade
DEBUG exec: pid=5, name=sh, mask=0
exec make failed
$ QEMU: Terminated
hafsalinus@HafsaASUS:~/xv6-labs-2025$ |
```

Attack.c:

```
xv6 kernel is booting

hart 1 starting
hart 2 starting
init: starting sh
DEBUG exec: pid=2, name=init, mask=0
$ secret addfgg7y8
DEBUG exec: pid=3, name=sh, mask=0
$ attack
DEBUG exec: pid=4, name=sh, mask=0
addfgg7y8
$ secret wssxxy
DEBUG exec: pid=5, name=sh, mask=0
$ attack
DEBUG exec: pid=6, name=sh, mask=0
addfgg7y8
$ QEMU: Terminated
hafsalinus@HafsaASUS:~/xv6-labs-2025$ |
```

Using gdb:

Usertrap () called syscall

The value is 0x7. The value is the system call number.

0 aka user mode.

It panicked at lw a5, 0(zero).

It crashed because we are dereferencing a null pointer.

Name is init pid is 1.