

# zadanie domowe 1

## ramdysk startowy

Wpisujemy

```
make qemu_aarch64_virt_defconfig
make menuconfig
```

Ustawiamy tak jak poniżej folder Filesystem images/

```

[*] cpio the root filesystem (for use as an initial RAM filesystem)
    cpio type (cpio the whole root filesystem) --->
        Compression method (gzip) --->
[ ] Create U-Boot image of the root filesystem
[ ] cramfs root filesystem
[ ] erofs root filesystem
[*] ext2/3/4 root filesystem
    ext2/3/4 variant (ext2 (rev1)) --->
    (rootfs) filesystem label
    (60M) exact size
    (0) exact number of inodes (leave at 0 for auto calculation)
    (256) inode size
    (5) reserved blocks percentage
    (-0 ^64bit) additional mke2fs options
        Compression method (no compression) --->
[ ] f2fs root filesystem
[*] initial RAM filesystem linked into linux kernel
```

```
make clean all
make
```

Dodatkowo w pliku start\_qemu.sh zmieniliśmy

```
exec qemu-system-aarch64 -M virt -cpu cortex-a53 -nographic -smp
    -append "rootwait root=/dev/vda console=ttyAMA0" -netdev user,
virtio-net-device,netdev=eth0 -drive file=rootfs.ext2,if=none,fo
-device virtio-blk-device,drive=hd0 ${EXTRA_ARGS} "$@"
```

na

```
exec qemu-system-aarch64 -M virt -cpu cortex-a53 -nographic -sm  
Image -append "rootwait root=/dev/vda console=ttyAMA0" -netdev i  
-device virtio-net-device,netdev=eth0 -drive file=rootfs.cpio,i  
id=hd0 -device virtio-blk-device,drive=hd0 ${EXTRA_ARGS} "$@"
```

Po kompilacji system działa, a zapisane pliki nie pojawiają się po reboocie

```
Welcome to Buildroot  
buildroot login: IPv6: ADDRCONF(NETDEV_CHANGE): eth0: link becomes ready  
root  
# echo "a" > a  
# ls  
a  
# echo "a" > a.txt  
# ls  
a      a.txt  
#
```

```
Welcome to Buildroot  
buildroot login: IPv6: ADDRCONF(NETDEV_CHANGE): eth0: link becomes ready  
root  
# ls  
#
```

## rzeczywisty system plików

```
make qemu_aarch64_virt_defconfig  
make menuconfig
```

Ustawiamy tak jak poniżej folder Filesystem images/

```

[ ] axfs root filesystem
[ ] btrfs root filesystem
[ ] cloop root filesystem for the target device
[ ] cpio the root filesystem (for use as an initial RAM filesystem)
[ ] cramfs root filesystem
[ ] erofs root filesystem
[*] ext2/3/4 root filesystem
    ext2/3/4 variant (ext2 (rev1)) --->
(rootfs) filesystem label
(60M) exact size
(0) exact number of inodes (leave at 0 for auto calculation)
(256) inode size
(5) reserved blocks percentage
(-0 ^64bit) additional mke2fs options
    Compression method (no compression) --->
[ ] f2fs root filesystem
[ ] initial RAM filesystem linked into linux kernel
[ ] jffs2 root filesystem
[ ] oci image
[ ] romfs root filesystem
[ ] squashfs root filesystem
└(+)
```

```
make clean all
make
```

Po kompilacji system działa, a pliki zostają po reboocie

```

Welcome to Buildroot
buildroot login: IPv6: ADDRCONF(NETDEV_CHANGE): eth0: link becomes ready
root
# ls
a.txt
#
```

## Ustawienie nazwy systemu

```
make menuconfig
```

Trzeba wejść w System configuration/system hostname i wpisać nazwę

