#include<p18f452.h>

#pragma config WDT=OFF,OSC=HS

#define sw PORTBbits.RB7

#define RS PORTEbits.RE0

#define RW PORTEbits.RE1

#define EN PORTEbits.RE2

#define ldata PORTD

void lcd\_init();

void lcd\_cmd(unsigned char value);

void lcd\_data(unsigned char value);

void delay(unsigned int a);

void lcd\_str(const rom char \*str);

void main(void)

{

ADCON1=0x0f;

TRISE=0x00;

TRISB=0xff;

TRISC=0x00;

TRISD=0x00;

lcd\_init();

lcd\_cmd(0x80);

lcd\_str("gsm");

PORTCbits.RC3=1;

if(sw==1)

{

PORTCbits.RC0=1;

lcd\_cmd(0xc0);

delay(15);

lcd\_str("light is on");

}

else

{

PORTCbits.RC0=0;

lcd\_cmd(0xc0);

delay(15);

lcd\_str("light is off");

}

}

void lcd\_init()

{

lcd\_cmd(0x38);

delay(10);

lcd\_cmd(0x06);

delay(50);

lcd\_cmd(0x0e);

delay(15);

lcd\_cmd(0x0c);

delay(16);

lcd\_cmd(0x01);

delay(16);

}

void lcd\_cmd(unsigned char value)

{

RS=0;

RW=0;

ldata=value;

EN=1;

delay(1);

EN=0;

}

void lcd\_data(unsigned char value)

{

RS=1;

RW=0;

ldata=value;

EN=1;

delay(2);

EN=0;

}

void delay(unsigned int a)

{int i,j;

for(i=0;i<a;i++)

for(j=0;j<120;j++);

}

void lcd\_str(const rom char \*str)

{while(\*str!='\0')

{ lcd\_data(\*str);

str++;

}

}