pysimCoder

Step-by-step Installation in Ubuntu with Anaconda

by

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Step 1: “Basic Installation”

a) uname -r
b) sudo su
c) apt-get install linux-headers-6.8.0-51-generic
d) apt-get install make

Step 2, part c:

```
emb@emb:~$ uname -r
6.8.0-51-generic
emb@emb:~$ sudo su
[sudo] password for emb:
root@emb:/home/emb# apt-get install linux-headers-6.8.0-51-generic
```

Step 2: Install Anaconda

Link: https://docs.anaconda.com/anaconda/install/

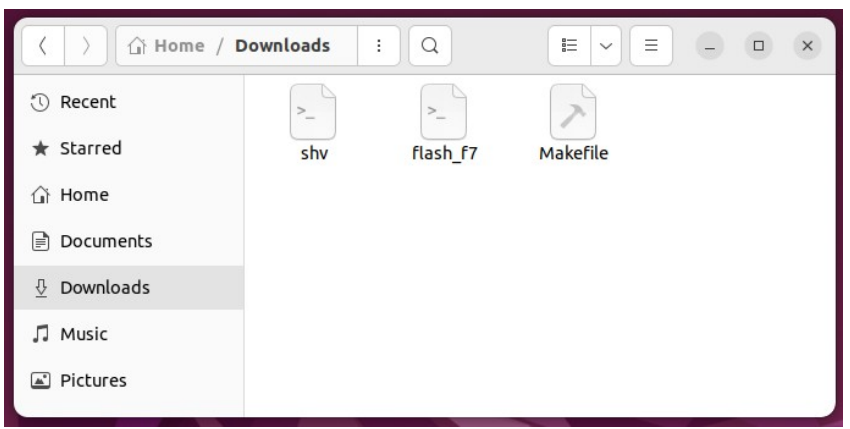
Step 3: Install Slycot and Python Control

Link: https://python-control.readthedocs.io/en/latest/intro.html

Step 4: Download files

Link: https://www.robots5.com/

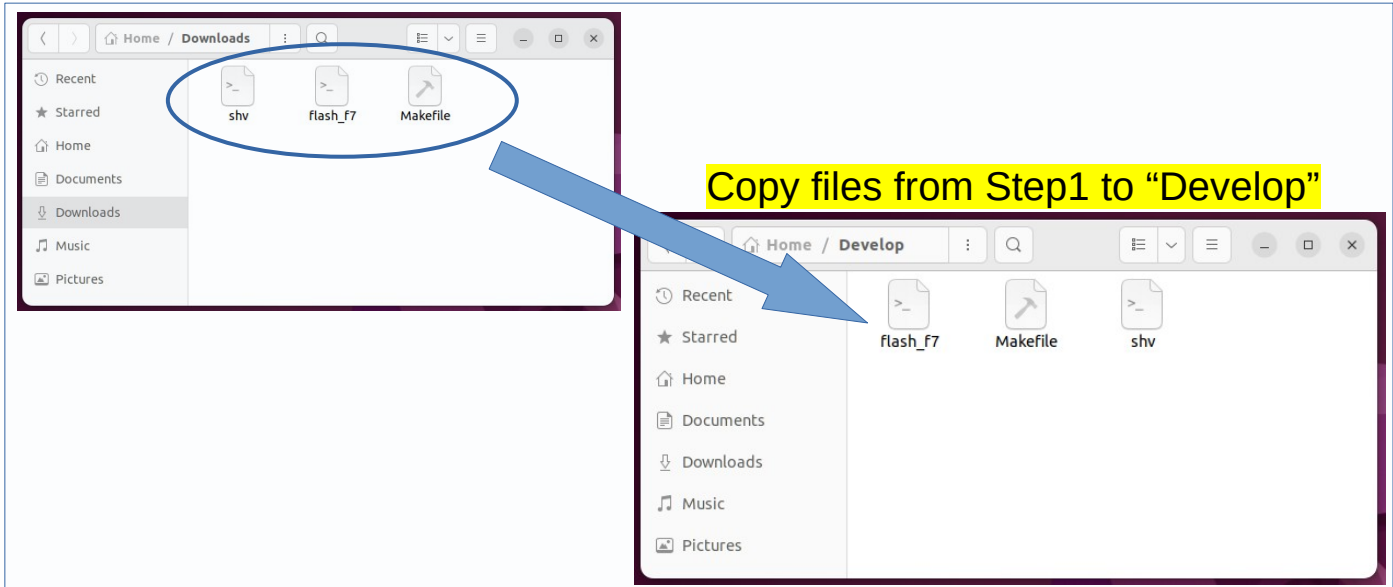
Make sure
“Allow executing files as program” is **checked**
for “shv” and “flash_f7”



Step 5: “Additional files for Python and pysimCoder”

a) mkdir Develop
b) cd Develop
c) Copy files to Develop
d) make packages

Step 3, part c:

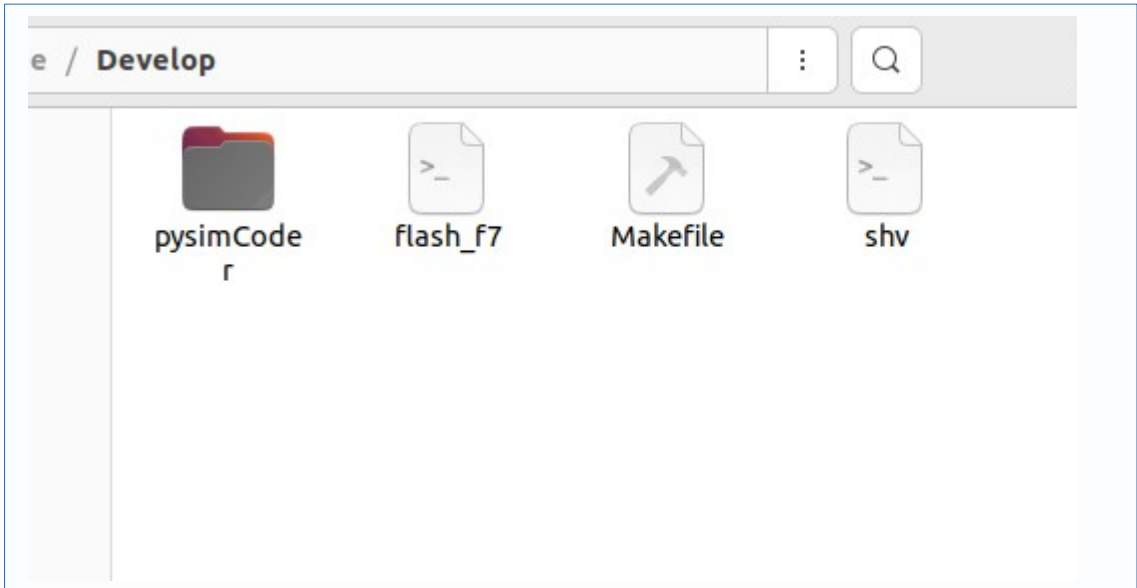


Step 6: “pysimCoder”

a) make pysimcoder

Step 5, part a:

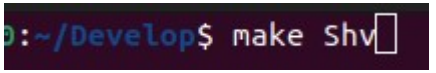
```
emb@emb:~/Develop$ make pysimcoder
```

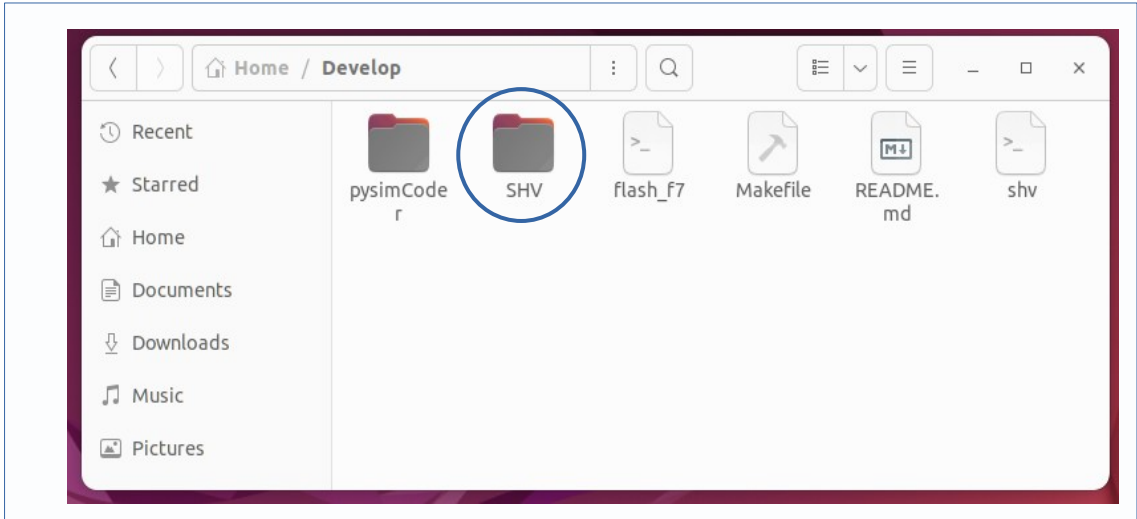


Step 7: “Install SHV”

a) make Shv
b) Start a new terminal as “normal user”
c) cd pysimCoder/CodeGen/LinuxRT/devices
d) make SHV=1

Step 5, part a:

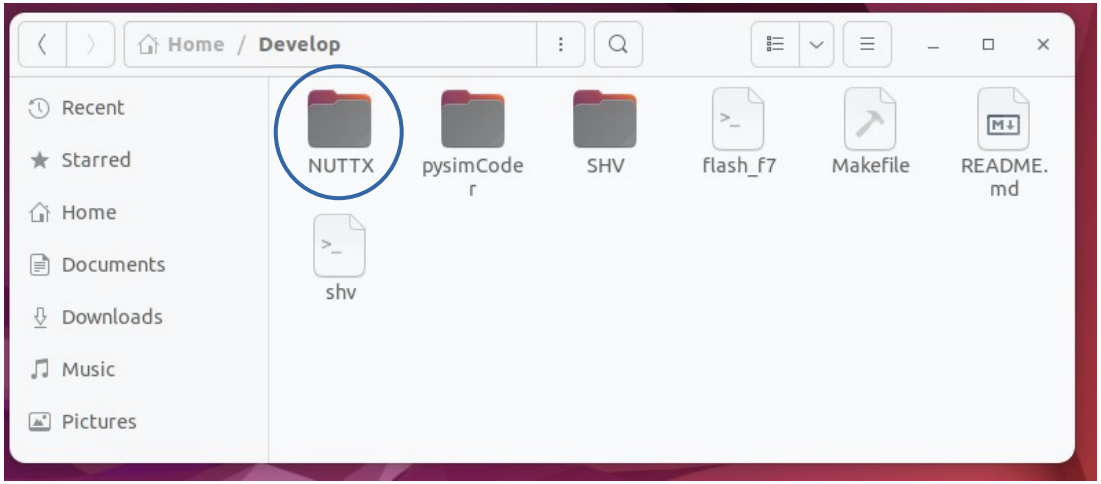




Step 8: “Install NuttX”

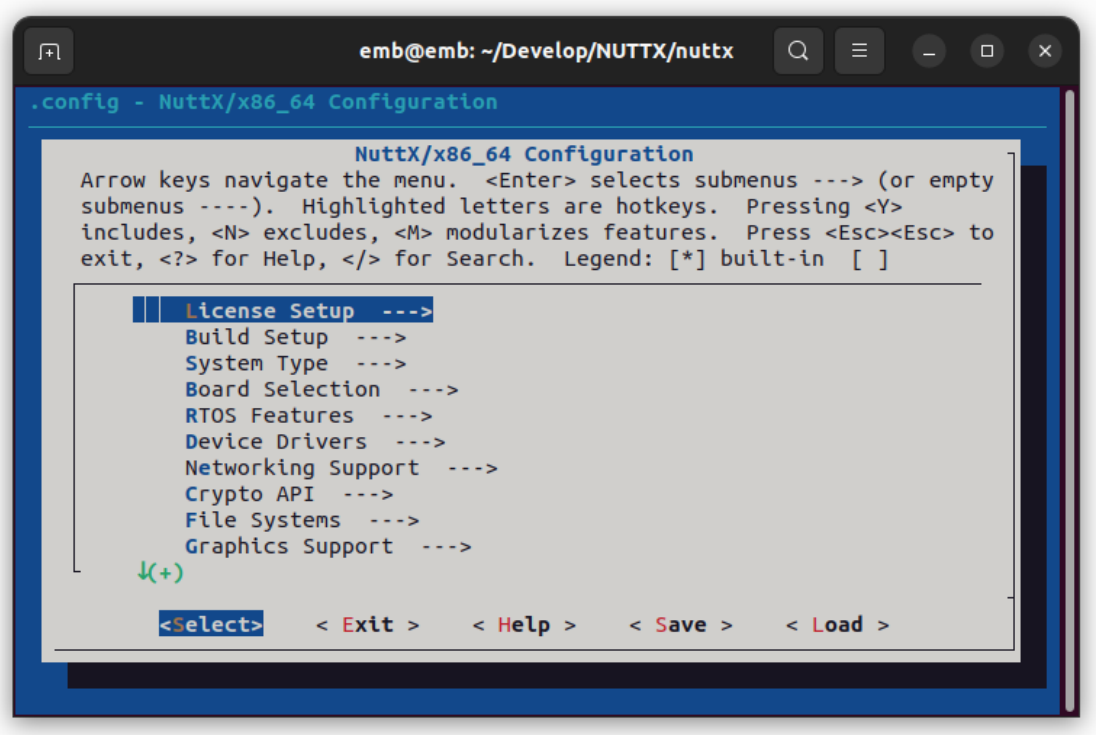
a) make nuttx
b) make f7
c) Configure “make menuconfig” to match the target needs (next slides)

Step 6, part a: `:~/Develop$ make nuttx`



Step 8: Continuation “Install NuttX”

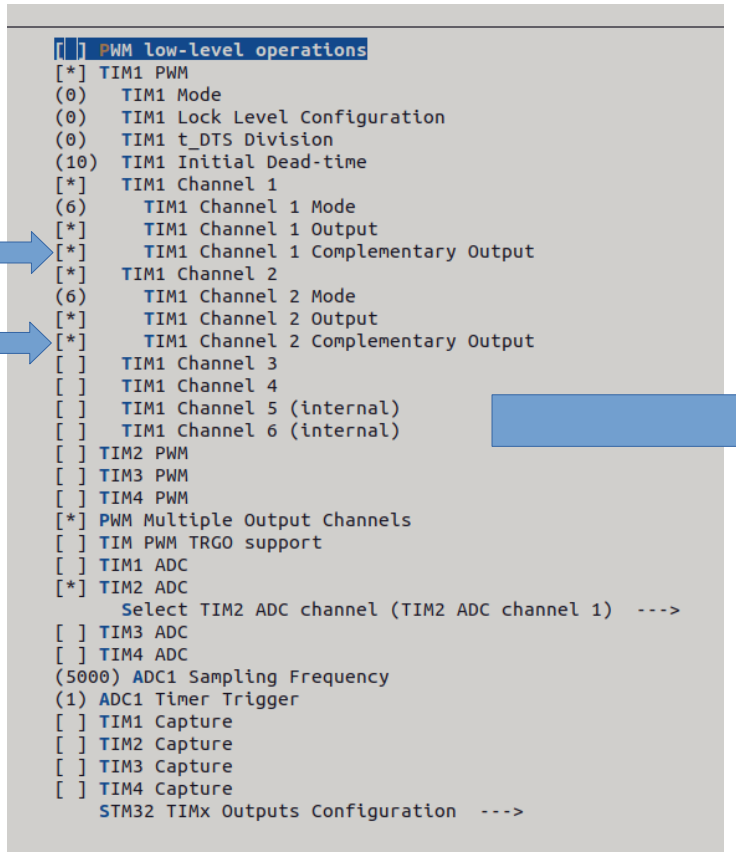
Optional Procedures depending on target needs.



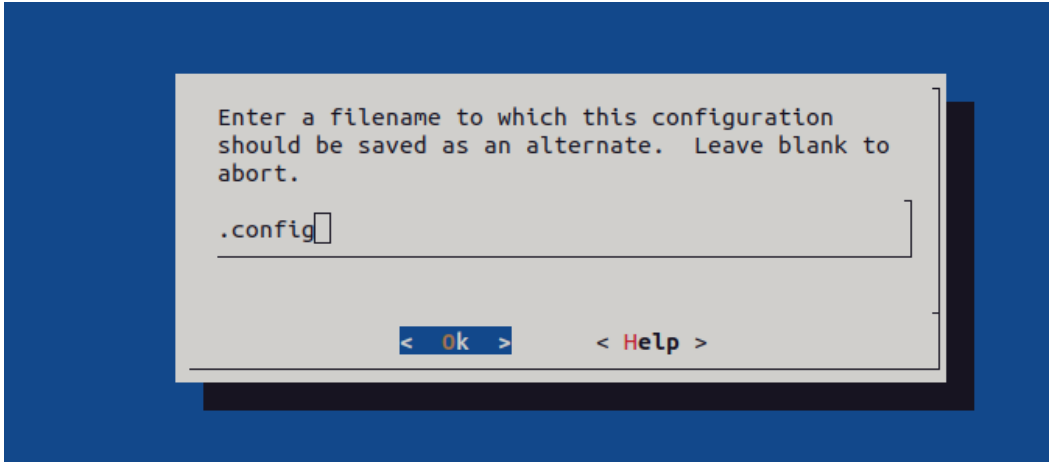
Go to “System Type”, then “Timer Configuration”

Step 8: Continuation “Install NuttX”

Optional Procedures depending on target needs.



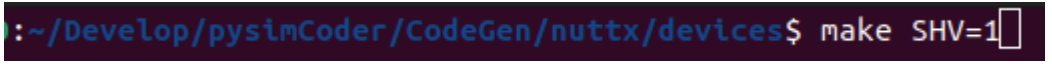
Step 8: Continuation “Install NuttX”



Save as .config and exit

Step 9: Continuation “Install NuttX”

d) Start a new terminal as “normal user”
e) cd pysimCoder/CodeGen/nuttx/devices
f) make SHV=1



Step 10: “Configure SHV Application”

a) Set user and password in the shvspy window
b) User: admin
c) Password: admin!123

Step 11: “pyshv module”

a) sudo pip install pyshv

Done, installation is complete!