

**Міністерство освіти і науки України
Національний технічний університет України «КПІ» імені Ігоря Сікорського
Кафедра обчислювальної техніки ФІОТ**

**Архітектура Комп'ютерів 2. Процесори
Лабораторна роботи №4**

Виконав:

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Перевірив:

пос. Нікольський С.С

Київ 2021

```
ebubuntu@pillisos: ~/repos/busybox
[ 1.366333] uart-pl011 9000000,pl011: no DMA platform data
[ 1.367494] Freeing unused kernel memory: 2048K
[ 1.378975] Run /init as init process

Please press Enter to activate this console.
/ # uname -a
Linux (none) 4.19.220 #1 SMP Thu Dec 9 06:58:26 EET 2021 armv7l GNU/Linux
/ # ls -l
total 0
drwxrwxr-x 2 1000 1000 0 Dec 9 05:11 bin
drwxrwxr-x 2 1000 1000 0 Dec 9 05:12 boot
drwxrwxr-x 3 1000 1000 0 Dec 9 05:15 dev
drwxrwxr-x 3 1000 1000 0 Dec 9 05:14 etc
lrwxrwxrwx 1 1000 1000 11 Dec 9 05:11 init -> bin/busybox
drwxrwxr-x 3 1000 1000 0 Dec 9 05:14 lib
lrwxrwxrwx 1 1000 1000 11 Dec 9 05:11 linuxrc -> bin/busybox
dr-xr-xr-x 90 root root 0 Jan 1 1970 proc
drwxrwxr-x 2 1000 1000 0 Dec 9 05:11 root
drwxrwxr-x 2 1000 1000 0 Dec 9 05:11/sbin
dr-xr-xr-x 12 root root 0 Dec 9 05:15 sys
drwxrwxr-x 2 1000 1000 0 Dec 9 05:11 tmp
drwxrwxr-x 4 1000 1000 0 Dec 9 05:11 usr

/ # dmesg | grep init
[ 0.000000] random: get_random_bytes called from start_kernel+0x9c/0x47c with crng_init=0
[ 0.000000] Memory: 406416K/524288K available (12288K kernel code, 1619K rwdata, 4784K rodata, 2048K init, 393K bss, 52336K reserved, 65536K cma-reserved, 0K highmem)
[ 0.000000] .init : 0x(ptrval) - 0x(ptrval) (2048 kB)
[ 0.048309] devtmpfs: initialized
[ 0.065754] pinctrl core: initialized pinctrl subsystem
[ 0.141857] SCSI subsystem initialized
[ 0.247291] Trying to unpack rootfs image as initramfs...
[ 1.143138] Freeing initrd memory: 25104K
[ 1.217135] SuperH (H)SCI(P) driver initialized
[ 1.217729] nsn serial: driver initialized
[ 1.217906] STMicroelectronics ASC driver initialized
[ 1.218497] STM32 USART driver initialized
[ 1.378975] Run /init as init process

/ # busybox --help | head -15
BusyBox v1.34.1 (2021-12-09 07:09:37 EET) multi-call binary.
BusyBox is copyrighted by many authors between 1998-2015.
Licensed under GPLv2. See source distribution for detailed
copyright notices.

Usage: busybox [function [arguments]...]
or: busybox --list[-full]
or: busybox --show SCRIPT
or: busybox --install [-s] [DIR]
or: function [arguments]...

BusyBox is a multi-call binary that combines many common Unix
utilities into a single executable. Most people will create a
link to busybox for each function they wish to use and BusyBox
will act like whatever it was invoked as.

/ # poweroff
/ # umount: can't unmount /: Invalid argument
swapoff: can't open '/etc/fstab': No such file or directory
The system is going down NOW!
```

```
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dr-xr-xr-x 90 root root 0 Jan 1 1970 proc
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drwxrwxr-x 4 1000 1000 0 Dec 9 05:11 usr

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/ # poweroff
/ # umount: can't unmount /: Invalid argument
swapoff: can't open '/etc/fstab': No such file or directory
The system is going down NOW!
Sent SIGTERM to all processes
Sent SIGKILL to all processes
Requesting system poweroff
[ 291.248621] reboot: Power down
ebubuntu@pillisos: ~/repos/busybox$
```









