

Assignment-9

```
#include <pic18f4550.h>
//#include<xc.h>

#define RELAY_PIN LATAbits.LATA4

void __interrupt() extint_isr(void)
{
    unsigned int i;
    if(INT1IF)
    {
        INT1IF = 0;
        INT1IE = 0;
        RELAY_PIN = ~RELAY_PIN;
        for(i=0; i<10000; i++);    //small delay for debouncing
        INT1IE = 1;
    }
}

int main(){
    ADCON1 = 0x0F;    //set pins as Digital in Analog To Digital Control Register 1
    TRISAbits.TRISA4 = 0; //set relay pin RA4 as output
    TRISBbits.TRISB1 = 1; //Interrupt pin as input
    RELAY_PIN = 1;

    INT1IE = 1;        //Enable external interrupt INT1
    INTEDG1 = 0;       //Interrupt on falling edge
    GIE = 1;           // Enable global interrupt

    while(1);
}
```

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```

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17 }
18
19 int main()
20 {
21     ADCON1 = 0x0F; //set pins as Digital in Analog To Digital Control Reg:
22     //set pins as Digital in Analog To Digital Control Reg:

```

Variables

Name	Type	Address	Value	Hexadecimal	Decimal
gIE	bit	0xFF2	0x01	0x01	1

SFRs

Address	Name	Hex	Decimal	Binary	Char
F83	PORTD	0x00	0	00000000	..
F84	PORTF	0x00	0	00000000	..
F89	LATA	0x00	16	00010000	..
F8A	LATB	0x00	0	00000000	..
F8B	LATC	0x00	0	00000000	..
F8C	LATD	0x00	0	00000000	..
F8D	LATE	0x00	0	00000000	..
F92	TRISA	0xFF	111	01101111	'g'
F93	TRISB	0xFF	255	11111111	'g'
F94	TRISC	0xC7	199	11000111	'Q'
F95	TRISD	0xFF	255	11111111	'g'
F96	TRISE	0x07	7	00000111	..
F9B	OSCTONE	0x00	0	00000000	..
F9D	PIE1	0x00	0	00000000	..
F9E	PIR1	0x00	0	00000000	..
F9F	IFR1	0xFF	255	11111111	'g'
FA0	PIE2	0x00	0	00000000	..
FA1	PIR2	0x00	0	00000000	..
FA2	IFR2	0xFF	255	11111111	'g'
FA6	ECCON1	0x00	0	00000000	..
FA7	ECCON2	0x00	0	00000000	..
FA8	EEDATA	0x00	0	00000000	..
FA9	EADDR	0x00	0	00000000	..
FAB	RCTA	0x00	0	00000000	..
FAC	TKSTA	0x02	2	00000010	..
FAD	TMR3	0x00	0	00000000	..
FAE	RCREG	0x00	0	00000000	..
FAF	SPBRG	0x00	0	00000000	..
FB0	SPBRH	0x00	0	00000000	..
FB1	T3CON	0x00	0	00000000	..
FB2	TMR3	0x0000	0	00000000 00000000	..
FB3	TMR3L	0x00	0	00000000	..
FB3	TMR3H	0x00	0	00000000	..
FB4	CNCON	0x07	7	00000111	..
FB5	CVRCON	0x00	0	00000000	..

Memory SFRs Format Individual

Filter Address

Assignmnnet (Build, Load, ...) debugger halted 29:1 INS

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Variables

Name	Type	Address	Value	Hexadecimal	Decimal
gIE	bit	0xFF2	0x01	0x01	1

SFRs

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FB0	SPBRGH	0x00	0	00000000	..
FB1	T3CON	0x00	0	00000000	..
FB2	TMR3	0x0000	0	00000000 00000000	..
FB2	TMR3L	0x00	0	00000000	..
FB3	TMR3H	0x00	0	00000000	..
FB4	CNCON	0x07	7	00000111	..
FB5	CVRCON	0x00	0	00000000	..
FB6	ECCPIAS	0x00	0	00000000	..
FB7	ECCPIDEL	0x00	0	00000000	..
FB8	BAUDCON	0x40	64	01000000	'B'
FB9	CCP2CON	0x00	0	00000000	..
FB8	CCPR2	0x0000	0	00000000 00000000	..
FB8	CCPR2L	0x00	0	00000000	..
FB8	CCPR2H	0x00	0	00000000	..
FB8	CCP1CON	0x00	0	00000000	..
FB8	CCPR1	0x0000	0	00000000 00000000	..
FB8	CCPR1L	0x00	0	00000000	..
FB8	CCPR1H	0x00	0	00000000	..
FC0	ADCON2	0x00	0	00000000	..
FC1	ADCON1	0x0F	15	00001111	..
FC2	ADCON0	0x00	0	00000000	..
FC3	ADRES	0x0000	0	00000000 00000000	..
FC3	ADRESL	0x00	0	00000000	..
FC4	ADRESH	0x00	0	00000000	..
FC5	SSPCON2	0x00	0	00000000	..
FC6	SSPCON1	0x00	0	00000000	..
FC7	SSPSTAT	0x00	0	00000000	..
FC8	SSPAD	0x00	0	00000000	..
FC9	SSPBUF	0x00	0	00000000	..
FCA	T2CON	0x00	0	00000000	..
FCB	PR2	0xFF	255	11111111	'g'
FCC	TMR2	0x00	0	00000000	..
FCD	T1CON	0x00	0	00000000	..
FCE	TMR1	0x0000	0	00000000 00000000	..

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