

```

#include <12f508.h>
#use delay (clock=4M)
#fuses NOWDT, NOMCLR, NOPROTECT, INTRC_IO

int sh;
int sl;
int req;
int dis;

void main()
{
    output_low(0);
    output_low(1);
    output_low(4);
    output_low(5);

    while(true)
    {
        output_low(0);

        output_low(5);
        output_high(4);
        delay_ms(1000);
        sh=!input(2);
        sl=!input(3);
        if (sh==1 && sl==1) {dis=1;}
        if (sh==0 && sl==0) {dis=0;}

        output_low(4);
        output_high(5);
        delay_ms(1000);
        sh=!input(2);
        sl=!input(3);
        if (sh==1 && sl==1) {req=0;}
        if (sh==0 && sl==0) {req=1;}

        if (req==1 && dis==1) {output_high(1);}
        if (req==0 || dis==0) {output_low (1);}

        output_high(0);
        output_low(4);
        output_low(5);
        delay_ms(1000);

    }
}

```