VM Setup:

Allocate approximately 4 GB of RAM, 2 virtual CPU cores, and 20 GB of hard drive space.
Install Artix-base (runit version) Linux using text mode instructions.
Post-Installation Configuration:

Enable ArchLinux repositories.
Install essential packages: binutils, elfutils, gcc, gdb, make, automake, autoconf, yasm, and vim.
Kernel Compilation:

Download the Linux kernel from kernel.org.
Use the provided kernel config.
Clean build artifacts with 'make mrproper'.
Copy and configure the kernel using 'config-rev-9-gold'.
Compile the kernel with 'make -j$(nproc)'.
Verify Boot:

Ensure the compiled Linux kernel successfully boots on your VM.
For VMware (Optional):

Remove unnecessary devices: Printer, SoundCard, USB Controller.
For VirtualBox (Optional):

Disable the sound card in VM settings.
These steps will set up your VM for further testing and development.