НАЦІОНАЛЬНИЙ ТЕХНІЧНИЙ УНІВЕРСИТЕТ УКРАЇНИ

«КИЇВСЬКИЙ ПОЛІТЕХНІЧНИЙ ІНСТИТУТ»

ФАКУЛЬТЕТ ІНФОРМАТИКИ І ОБЧИСЛЮВАЛЬНОЇ ТЕХНІКИ

КАФЕДРА ОБЧИСЛЮВАЛЬНОЇ ТЕХНІКИ

**Лабораторна робота №5**

*з дисципліни* ***«****Архітектура комп’ютерів 2****»***

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Київ 2020 р.

**Лістинг програми:**

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\*/

#include <linux/init.h>

#include <linux/module.h>

#include <linux/moduleparam.h>

#include <linux/printk.h>

#include <linux/types.h>

MODULE\_AUTHOR("Serhii Popovych <serhii.popovych@globallogic.com>");

MODULE\_DESCRIPTION("Hello, world in Linux Kernel Training");

MODULE\_LICENSE("Dual BSD/GPL");

static uint times = 1;

module\_param(times,uint,0);

MODULE\_PARM\_DESC(times, "The amount of times to print hello world");

static int \_\_init initter(void)

{

uint i = 0;

printk(KERN\_INFO "times: %d\n", times);

if(times == 0) {

printk(KERN\_WARNING "The parameter is 0");

}else if(times >=5 && times <= 10) {

printk(KERN\_WARNING "The parameter is between 5 and 10");

} else if(times > 10) {

printk(KERN\_ERR "The parameter is greater than 10");

return -EINVAL;

}

for(i = 0; i < times; i++){

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

}

return 0;

}

static void \_\_exit exitter(void)

{

/\* Do nothing here right now \*/

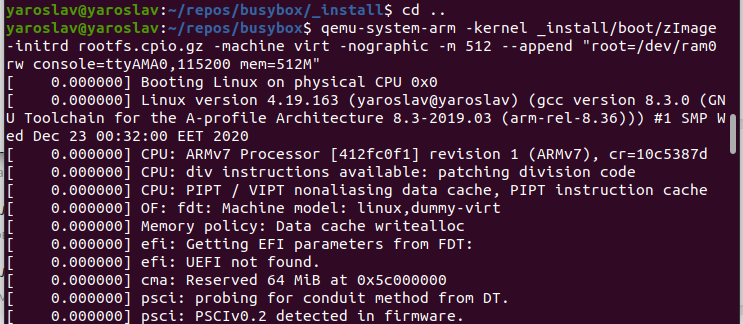
}

module\_init(initter);

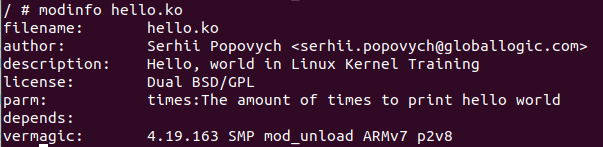
module\_exit(exitter);

**Скріншоти виконання:**

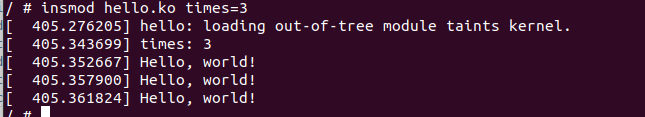
*Запуск емулятора*

**

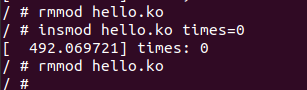
*… та виконання команди modinfo*

****

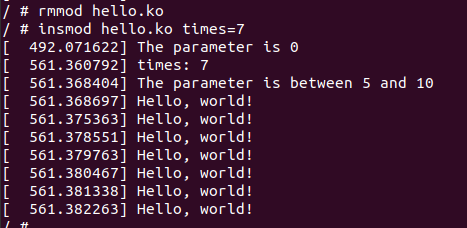
*Приклад виконання з times=3*

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*Виконання rmmod та times=0*

****

*Виконання rmmod та times=7*

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