

```

/* ANRC RHKI */
/* Lab12: Syscalls Lab */
#include <linux/module.h>
#include <linux/kernel.h>
#include <linux/init.h>
#include <linux/unistd.h>
#include <linux/semaphore.h>
#include <linux/mm.h>
#include <linux/highmem.h>
#include <asm/unistd.h>

#define DRIVER_AUTHOR "ANRC"
#define DRIVER_DESC   "Lab12"

MODULE_LICENSE("GPL");           // Get rid of taint message by declaring code as GPL.

/* Or with defines, like this: */
MODULE_AUTHOR(DRIVER_AUTHOR);    // Who wrote this module?
MODULE_DESCRIPTION(DRIVER_DESC); // What does this module do?

int init(void);
void cleanup(void);

int set_page_rw(long unsigned long _addr)
{
    unsigned int level;
    pte_t *pte = lookup_address(_addr, &level);
    if(pte->pte &~ _PAGE_RW) pte->pte |= _PAGE_RW;
    return 0;
}

void **sys_call_table;

asmlinkage int (*original_call) (const char*);

//asmlinkage long sys_unlink(const char *pathname)
asmlinkage long my_sys_unlink(const char *pathname)
{
    printk("unlinker: File unlink attempted and stopped!\n");
    //return original_call(pathname);
    return -1;
}

int init_module()
{
    // sys_call_table address in System.map
    //[user@localhost labs]$ cat /boot/System.map-2.6.32-358.el6.x86_64 | grep sys_call_table
    //ffffffff816004a0 R sys_call_table
    //ffffffff8160a5f8 r ia32_sys_call_table

    /* get address of sys_call_table */

    /* change page attributes to RW */

    /* replace function call address of unlink */

    return 0;
}

void cleanup_module()
{
    // Restore the original call to unlink
}

```