```
1  Initialise the timer
2  Set intensity, counter, location to 0
3  Store counter in the memory

4  For i=0 to i=7
5  Store intensity in the memory on location i
6  Start the countdown
7  Loop for ever

8  Timer interrupt:
9  Reset the countdown to 1

10 Load the value of counter from the memory
11 counter++
12 If counter=1000
13 counter=1
14 Store the value of counter in the memory
15 Set temp, lights to 0

16 For i=0 to i=7
17 if location=0
18       store the value of the AD in temp
19       divide temp by 25
20 else
21       get the value of the memory on location i and save it in temp
22 if the mod 10 of counter < temp
23       lights+=2^i

24 if counter=1
25 For i = 0 to i = 7
26       if button i is pressed
27             get the value of the memory on location i and save it in temp
28             temp++
29             if button 0 is pressed
30                   temp = temp - 2
31             if 11 > temp > 0
32                   save the value of temp in the memory on location i

33 go back to the loop on line #6
```