

```

1  #include "hardware.h"
2
3  // seven segment display anodes
4  // when in a int8_t, they are 0b-GFEDCBA
5  BusOut      g_seven_seg(SGA_PIN, SGB_PIN, SGC_PIN, SGD_PIN,
6                        SGE_PIN, SGF_PIN, SGG_PIN);
7
8  BusOut      g_leds(LDR_PIN, LDM_PIN, LDL_PIN);
9
10
11 // display cathodes
12 PwmOut  g_dsl(DSL_PIN);
13 PwmOut  g_dsr(DSR_PIN);
14
15 // hc-sr04 range finder
16 DigitalOut g_trg(TRG_PIN);
17 InterruptIn g_ech(ECH_PIN);
18
19 // swm
20 InterruptIn g_swm(SWM_PIN);
21
22 //control
23 AnalogIn g_lit(LIT_PIN);
24
25 // hardware initialization
26 void hw_init (void) {
27
28     g_swm.mode(PullUp);
29     g_ech.mode(PullDown);
30     g_swm.mode(PullUp);
31
32     g_dsl.period_us(40);
33     g_dsr.period_us(40);
34 }
35

```