Building Toolchain:

Buildroot is a framework that simplifies and automates the process of building a complete Linux system for an embedded system, using cross-compilation.

In order to achieve this, Buildroot is able to generate a cross-compilation toolchain, a root filesystem, a Linux kernel image and a bootloader for your target. Buildroot can be used for any combination of these options, independently.

1. Download the Buildroot source form https://buildroot.org/downloads/ and extract tar file. Go to buildroot root directory and check if board support exsists. The directory configs contains board support defconfigs, Here beaglebone black board configuration file is **beaglebone_defconfig.**

2. Apply board specific config configuration file

$ make beaglebone_defconfig

3. Apply required changes to the configuration file using **menuconfig**

$ make menuconfig

* Toolchain
        [*] Enable WCHAR support
        [*] Enable RPC support

4. Now save the configuration & Initiate the build process

$ make toolchain

-> make toolchain - for generating cross compiler tool chain binary.

The Cross compiler binaries that are generated will be at (path_to_buildroot)/output/build/host/usr/bin.