```
Application
main() {
                     asm("SYSCALL" :: "a"(NR_getpid));
    malloc(10);
                                                                             libc
malloc(size) {
    INLINE_SYSCALL(mmap, 6, ...);
syscalldb(sys_NR, args, ...) {
                                                                        libLinux
    handler = syscall_table[sys_NR];
                                        IllegalInstrHandler(obj) {
    return handler(args);
                                          if (obj->pc[0]==0x0f &&
                                              obj->pc[1]==0x05) { //SYSCALL(0f 05)}
do_mmap(addr, size, ...) {
                                              obj->rax = syscalldb(obj->rax, ...);
    VirtMemAlloc(addr, size, ...);
                                             ExceptionReturn(obj);
VirtMemAlloc(addr, size, ...) {
                                                                             PAL
                                             ExceptionReturn(obj) {
                                                                         Host OS
```

SYSCALL/INT \$80

IRET

function call