1. *sudo apt update*
2. Install cmake, min version 3.24

   You can download the current latest release for arm chips using this command:

   curl -OL [*https://github.com/Kitware/CMake/releases/download/v3.26.4/cmake-3.26.4-linux-aarch64.sh*](https://github.com/Kitware/CMake/releases/download/v3.26.4/cmake-3.26.4-linux-aarch64.sh)

   then make the script an executable using:

   sudo chmod +x cmake-3.26.4-linux-aarch64.sh

   Then run the script to download and unzip using:

   ./cmake-3.26.4-linux-aarch64.sh

   Now you should have the cmake executable in the current directory, we need to add it to the PATH so you can access it without the path prefix:

   sudo nano ~/.bashrc

   at the end of .bashrc write this line:

   export PATH="/home/$USER/cmake-3.26.4-linux-aarch64/bin:$PATH"

3. Install clang, (I tested with clang-12 only)
   Run this command to install all tools:
   sudo apt install clang-format clang-tidy clang-tools clang clangd libc++-dev libc++1 libc++abi-dev libc++abi1 libclang-dev libclang1 liblldb-dev libllvm-ocaml-dev libomp-dev libomp5 lld lldb llvm-dev llvm-runtime llvm python3-clang

   If this command does not install atleast clang 5 (for C++17), you need to install it manually.
4. *sudo apt install ninja-build*
5. *sudo reboot* : this will apply the .bashrc change
6. *cd ~*
7. *git clone* [*https://github.com/vladsomai/Mobots-3dPrinter.git*](https://github.com/vladsomai/Mobots-3dPrinter.git)
8. *cd Mobots-3dPrinter*
9. We must specify the path to the compiler in the build.sh file. We can find the clang path by using this command:
   clang++ –version
   you should see the installation dir of clang, now set this path in the build.sh:
   sudo nano ./build.sh
   modify the C_COMPILER and CXX_COMPILER variables to the path you got from clang++ --version
   after you save the file, execute it: *./build.sh*
   You should see the build files generated in the "out" folder
10. *cd out*
11. *sudo ninja*

After running this command you should have the executable in the "out" directory. The executable can be run using "./RoMoController". But before running it, you should copy the sample g code from ~/Mobots-3dPrinter/SampleGCode to ~/Mobots-3dPrinter/out using this command:

sudo cp ~/Mobots-3dPrinter/Samples/hello-world.ngc ~/Mobots-3dPrinter/out/

sudo mv ~/Mobots-3dPrinter/out/hello-world.ngc ~/Mobots-3dPrinter/out/gcode.ngc

and also copy the config.ini:

sudo cp ~/Mobots-3dPrinter/Samples/config.ni ~/Mobots-3dPrinter/out/

After running the executable you will see a log file created in the same directory as the executable, the name of the log file is the current date. The log file shall describe the steps the app makes, show errors or info, the log is not 100% complete it may not contain all the errors at the moment.