

```

1  #include "mbed.h"
2  #include "pinout.h"
3  #include "to_7seg.h"
4
5  // seven segment display anodes
6  // when in a int8_t, they are 0b-GFEDCBA
7  BusOut      g_seven_seg(SGA_PIN, SGB_PIN, SGC_PIN, SGD_PIN,
8                        SGE_PIN, SGF_PIN, SGG_PIN);
9
10 // display cathodes
11 DigitalOut  g_dsr(DSR_PIN);
12 DigitalOut  g_dsl(DSL_PIN);
13
14 // leds
15 BusOut      g_leds(LDR_PIN, LDM_PIN, LDL_PIN);
16
17
18 //ticker
19 static Ticker tick_100ms;
20
21 //evento
22 static bool volatile tick_100ms_evnt;
23 //interruccion
24 static void tick_100ms_isr(void) {
25     tick_100ms_evnt = true;
26 }
27
28 //interruccion
29 static InterruptIn swm (SWM_PIN);
30
31 //eventos botones
32 static bool volatile swm_evnt;
33
34 //interruccion botones
35 static void swm_isr(void) {
36     swm_evnt = true;
37 }
38
39 //REBOTES
40 static Timeout t_4ms;
41 static bool volatile t_4ms_evnt;
42 static void t_4ms_isr (void){
43     t_4ms_evnt = true;
44 }
45
46 static int8_t g_cnt_sw = 0; //número de veces que se acciona el pulsador central
47
48 int main (void) {
49
50     bool gb_led_seq_on = true;
51
52     g_leds = 4;
53
54     tick_100ms.attach_us(tick_100ms_isr, 100000);
55
56     //pulsos
57     swm.mode(PullUp);
58     swm.fall(swm_isr);
59
60     for (;;) {
61
62         if(tick_100ms_evnt){
63             tick_100ms_evnt = false;
64
65             if(gb_led_seq_on){
66                 g_leds = (g_leds==1) ? 4 : (g_leds >> 1);
67             }else{
68                 g_leds = g_leds;
69             }
70         }
71
72         if(swm_evnt){
73             swm_evnt = false;
74             t_4ms.attach_us(t_4ms_isr, 4000);
75         }
76
77         if (t_4ms_evnt){
78             t_4ms_evnt = false;
79
80             if(swm ==0){
81                 gb_led_seq_on = !gb_led_seq_on;
82             }
83         }
84

```

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85     }
86
87     __disable_irq();
88     if(!tick_100ms_evnt && !swm_evnt && !t_4ms_evnt){
89         __WFI();
90     }
91     __enable_irq();
92
93     // [2] segundo bloque de código que puede rellenar ++++++
94
95     //Parte de los leds preguntada
96
97
98     // [2] fin del segundo bloque de código -----
99
100 } // for (;;)
101 } // main()
102

```