```
#include "hardware.h"
     3
 5
 6
     PwmOut g_dsl(DSL_PIN);
PwmOut g_dsr(DSR_PIN);
 9
10
11
     // bc-sr04 range finder
DigitalOut g_trg(TRG_PIN);
InterruptIn g_ech(ECH_PIN);
12
13
14
15
16
     InterruptIn g_swm(SWM_PIN);
17
18
19
     DigitalOut g_ldl(LDL_PIN);
20
21
22
23
    AnalogIn g_lit(LIT_PIN);
24
25 // hardware initialization
26 void hw_init (void) {
     g_ech.mode(PullDown);
g_swm.mode(PullUp);
27
28
29 }
30
```