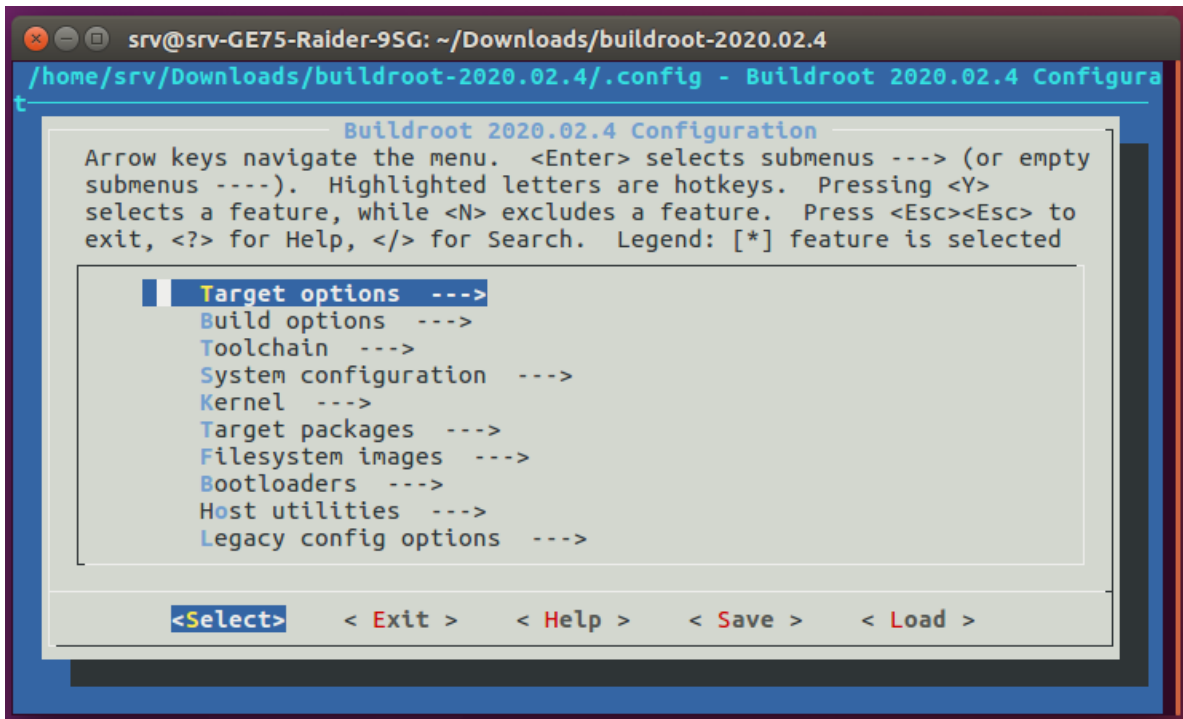# Buildroot Configuration Steps
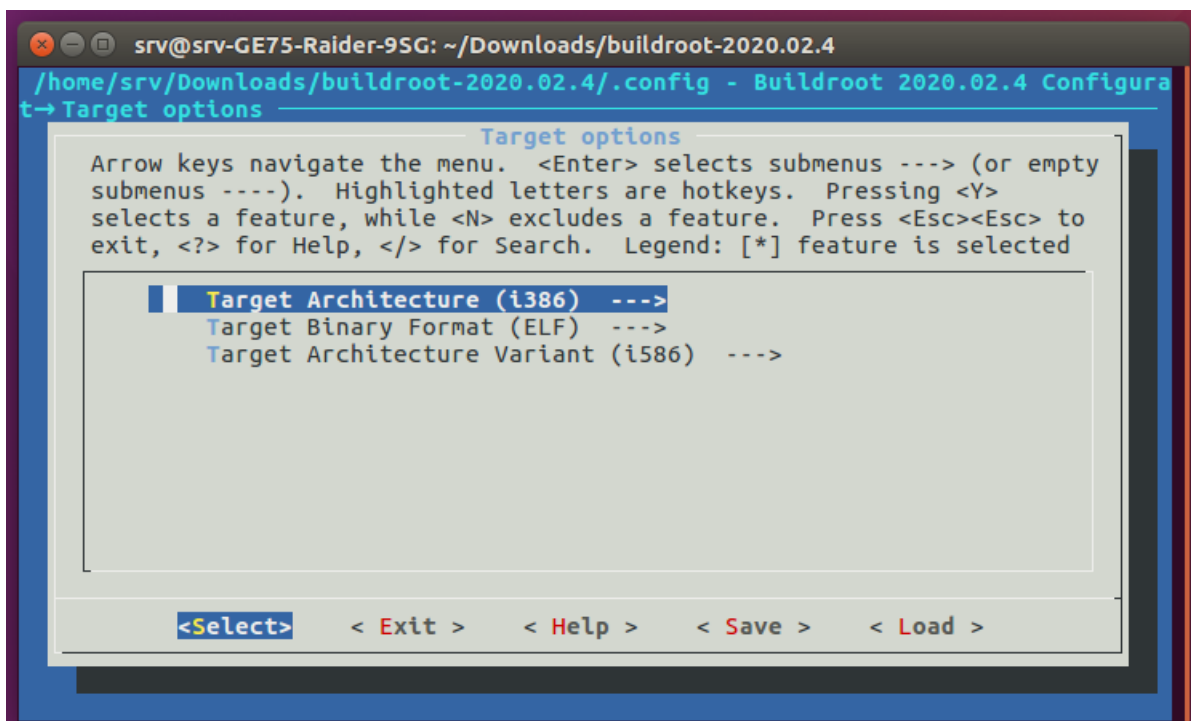
Step1

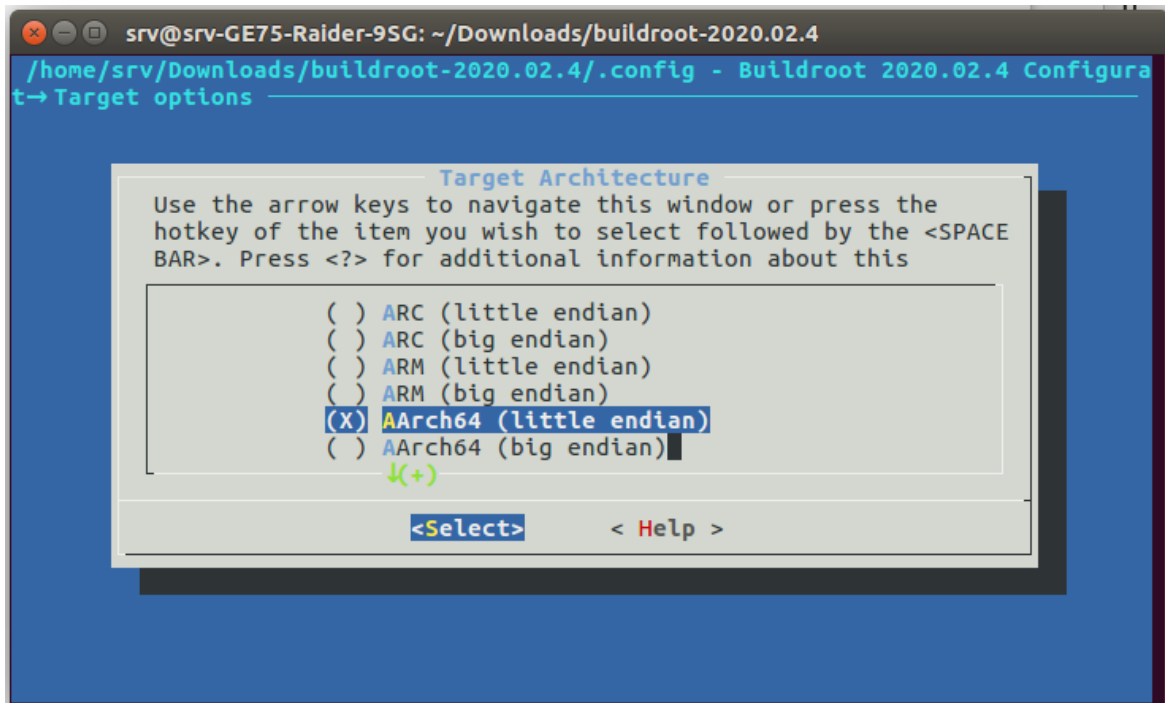Choose the target options as highlighted below and enter.

Step 2

Choose "Target Architecture (i386)" and enter
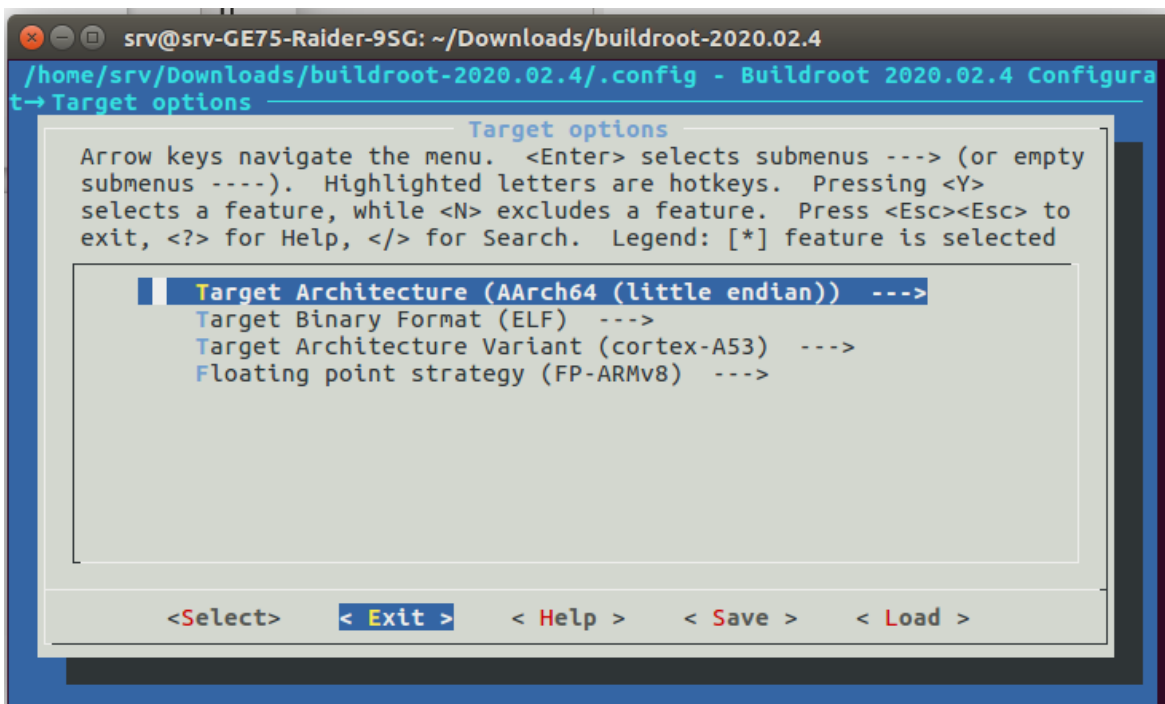
Buildroot Configuration Steps

Step 3

Scroll down and select "AArch64 (little endian) as highlighted below. Use "space bar" to choose the option and hit enter.
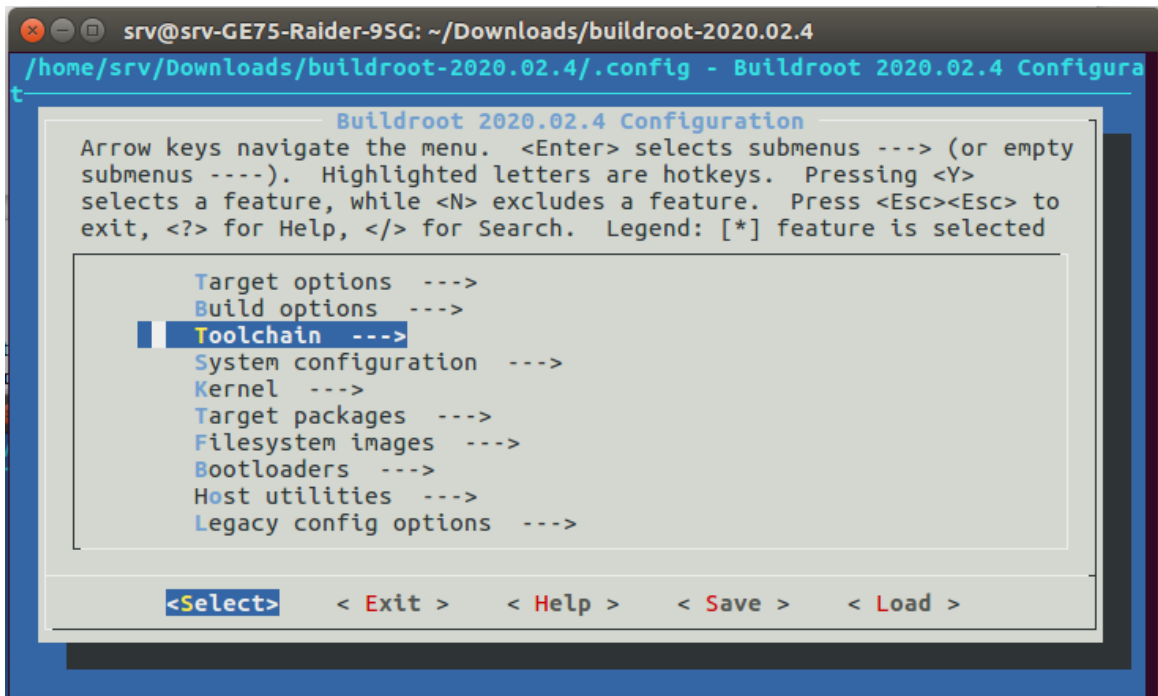

Step 4

You will see this page. Here you should choose **<Exit>** to go back to main menu
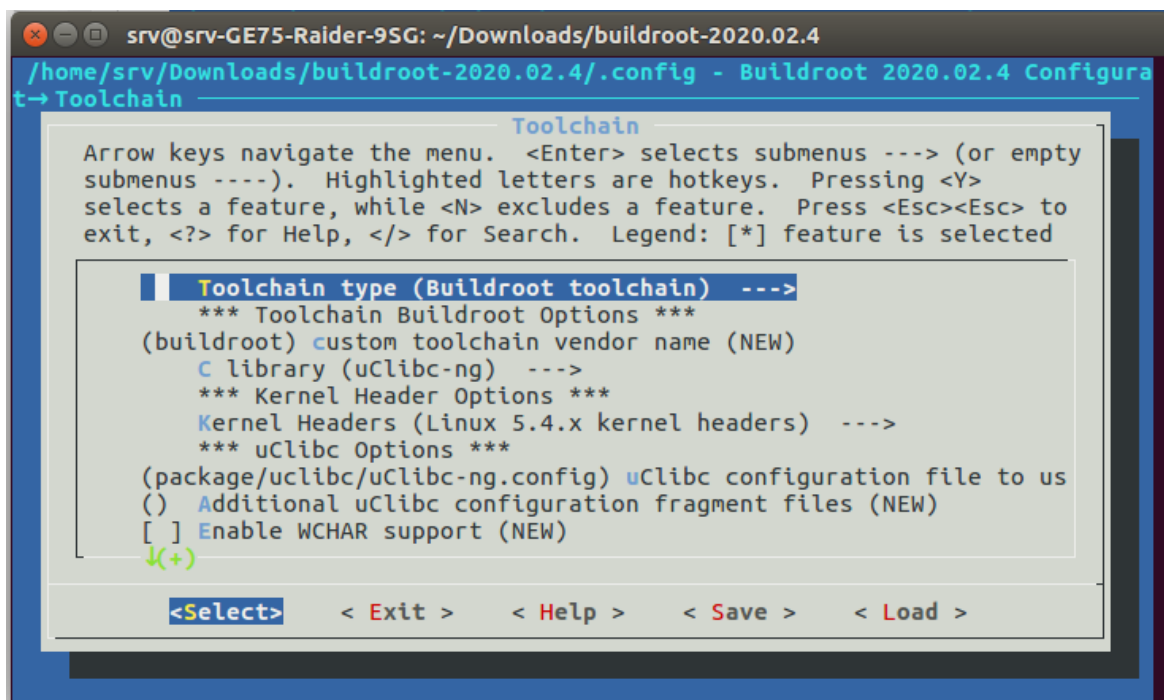
Buildroot Configuration Steps

Step 5

You will be back to the main menu. Now go to "Toolchain section" (hit enter on Toolchain)
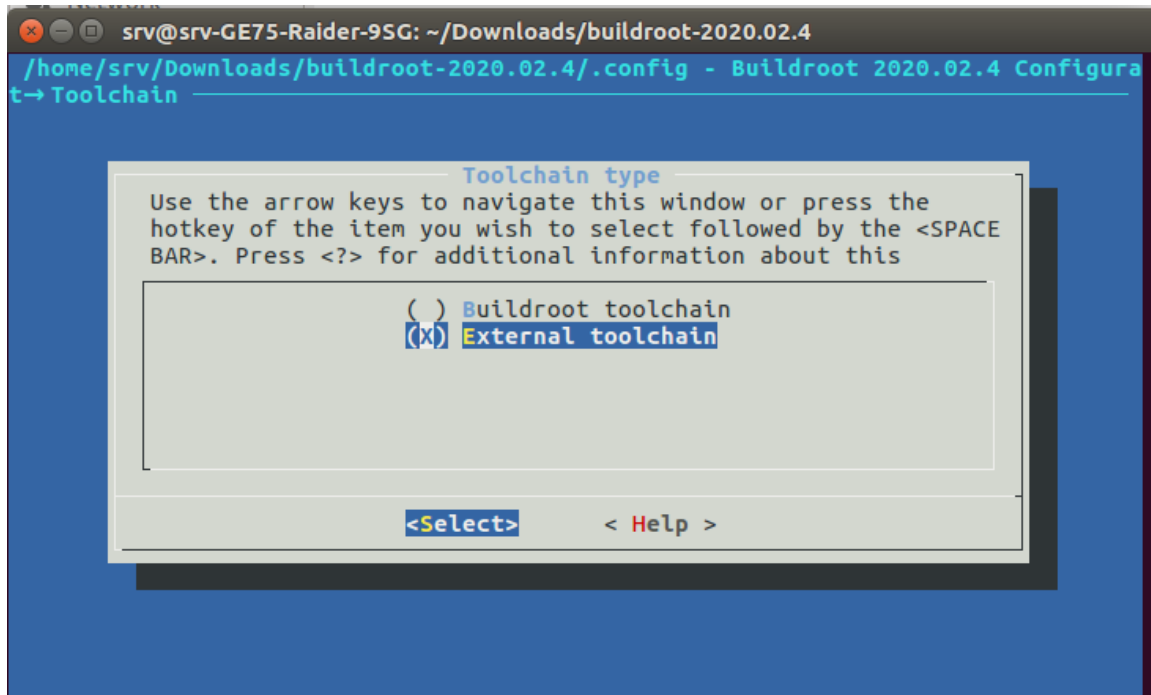

Step 6

You will see the tool chain menu like the below image. Hit enter on the "Toolchain type" as highlighted below
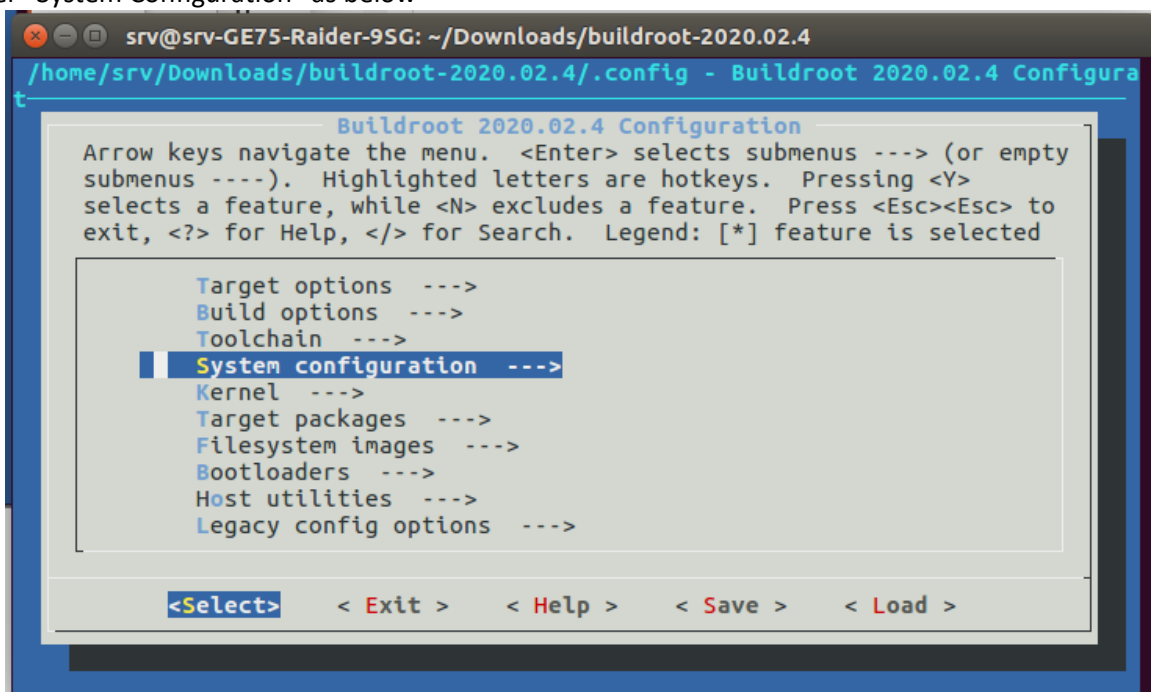
Buildroot Configuration Steps

Step 7:

Now you will see the following options. Choose "External toolchain" (use arrow to move the cursor and hit "space bar" to select: the 'x' mark should move to the option External toolchain).

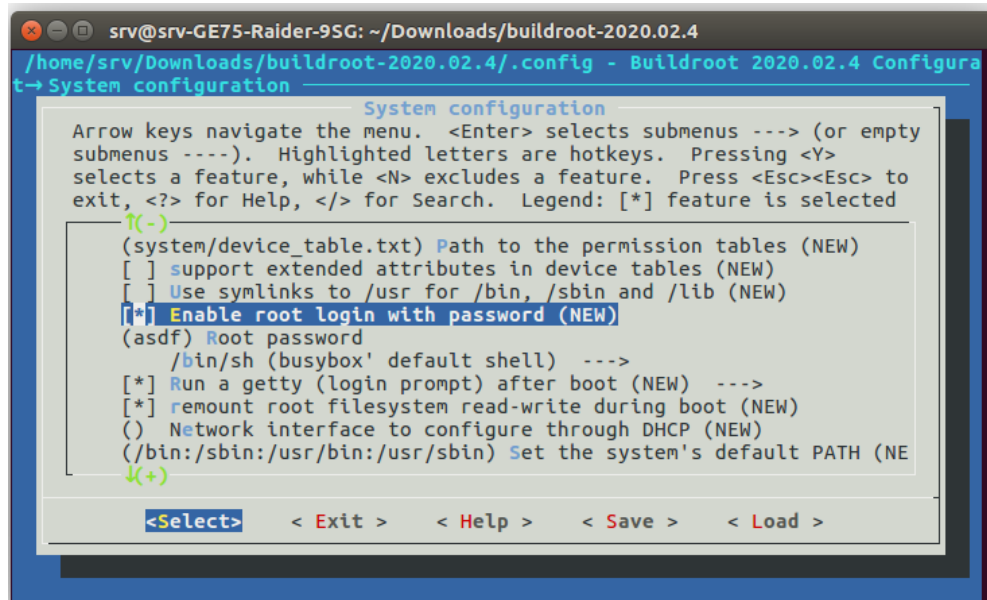After this, come back to the main menu (use exit)

Step 8

Enter "System Configuration" as below

Buildroot Configuration Steps

Step 9

After entering system configuration, scroll down until you see the "Enable root login with password (NEW) line item as below:
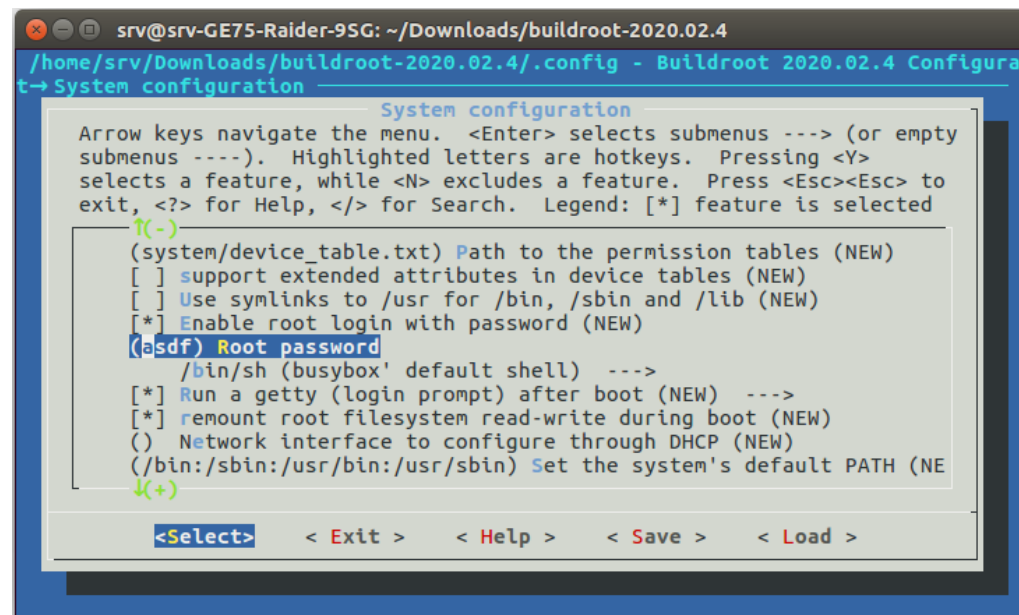

Step 10

Hit enter on the "(asdf) Root passoword" and change your password.

Buildroot Configuration Steps

Step 11

After changing the password. Scroll down in the menu and hit enter on the line item "Run a getty (login prompt) after boot (NEW)" as shown below
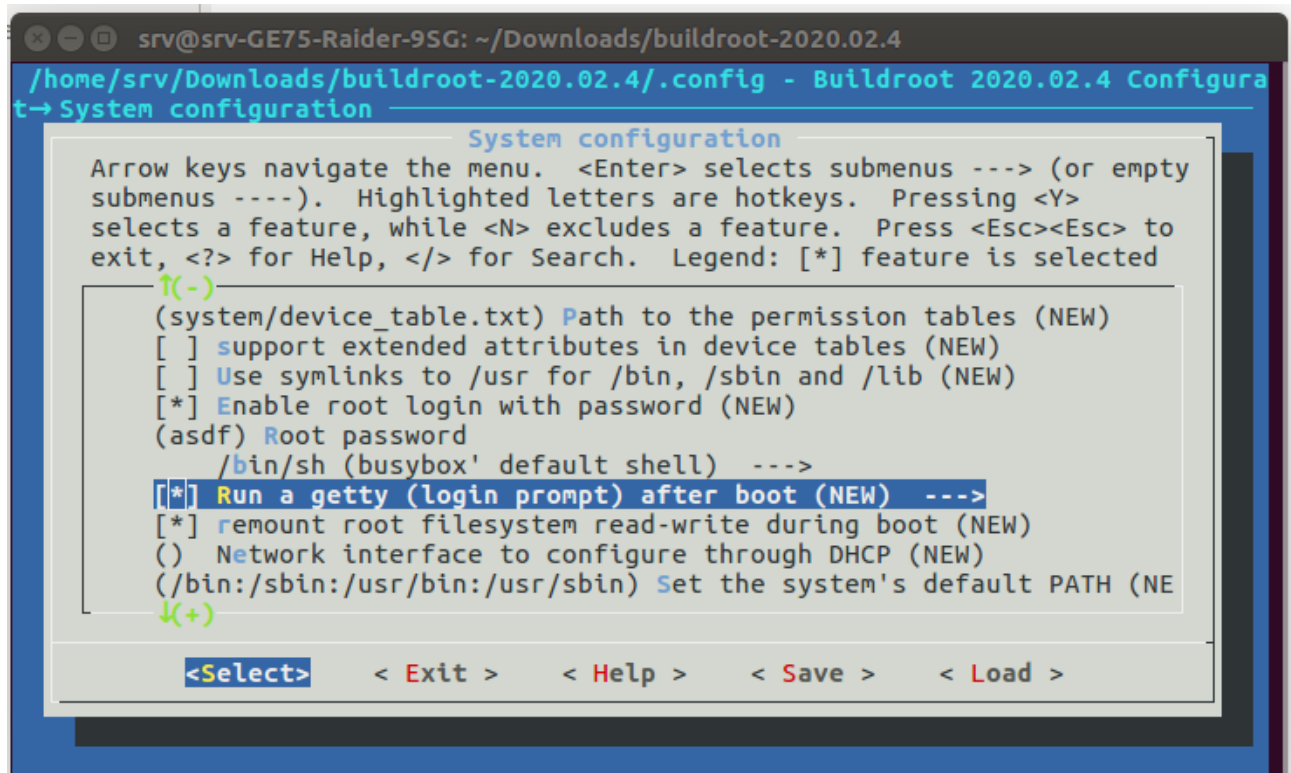
This will show the following menu

Buildroot Configuration Steps
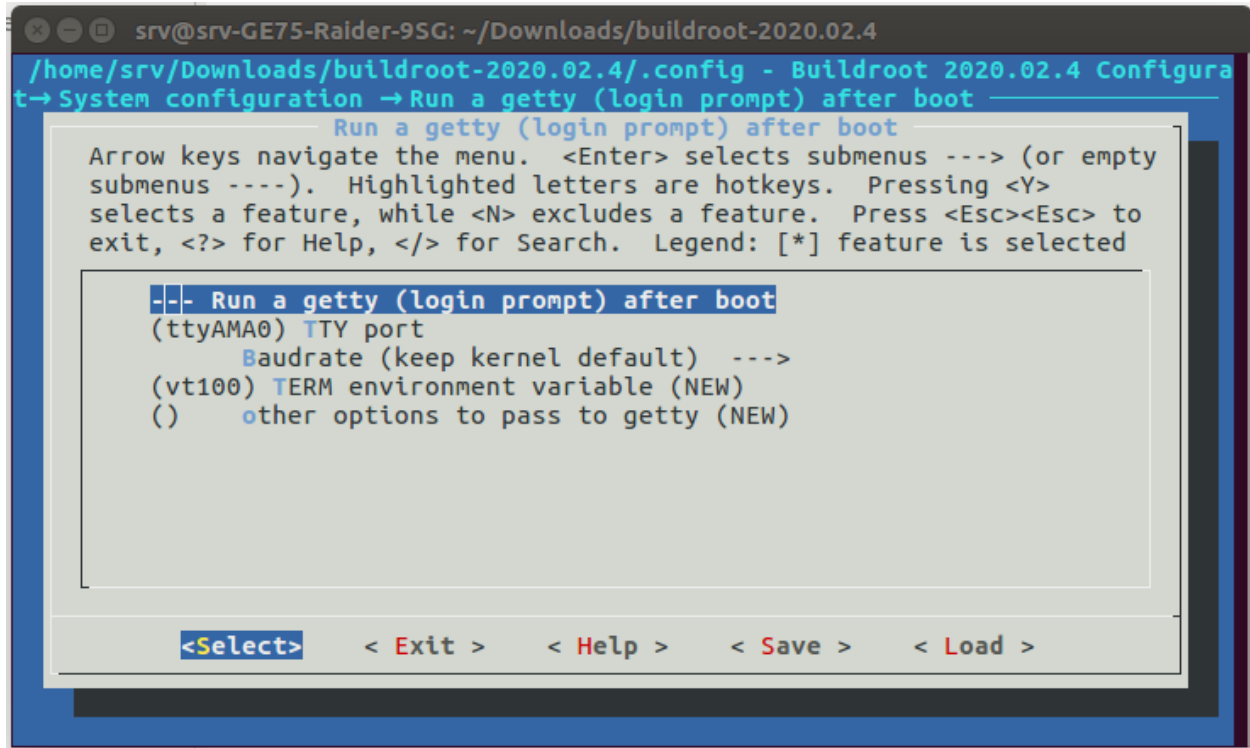
Step 12

Scroll down and hit enter on "TTY port". You will see the following page.
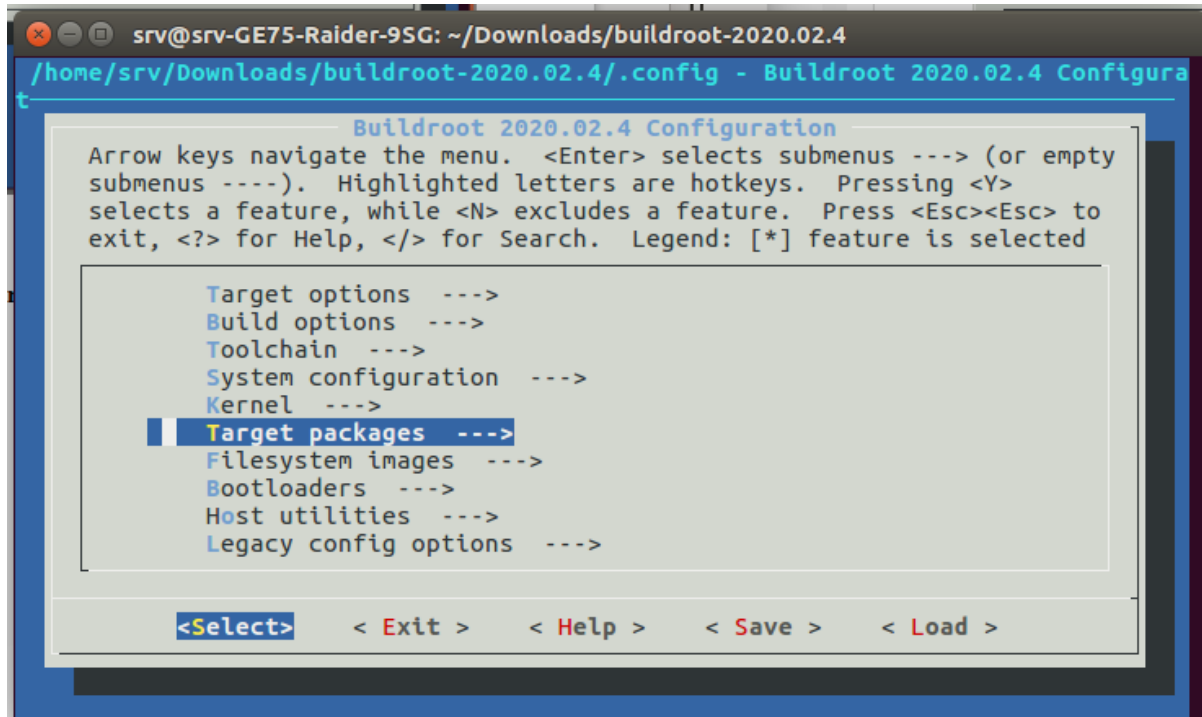
Enter the string value as "ttyAMA0"
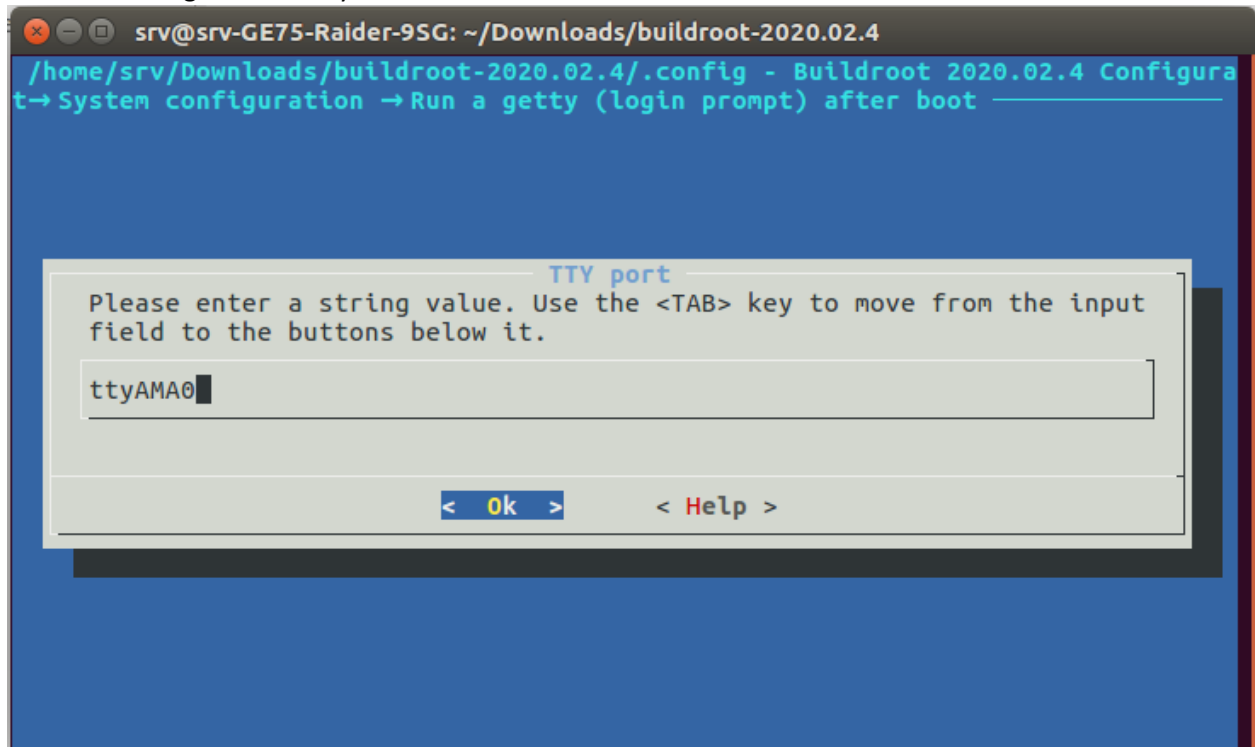
Buildroot Configuration Steps

Step 13

Go back to the main menu (use exit) and enter the Target packages as below

You will see the following menu. Scroll down and choose "Show packages that are also provided by busybox" (Use "space bar" to choose the option)

Buildroot Configuration Steps

Step 14

After the above step, exit and navigate back to the main menu. Choose "Filesystem Images" as shown below.
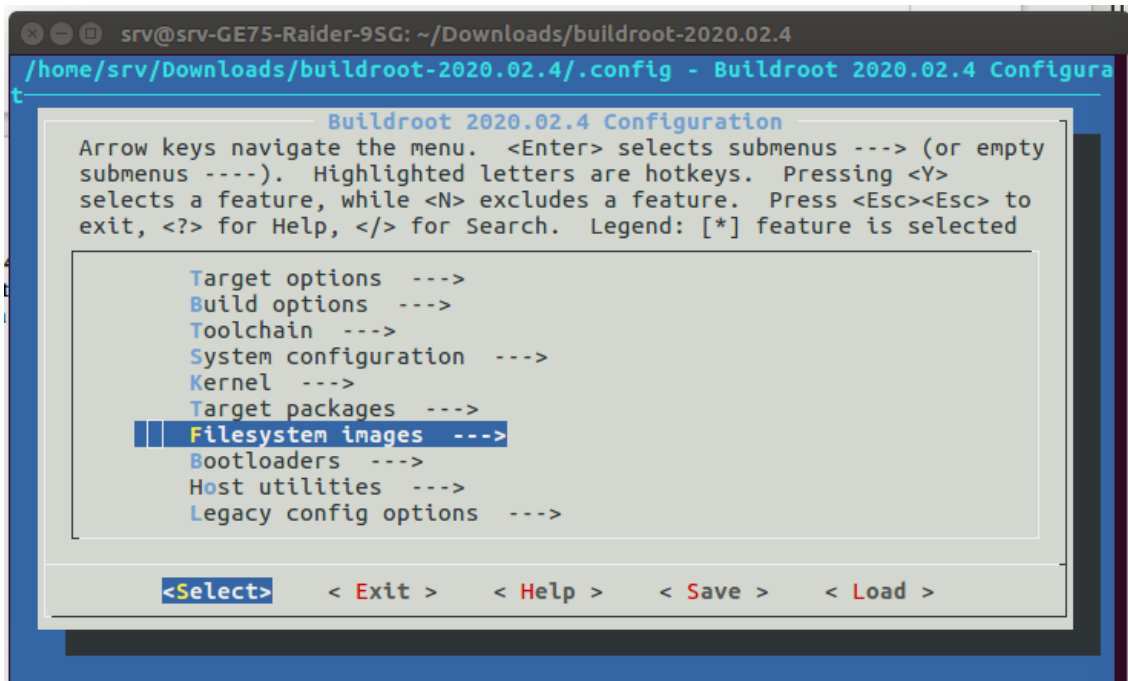
You will see the following menu. Scroll down and choose the "cpio the root filesystem" option as shown below
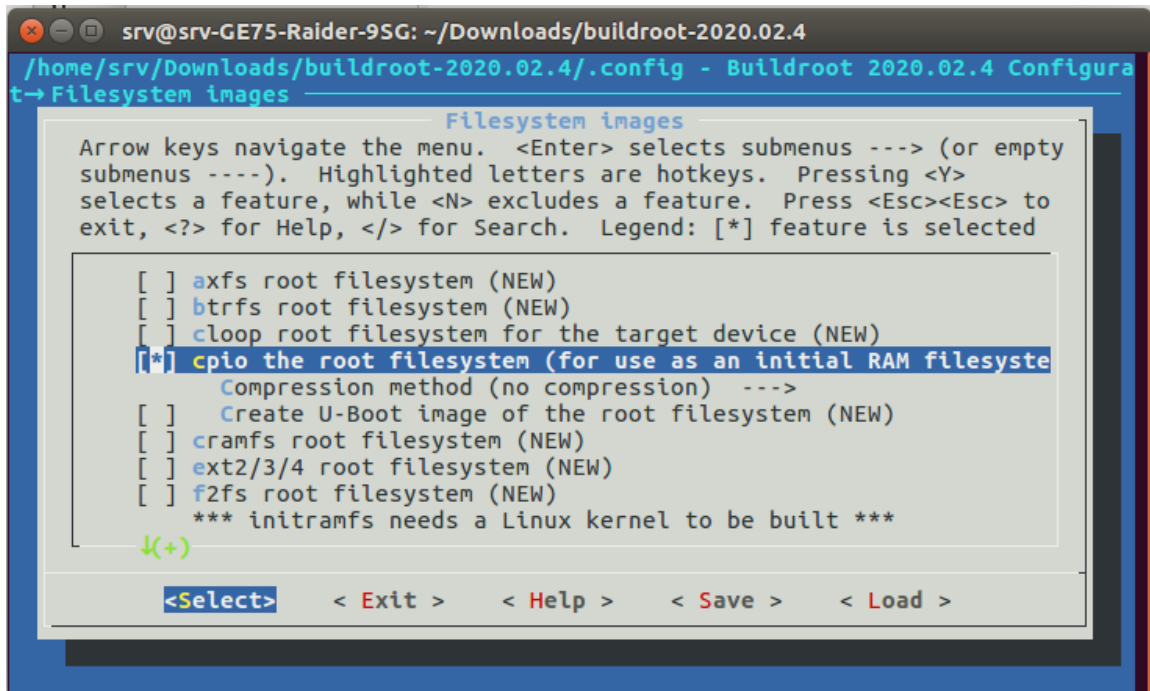
Buildroot Configuration Steps

Step 15

Exit the menu all the way out. Save the configuration during exit.

You will see the following in the terminal

```
srv@srv-GE75-Raider-9SG:~/Downloads/buildroot-2020.02.4$ make menuconfig
configuration written to /home/srv/Downloads/buildroot-2020.02.4/.config

*** End of the configuration.
*** Execute 'make' to start the build or try 'make help'.

srv@srv-GE75-Raider-9SG:~/Downloads/buildroot-2020.02.4$
```

Step 16

Run "make" here and the output file will be saved to output/images.

```
srv@srv-GE75-Raider-9SG: ~/Downloads/buildroot-2020.02.4/output/images
fakeroot
PATH="/home/srv/Downloads/buildroot-2020.02.4/output/host/bin:/home/srv/Download
s/buildroot-2020.02.4/output/host/sbin:/home/srv/.pyenv/plugins/pyenv-virtualenv
/shims:/home/srv/.pyenv/shims:/home/srv/.pyenv/bin:/home/srv/.pyenv/plugins/pyen
v-virtualenv/shims:/home/srv/.pyenv/shims:/home/srv/.pyenv/bin:/home/srv/autowar
e/ros/install/sick_ldmrs_driver/bin:/opt/ros/kinetic/bin:/home/srv/bin:/home/srv
/.local/bin:/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/ga
mes:/usr/local/games:/snap/bin:/usr/local/cuda/bin" FAKEROOTDONTTRYCHOWN=1 /home
/srv/Downloads/buildroot-2020.02.4/output/host/bin/fakeroot -- /home/srv/Downloa
ds/buildroot-2020.02.4/output/build/buildroot-fs/tar/fakeroot
rootdir=/home/srv/Downloads/buildroot-2020.02.4/output/build/buildroot-fs/tar/ta
rget
table='/home/srv/Downloads/buildroot-2020.02.4/output/build/buildroot-fs/full_de
vices_table.txt'
ln -snf /home/srv/Downloads/buildroot-2020.02.4/output/host/aarch64-buildroot-li
nux-gnu/sysroot /home/srv/Downloads/buildroot-2020.02.4/output/staging
srv@srv-GE75-Raider-9SG:~/Downloads/buildroot-2020.02.4$ ls
arch       Config.in         DEVELOPERS   linux            package   toolchain
board      Config.in.legacy  dl           Makefile         README    utils
boot       configs           docs         Makefile.legacy  support
CHANGES    COPYING           fs           output           system
srv@srv-GE75-Raider-9SG:~/Downloads/buildroot-2020.02.4$ cd output/
srv@srv-GE75-Raider-9SG:~/Downloads/buildroot-2020.02.4/output$ ls
build  host  images  staging  target
srv@srv-GE75-Raider-9SG:~/Downloads/buildroot-2020.02.4/output$ cd images/
srv@srv-GE75-Raider-9SG:~/Downloads/buildroot-2020.02.4/output/images$ ls
rootfs.cpio  rootfs.tar
srv@srv-GE75-Raider-9SG:~/Downloads/buildroot-2020.02.4/output/images$
```