

```

#include <avr/io.h>
#define F_CPU 10000000UL
#include <util/delay.h>
#include <avr/interrupt.h>

void outl(void);
void outh(void);
void startbit(void);
void stopbit(void);

int TIMFLG = 640;
int a=0;
int b=0;
int c=0;
int d=0;
int e=0;
int f=0;
int g=0;
int h=0;
int botan=0;

//static int kaisuu = 0; //23回点滅用

ISR(PCINT_vect)
{
    if((~PINB & (1<<PB0)) == (1<<PB0)) //スイッチa PB0
    {
        a=1;
    }
    if((~PINB & (1<<PB1)) == (1<<PB1)) //スイッチb PB1
    {
        b=1;
    }
    if((~PINB & (1<<PB2)) == (1<<PB2)) //スイッチc PB2
    {
        c=1;
    }
    if((~PINB & (1<<PB3)) == (1<<PB3)) //スイッチd PB3
    {
        d=1;
    }
    if((~PINB & (1<<PB4)) == (1<<PB4)) //スイッチe PB4
    {
        e=1;
    }
    if((~PINB & (1<<PB5)) == (1<<PB5)) //スイッチf PB5
    {
        f=1;
    }
    if((~PINB & (1<<PB6)) == (1<<PB6)) //スイッチg PB6
    {
        g=1;
    }
    if((~PINB & (1<<PB7)) == (1<<PB7)) //スイッチh PB7
    {
        h=1;
    }
}

int main(void)
{
    DDRB &= 0x00;
    PORTB |= 0xff;
    DDRD |=0x01;
    GIMSK |=0x20; //0b00100000
    PCMSK |=0xff; //0b11111111

    TCCR1A = 0;
    TCCR1B = 2;

    int i;
    sei();

    while(1)
    {
        if(a==1)
        {
            startbit();
            outl();outl();outl();outh();
            stopbit();
            _delay_ms(10);
            a=0;
        }
        if(b==1)
        {
            startbit();
            outl();outl();outh();outl();
            stopbit();
            _delay_ms(10);
            b=0;
        }
        if(c==1)
        {
            startbit();
            outl();outl();outh();outh();
            stopbit();
            _delay_ms(10);
            c=0;
        }
    }
}

```

```
if(d==1)
{
    startbit();
    outl();outh();outl();outl();
    stopbit();
    _delay_ms(10);
    d=0;
}
if(e==1)
{
    startbit();
    outl();outh();outl();outh();
    stopbit();
    _delay_ms(10);
    e=0;
}
if(f==1)
{
    startbit();
    outl();outh();outh();outl();
    stopbit();
    _delay_ms(10);
    f=0;
}
if(g==1)
{
    startbit();
    outl();outh();outh();outh();
    stopbit();
    _delay_ms(10);
    g=0;
}
if(h==1)
{
    startbit();
    outh();outl();outl();outl();
    stopbit();
    _delay_ms(10);
    h=0;
}
a=0;b=0;c=0;d=0;e=0;f=0;g=0;h=0;
}

void outl()
{
    TCNT1 = 0;
    while(1)
    {
        PORTD &=0xfe;
        if(TCNT1> TIMFLG+220)
            break;
    }
}
void outh()
{
    TCNT1= 0;
    while(1)
    {
        PORTD |=0x01;
        _delay_us(13); //10
        PORTD &=0xfe;
        _delay_us(13); //10
        if(TCNT1> TIMFLG)
            break;
    }
}
void stopbit()
{
    outh();
    outl();
    outh();
    outl();
    outh();
}
void startbit()
{
    outh();
}
```