

```

1  # This is a general use makefile for robotics cape projects written in C.
2  # Just change the target name to match your main source code filename.
3  TARGET = balance
4
5  CC      := gcc
6  LINKER  := gcc -o
7  CFLAGS  := -c -Wall -g
8  LFLAGS  := -lm -lrt -lpthread -lroboticscape
9
10 SOURCES  := $(wildcard *.c)
11 INCLUDES := $(wildcard *.h)
12 OBJECTS  := $(SOURCES:%.c=%.o)
13
14 prefix   := /usr/local
15 RM       := rm -f
16 INSTALL  := install -m 4755
17 INSTALLDIR := install -d -m 755
18
19 LINK      := ln -s -f
20 LINKDIR   := /etc/roboticscape
21 LINKNAME  := link_to_startup_program
22
23
24 # linking Objects
25 $(TARGET): $(OBJECTS)
26     @$ (LINKER) $ ( @ ) $ (OBJECTS) $ (LFLAGS)
27
28
29 # compiling command
30 $(OBJECTS): %.o : %.c $(INCLUDES)
31     @$ (CC) $ (CFLAGS) -c $ < -o $ ( @ )
32     @echo "Compiled: " $ <
33
34 all:
35     $ (TARGET)
36
37 debug:
38     $ (MAKE) $ (MAKEFILE) DEBUGFLAG="-g -D DEBUG"
39     @echo " "
40     @echo "$ (TARGET) Make Debug Complete"
41     @echo " "
42
43 install:
44     @$ (MAKE) --no-print-directory
45     @$ (INSTALLDIR) $ (DESTDIR) $ (prefix) /bin
46     @$ (INSTALL) $ (TARGET) $ (DESTDIR) $ (prefix) /bin
47     @echo "$ (TARGET) Install Complete"
48
49 clean:
50     @$ (RM) $ (OBJECTS)
51     @$ (RM) $ (TARGET)
52     @echo "$ (TARGET) Clean Complete"
53
54 uninstall:
55     @$ (RM) $ (DESTDIR) $ (prefix) /bin / $ (TARGET)
56     @echo "$ (TARGET) Uninstall Complete"
57
58 runonboot:
59     @$ (MAKE) install --no-print-directory
60     @$ (LINK) $ (DESTDIR) $ (prefix) /bin / $ (TARGET) $ (LINKDIR) / $ (LINKNAME)
61     @echo "$ (TARGET) Set to Run on Boot"
62

```