Making an operating system on bare-metal ARM

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1 Installing the toolchain

First of all I am assuming you are running linux. If you are feeling lucky, you can also try this on any posix-like environment, but beware that things might not work.

If you are developing under windows you can use WSL[1] . Bare in mind that things also might not work as expected.

With this disclaimer out of the way we can start the first steps in compiling a program for ARM!

1.1 Installing the compiler

Installing the compiler should be as easy as running the command `pacman -S arm-none-eabi-gcc`. The package is even available under Debian, so your package manager *should* have it.

If you want to compile it manually you have to execute the following commands:

```
wget https://ftp.fu-berlin.de/unix/languages/gcc/releases/gcc-11.2.0/gcc-11.2.0.tar.gz
```

1.2 Installing a debugger

1.3 Installing QEMU

1.4 Installing mkimage and UBoot

2 `make`-ing first contact

[1] https://docs.microsoft.com/en-us/windows/wsl/install