# **Part 1: hello.c**

## Script:

#include <linux/module.h>

#include <linux/kernel.h>

int init\_module(void)

{

printk (KERN\_INFO "Hello world\n");

return 0;

}

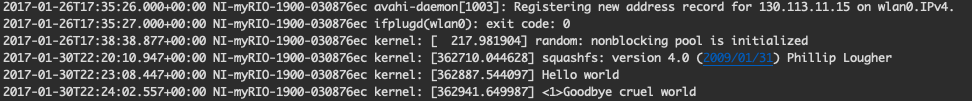
void cleanup\_module(void)

{

printk (KERN\_INFO "<1>Goodbye cruel world\n");

}

## Screenshot of IP address and Output:



## Screenshot of loaded module:

Text

Description automatically generated

## Screenshot of unloaded module:

Text

Description automatically generated

# **Part 2: hello2.c**

## Script:

#include <linux/module.h>

#include <linux/kernel.h>

#include <linux/init.h>

static int foo \_\_initdata = 2;

static int \_\_init init\_custom\_module(void)

{

printk (KERN\_INFO "Hello dummy world %d\n", foo);

return 0;

}

static void \_\_exit cleanup\_custom\_module(void)

{

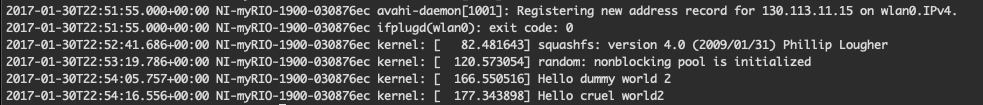
printk (KERN\_INFO "<1>Hello cruel world2\n");

}

module\_init(init\_custom\_module);

module\_exit(cleanup\_custom\_module);

## Screenshot of IP address and Output:



## Screenshot of loaded module:

Text

Description automatically generated

# **Part 3: hello3.c**

## Script:

#include <linux/module.h>

#include <linux/kernel.h>

#include <linux/init.h>

#define DRIVER\_AUTHOR "Adam+Harneet"

#define DRIVER\_DESC "4AA4 Lab2 Part3"

static int foo \_\_initdata = 2;

static int \_\_init init\_custom\_module(void)

{

printk (KERN\_INFO "Hello dummy world %d\n", foo);

return 0;

}

static void \_\_exit cleanup\_custom\_module(void)

{

printk (KERN\_INFO "<1>Hello cruel world2\n");

}

module\_init(init\_custom\_module);

module\_exit(cleanup\_custom\_module);

MODULE\_LICENSE("GPL");

MODULE\_AUTHOR(DRIVER\_AUTHOR);

MODULE\_DESCRIPTION(DRIVER\_DESC);

## Screenshot of IP address and Output:

Text

Description automatically generated

## Screenshot of loaded module:

Text

Description automatically generated

# **Part 4: hello4.c**

## Script:

#include <linux/module.h>

#include <linux/kernel.h>

#include <linux/init.h>

#define DRIVER\_AUTHOR "Adam+Harneet"

#define DRIVER\_DESC "4AA4 Lab2 Part3"

static char \*my\_name = "harneet";

static int \_\_init init\_custom\_module(void)

{

printk (KERN\_INFO "Hello dummy world %s\n", my\_name);

return 0;

}

static void \_\_exit cleanup\_custom\_module(void)

{

printk (KERN\_INFO "Goodbye, %s\n", my\_name);

}

module\_init(init\_custom\_module);

module\_exit(cleanup\_custom\_module);

module\_param(my\_name, charp, 0000);

MODULE\_PARM\_DESC(my\_name, "Your name string");

MODULE\_LICENSE("GPL");

MODULE\_AUTHOR(DRIVER\_AUTHOR);

MODULE\_DESCRIPTION(DRIVER\_DESC);

## Screenshot of IP address and Output:

Text

Description automatically generated with low confidence

## Screenshot of loaded module:

Text

Description automatically generated