A Morse Code Generator

Using Flea-Scope and a simple piezo buzzer between pins a7 and a8, you can trivially input strings from the user and translate them to morse code, using the program below:

```
 10 dim i, ms, freq, input$[79], codes[128]
 20 dim gnd as pin a7 for digital output
 30 dim buzzer as pin a8 for frequency output
 40 ms = 100, freq = 800, gnd = 0
 50 gosub init
 60 while 1 do
 70   input input$
 80   for i = 0 to input#-1
 90     gosub morse input[i]
100   next
110   print ""
120 endwhile
130 end
140 sub morse letter
150   dim code, key
160   code = codes[letter]
170   while code do
180     key = code&3
190     if key==1 then
200       buzzer = freq
210       sleep ms ms
220     elseif key==2 then
230       buzzer = freq
240       sleep 3*ms ms
250     endif
260     buzzer = 0
270     sleep ms ms
280     code = code>>2
290   endwhile
300   sleep 2*ms ms
310 endsub
320 sub init
330   dim a, b
340   do
350     read a, b
360     if a then
370       codes[a] = b
380     endif
390   until !a
400 endsub
```

```
410 data '0', 0x2aa
420 data '1', 0x2a9
430 data '2', 0x2a5
440 data '3', 0x295
450 data '4', 0x255
460 data '5', 0x155
470 data '6', 0x156
480 data '7', 0x15a
490 data '8', 0x16a
500 data '9', 0x1aa
510 data ' ', 0xff
520 data 'a', 0x9
530 data 'b', 0x56
540 data 'c', 0x66
550 data 'd', 0x16
560 data 'e', 0x1
570 data 'f', 0x65
580 data 'g', 0x1a
590 data 'h', 0x55
600 data 'i', 0x5
610 data 'j', 0xa9
620 data 'k', 0x26
630 data 'l', 0x59
640 data 'm', 0xa
650 data 'n', 0x6
660 data 'o', 0x2a
670 data 'p', 0x69
680 data 'q', 0x9a
690 data 'r', 0x19
700 data 's', 0x15
710 data 't', 0x2
720 data 'u', 0x25
730 data 'v', 0x95
740 data 'w', 0x29
750 data 'x', 0x96
760 data 'y', 0xa6
770 data 'z', 0x5a
780 data 0, 0
```