```c
/*
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動かし方:スイッチ操作でスタートからゴールまで行く
*/

#include <avr/io.h>
#include <avr/interrupt.h>
#include <avr/wdt.h>

#define CTOP 10000UL;
#define BZ_CTOP 1000UL
#define BZ_CTOP2 500UL
#define BZ_CTOP3  100UL


volatile unsigned char map[8] =
  {
    0b10111111,
//    0b00000000,
      0b10011111,
    0b11000000,
    0b11111110,
    0b10000000,
    0b10111111,
    0b10000000,
    0b11111110
   };
volatile unsigned char stat;
volatile unsigned char sw;
volatile unsigned char sw_flag;
volatile unsigned char mv_flag;

static unsigned char my_state = 0;
static unsigned char scan = 0;
unsigned char x = 0x40;
unsigned char smog_b = 0xE0;

void update_led();

ISR(PCINT1_vect)
{
    stat = 1;
}

void update_sw()
{
    static unsigned long cnt;
    switch (stat) {
    case 0:
        return;
    case 1:
        cnt = CTOP;
        stat = 2;
        return;
    case 2:
        cnt--;
        if (cnt == 0) {
            sw = ~(PINC >> 4) & 3;
            sw_flag = 1;
            stat = 0;
        }
        return;
    }
}

void proc_bz1()
{
    static unsigned long cnt = 0;
    cnt ++;
    if(cnt < BZ_CTOP){
        return;
    }
    cnt = 0;
    PORTD ^=0x08;
}

void proc_bz2()
{
    static unsigned long cnt2 = 0;
    cnt2 ++;
    if(cnt2 < BZ_CTOP2){
        return;
    }
    cnt2 = 0;
    PORTD ^=0x08;
}

void proc_bz3()
{
    static unsigned long cnt3 = 0;
    cnt3 ++;
    if(cnt3 < BZ_CTOP3){
        return;
    }
    cnt3 = 0;
    PORTD ^=0x08;
}

ISR(TIMER0_COMPA_vect)
{
    static int cnt;
    cnt++;
    if (cnt == 100) {
        cnt = 0;
        mv_flag = 1;
    }
    update_led();
}
void update_led()
{
    static unsigned char sc = 0xFE;

    PORTB = 0;
    sc = (sc << 1) | (sc >> 7);
    PORTD = (PORTD & 0x0F) | (sc & 0xF0);
    PORTC = (PORTC & 0xF0) | (sc & 0x0F);
    scan = (scan + 1) & 7;
//   PORTB = map[scan];
    if(my_state != 0)    {
//        if(scan == my_state || scan == my_state +1  || scan == my_state -1)

      if(scan == my_state ){
            //PORTB = map[scan];
            PORTB = map[scan] & smog_b;
          }else if(scan == (my_state + 1)){
        PORTB = map[scan] & smog_b;
      }else if(scan == (my_state - 1)){
        PORTB = map[scan] & smog_b;
      }

      }else{
      if(scan == my_state ){
            //PORTB = map[scan];
            PORTB = map[scan] & smog_b;
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136             }else if(scan == (my_state + 1)){
137             PORTB = map[scan] & smog_b;
138         }
139     }
140
141 }
142
143 int main()
144 {
145 //    unsigned char n;
146 //    unsigned char n2;
147
148     DDRB = 0xFF;
149     DDRC = 0x0F;
150     DDRD = 0xFE;
151
152     PORTB = 0x00;
153     PORTC = 0x30;
154     PORTD = 0x00;
155   PCICR = _BV(PCIE1);
156   PCMSK1 = 0x30;
157
158     TCNT0 = 0;
159     OCR0A = 249;
160     TCCR0A = 2;
161     TCCR0B = 3;
162     TIMSK0 |= _BV(OCIE0A);
163
164     sei();
165     for (;;) {
166         wdt_reset();
167      update_sw();
168      if(scan == my_state){
169          PORTB |= x;
170        }
171
172      if (sw_flag) {
173             sw_flag = 0;
174
175 /*          if(scan == my_state){
176                 if(my_state < 4){
177                     //PORTC =
178                 }else{
179                     //PORTD =
180                 }
181
182             }
183 */
184             switch (sw) {
185             case 0:
186                 break;
187             case 1:
188                 x = (x >> 7) | (x << 1);
189                 smog_b = (smog_b >> 7) | (smog_b << 1);
190                 proc_bz1();
191                 break;
192          case 2:
193                 proc_bz2();
194                 x = (x << 7) | (x >> 1);
195                 smog_b = (smog_b << 7) | (smog_b >> 1);
196                 break;
197             case 3:
198                 proc_bz3();
199                 my_state ++;
200                 break;
201             }
202
203
204         }
205         if (mv_flag == 1) {
206             mv_flag = 0;
207         }
208     }
209     return 0;
210 }
211
```