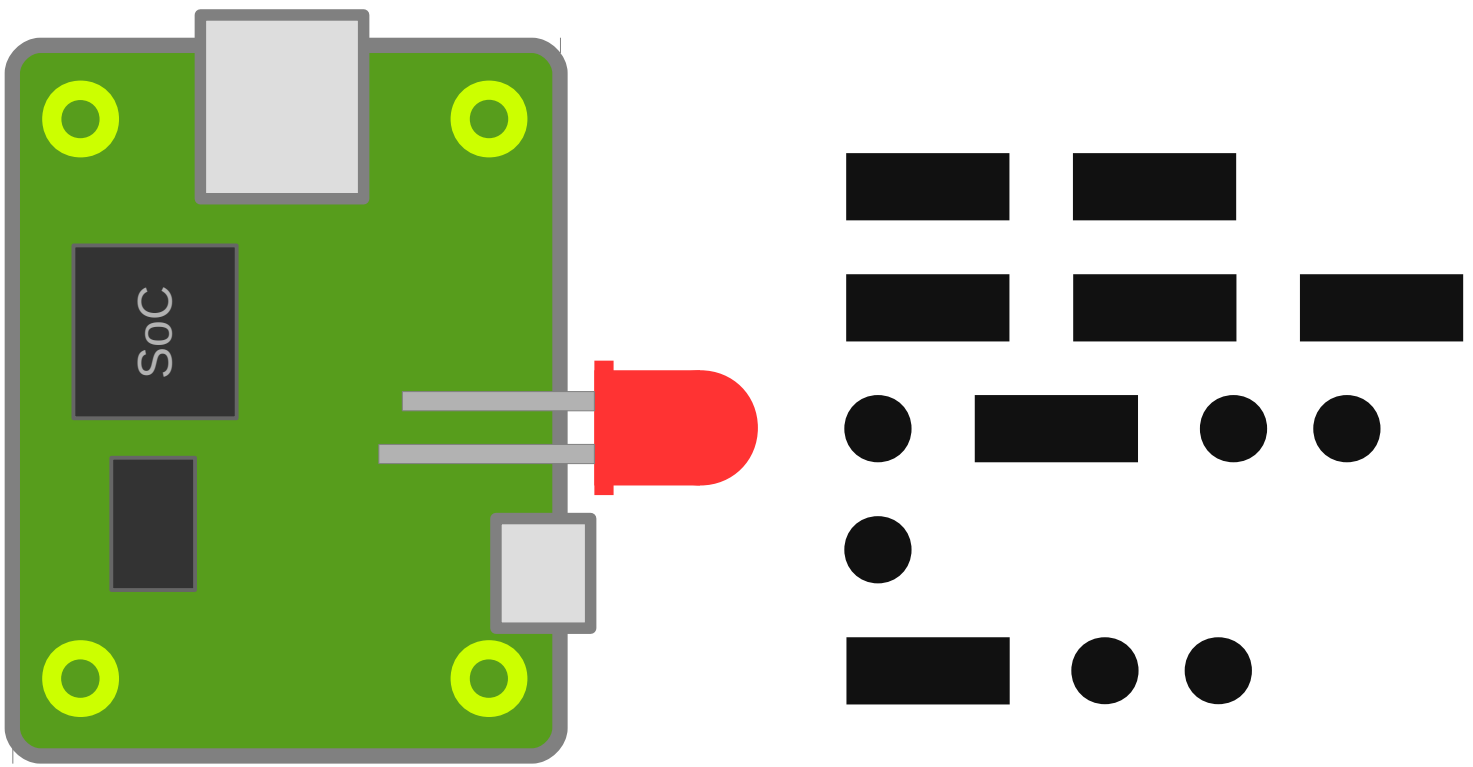
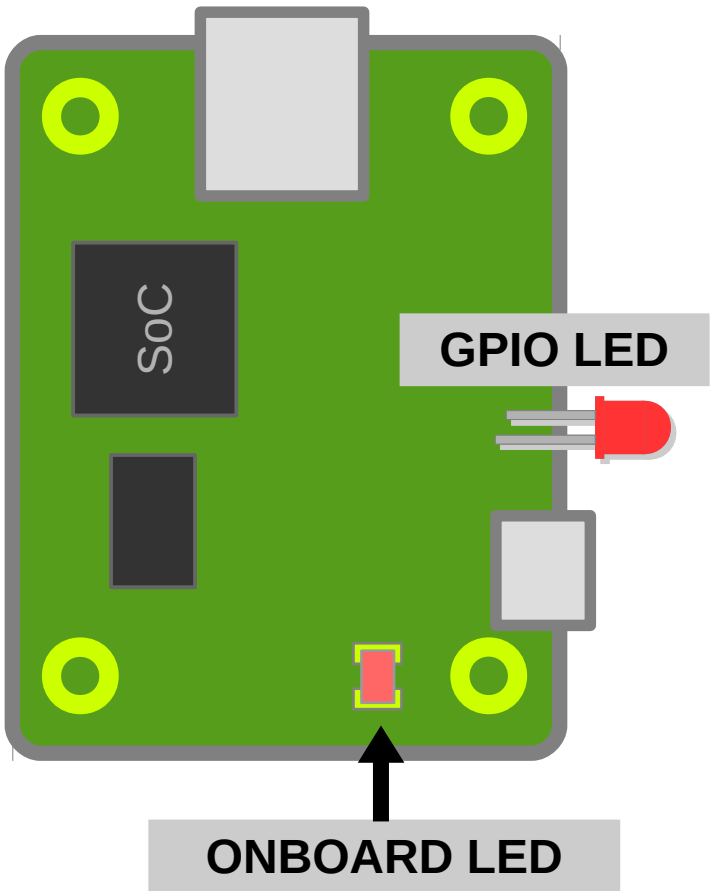
SBC MOLED (MORSE ONE LED DISPLAY)





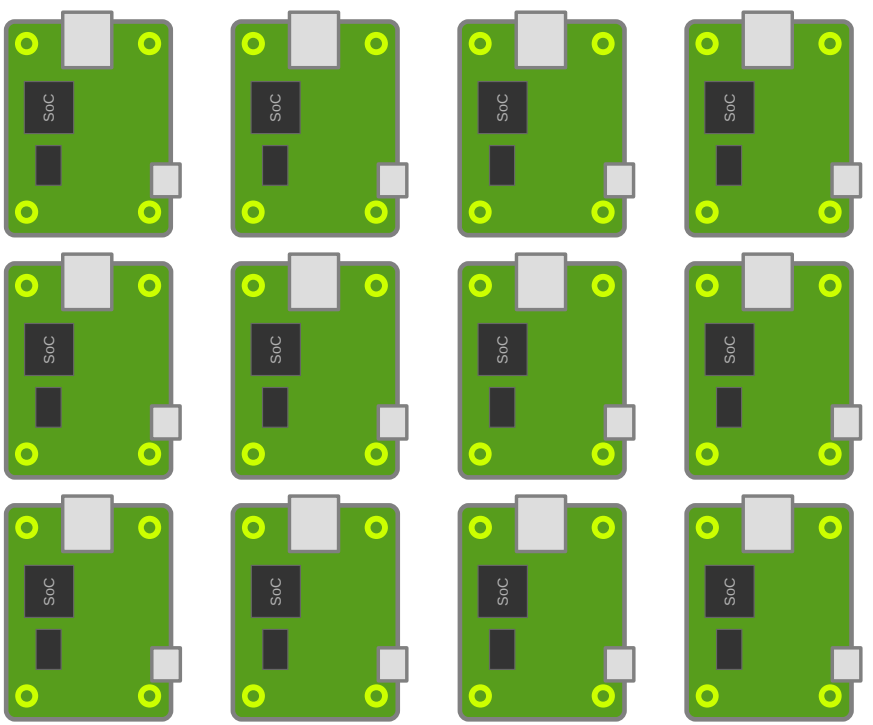
Using the **onboard LED**,
or the **LED on GPIO** to
communicate
small visual messages
to the user...

With **MORSE Code**...

MORSE, ONE LED? WHY?

In the Age of PC there is
1 Display for Each CPU

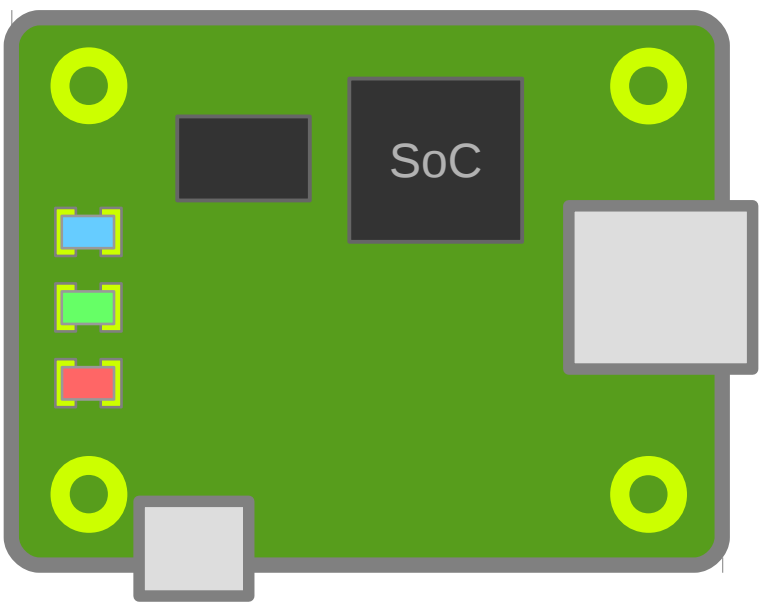
Now, the Rule is:
MANY CPUs, FEW DISPLAYS!



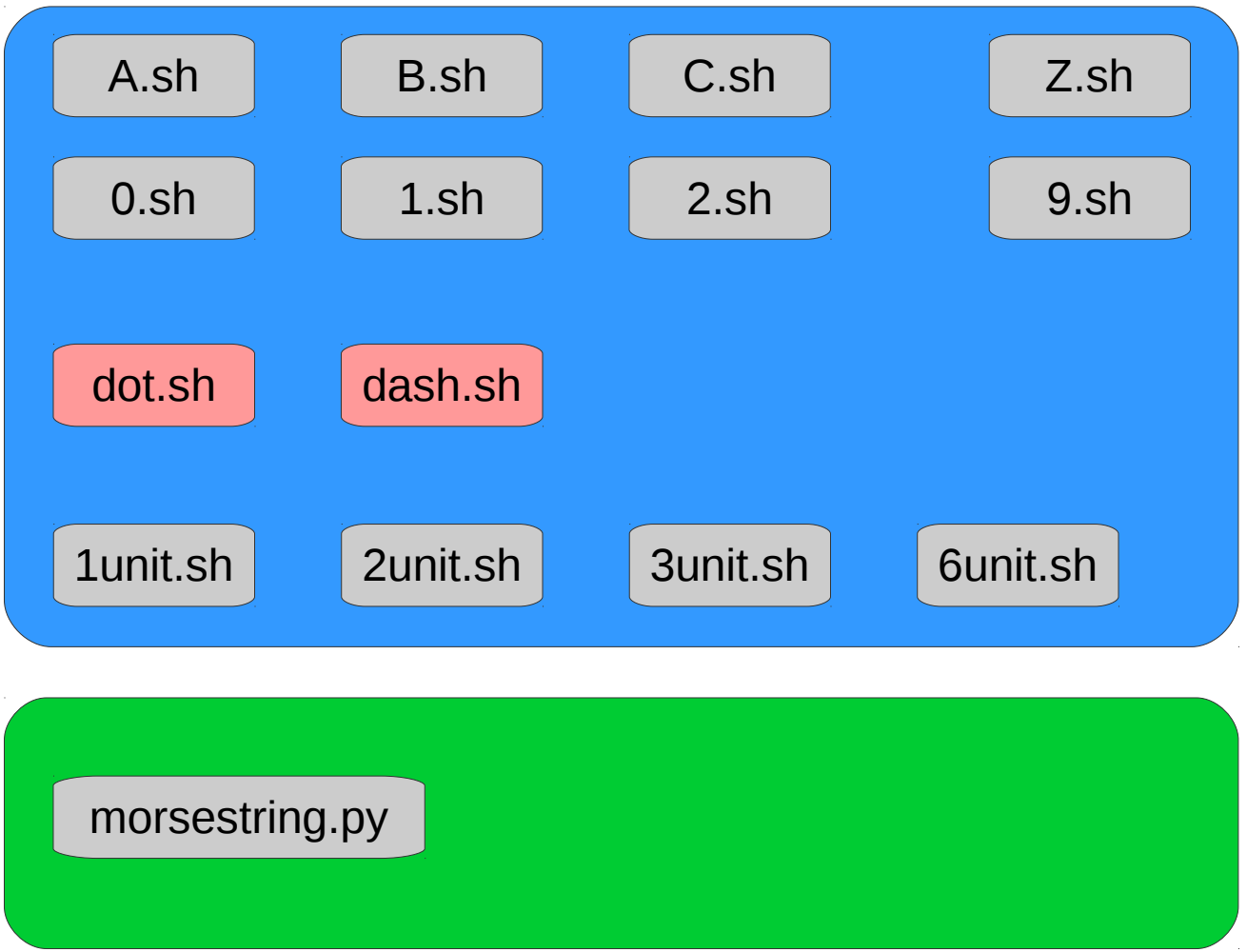
MORSE, ONE LED? YES

Besides its simplicity, One LED Display idea is to work together with LAN, WiFi, Bluetooth... it is a VERY SIMPLE mechanism for VERY SIMPLE messages...

WHY NOT?
SBCs already have LEDs that we can control using soft, so, the cost and physical setup effort are zero!



SCRIPTS



Shell Scripts

Python (2) Script

SCRIPTS – How to run…

Letters, Digits:

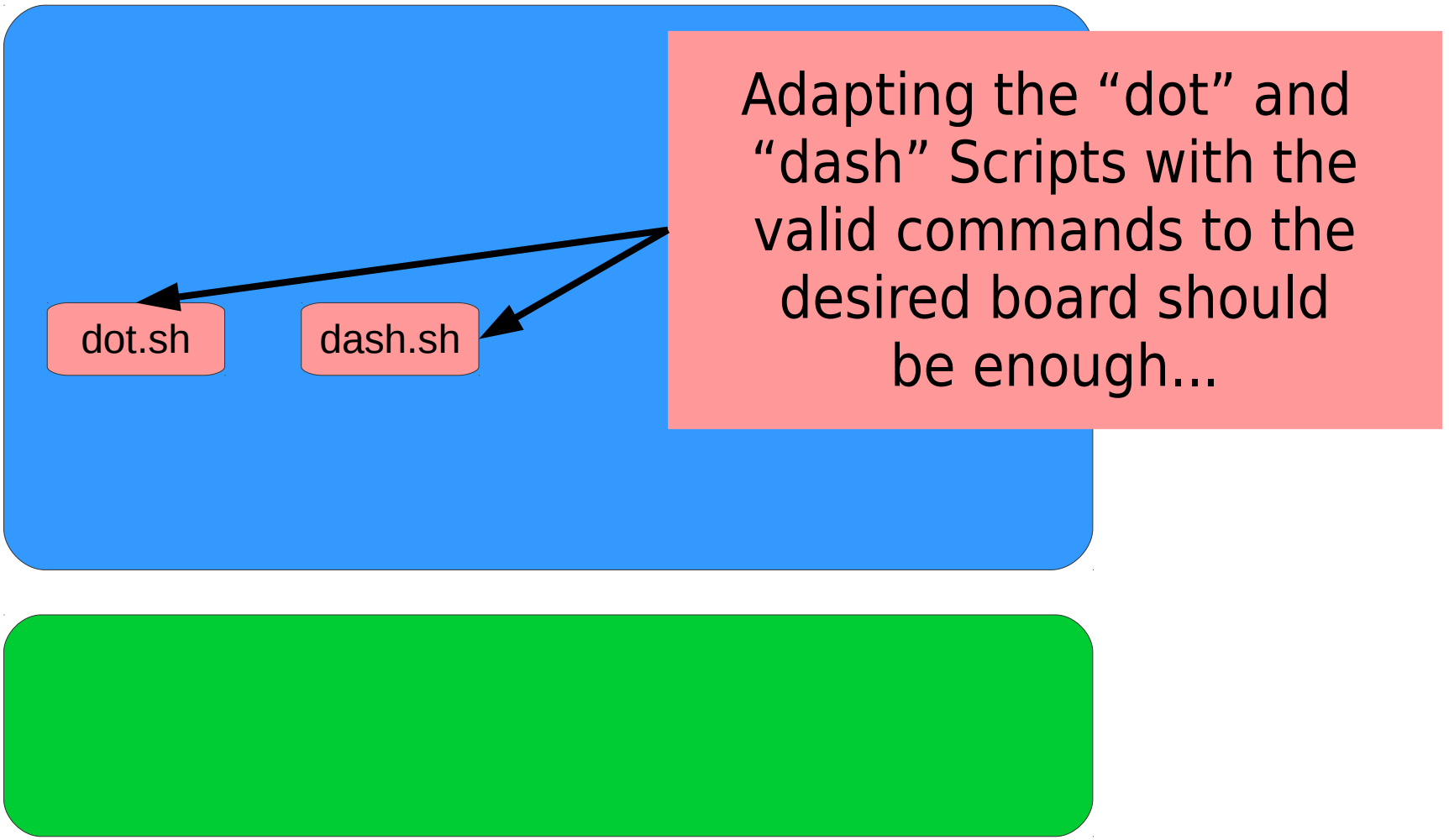
```
$ sudo ./A.sh

$ sudo ./Z.sh

$ sudo ./3.sh
```

Strings:

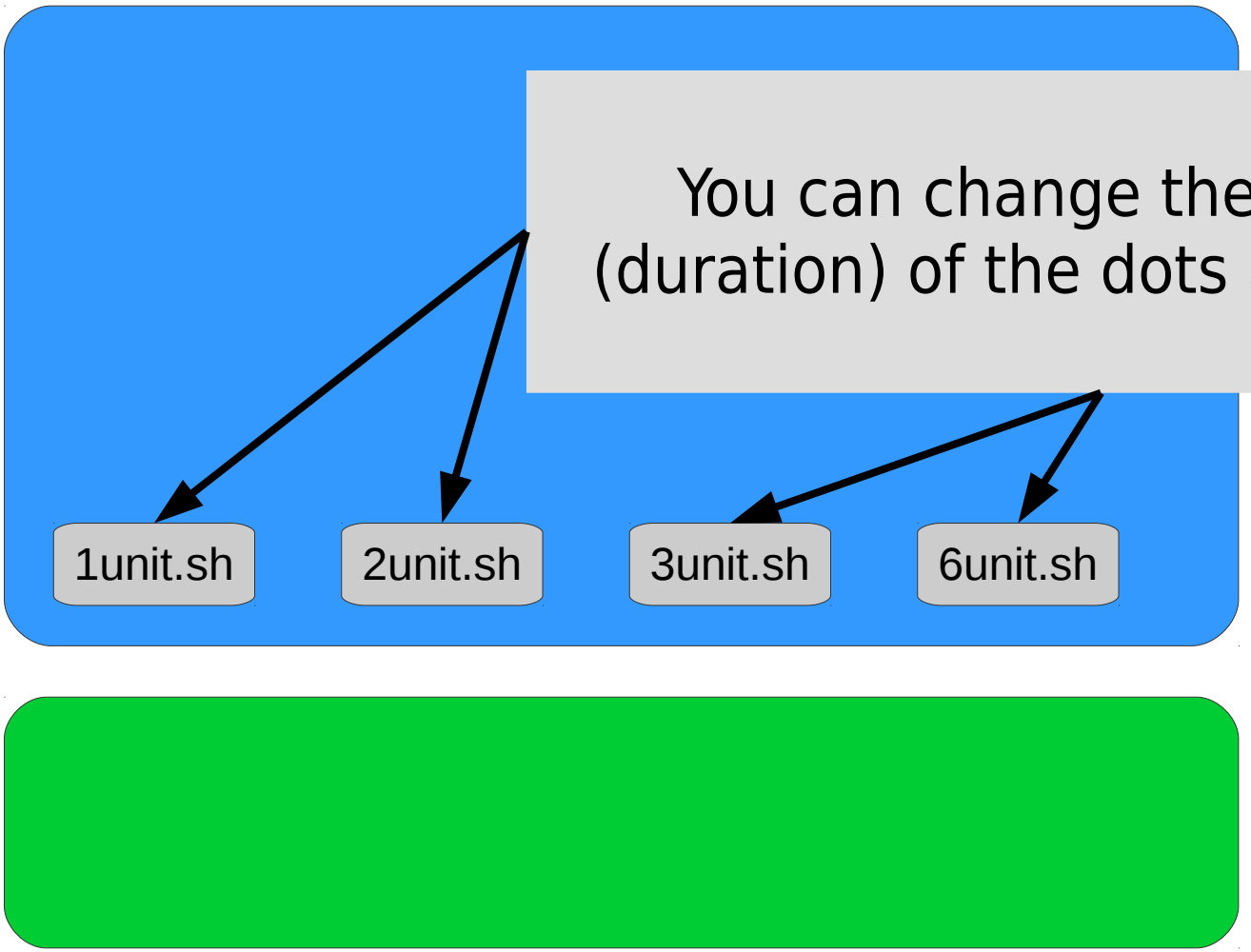
```
$ sudo  python  morsestring.py  hello

$ sudo  python  morsestring.py  "hi all"
```

(morsestring.py script uses Python2 syntax)

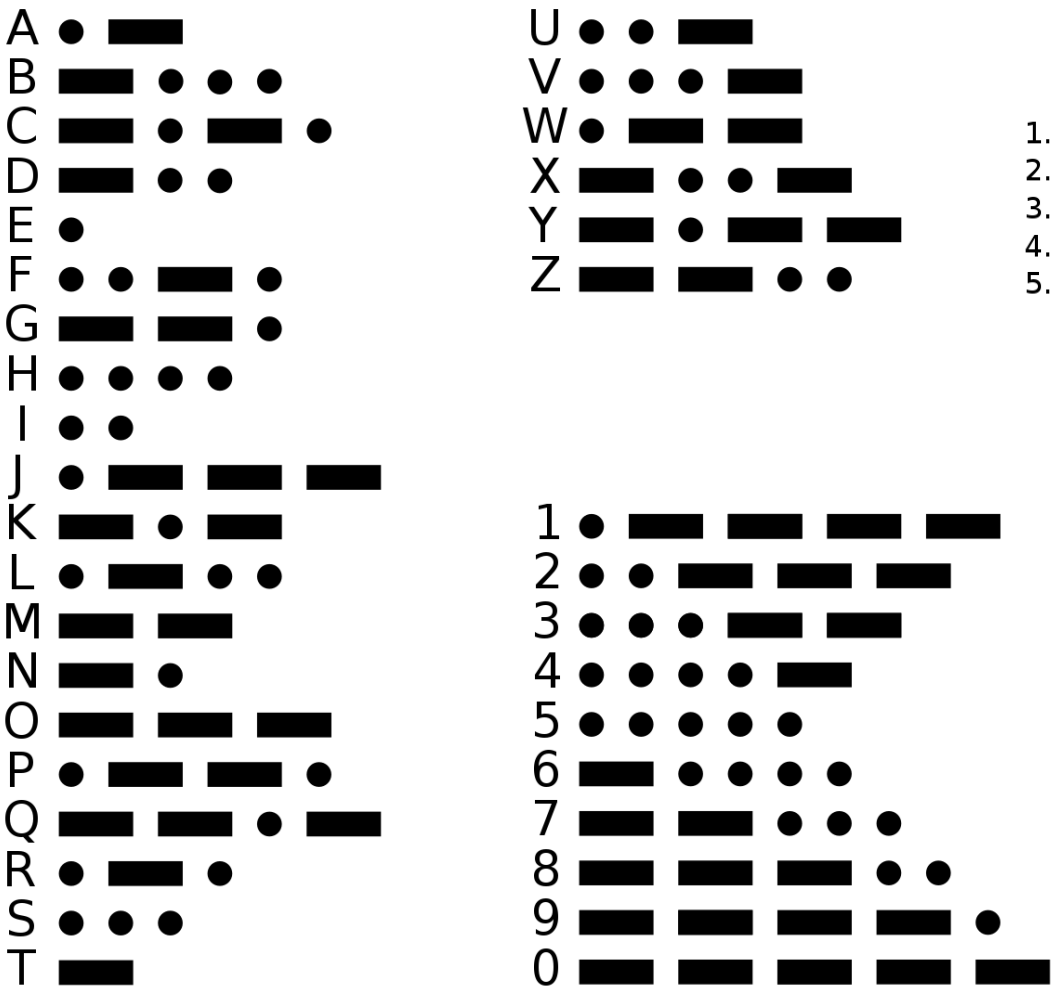
SCRIPTS – Run on different SBC...



Change the time duration




```
sleep  0.5
sleep  1
sleep  2.5
```



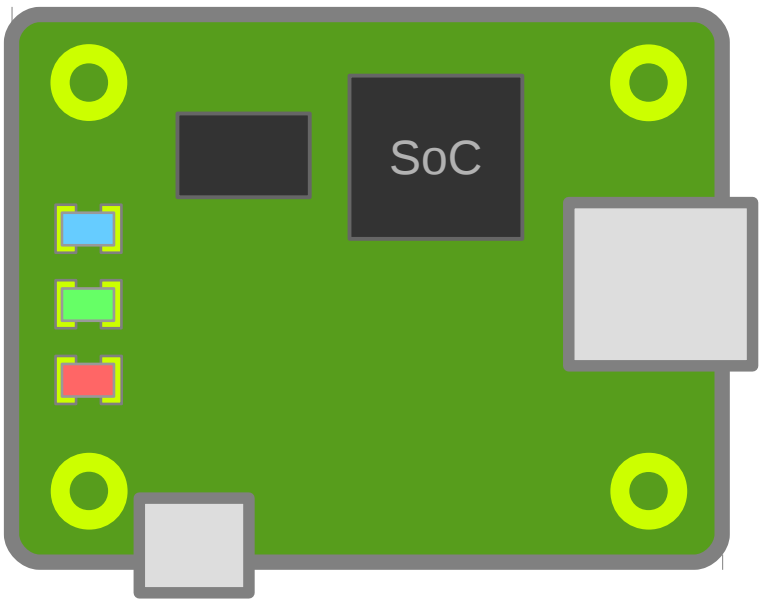
International Morse Code

1. The length of a dot is one unit.
2. A dash is three units.
3. The space between parts of the same letter is one unit.
4. The space between letters is three units.
5. The space between words is seven units.

ANY KIND OF CODE OK

Other than Morse Code...

Some SBCs have more than 1 LED that we can control using soft, so, **ANY KIND OF CODE** can be created...



When the needed messages are simple and short,
1 or 3 LEDs should be useful...

Extra Table

Character	Morse	Phonetic Alphabeth	Pronunciation
A	• —	Alfa	(AL-FAH)
B	— • • •	Bravo	(BRAH-VOH)
C	— • — •	Charlie	(CHAR-LEE) or (SHAR-LEE)
D	— • •	Delta	(DELL-TAH)
E	•	Echo	(ECK-OH)
F	• • — •	Foxtrot	(FOKS-TROT)
G	— — •	Golf	(GOLF)
H	• • • •	Hotel	(HOH-TEL)
I	• •	India	(IN-DEE-AH)
J	• — — —	Juliett	(JEW-LEE-ETT)
K	— • —	Kilo	(KEY-LOH)
L	• — • •	Lima	(LEE-MAH)
M	— —	Mike	(MIKE)
N	— •	November	(NO-VEM-BER)
O	— — —	Oscar	(OSS-CAH)
P	• — — •	Papa	(PAH-PAH)
Q	— — • —	Quebec	(KEH-BECK)

Extra Table

R	● — ●	Romeo	(ROW-ME-OH)
S	● ● ●	Sierra	(SEE-AIR-RAH)
T	—	Tango	(TANG-GO)
U	● ● —	Uniform	(YOU-NEE-FORM) or (OO-NEE-FORM)
V	● ● ● —	Victor	(VIK-TAH)
W	● — —	Whiskey	(WISS-KEY)
X	— ● ● —	Xray	(ECKS-RAY)
Y	— ● — —	Yankee	(YANG-KEY)
Z	— — ● ●	Zulu	(ZOO-LOO)
1	● — — — —	One	(WUN)
2	● ● — — —	Two	(TOO)
3	● ● ● — —	Three	(TREE)
4	● ● ● ● —	Four	(FOW-ER)
5	● ● ● ● ●	Five	(FIFE)
6	— ● ● ● ●	Six	(SIX)
7	— — ● ● ●	Seven	(SEV-EN)
8	— — — ● ●	Eight	(AIT)
9	— — — — ●	Nine	(NIN-ER)
0	— — — — —	Zero	(ZEE-RO)