**LINUX EXERCISE (LAB 09)**

Exercise 1. Use the Buildroot tool to build a complete Linux system image for an embedded computer, then boot it on that embedded computer (using the QEMU virtualization tool).

Clone buildroot directory:

A picture containing text, screenshot, font

Description automatically generated

Configure buildroot:

A picture containing text, screenshot, font, menu

Description automatically generated

Build the system:

A computer screen with white text

Description automatically generated with low confidence

A picture containing text, screenshot, software, multimedia

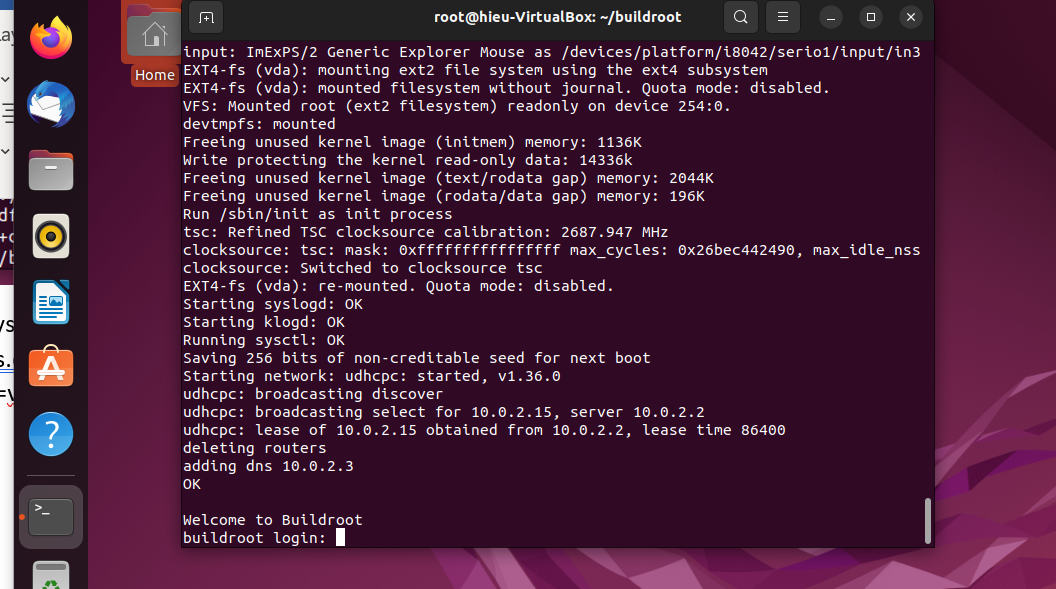
Description automatically generated

Install QEMU: sudo apt install qemu-system-x86

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Description automatically generated

Boot the system: qemu-system-x86\_64 -M pc -kernel output/images/bzImage -drive file=output/images/rootfs.ext2,if=virtio,format=raw -append "root=/dev/vda console=ttyS0" -nographic -net nic,model=virtio -net user



A picture containing text, screenshot, multimedia, multimedia software

Description automatically generated

Exercise 2 (Optional). Try adding a new application, either created by the student or a third party, to the Buildroot system.