

## Lab 8

### Task1

```
#define _XTAL_FREQ 4000000
#include <xc.h>

void __interrupt() isr(void){
    if(INTCONbits.TMR0IF == 1){
        PORTC = 12;
        INTCONbits.TMR0IF = 0;
        TMR0 = 12;
    }
}

void main(void){
    TRISC = 0x00;
    TRISB = 0x00;

    INTCONbits.GIE = 1;
    INTCONbits.TMR0IE = 1;

    OPTION_REG = 0b00000000;

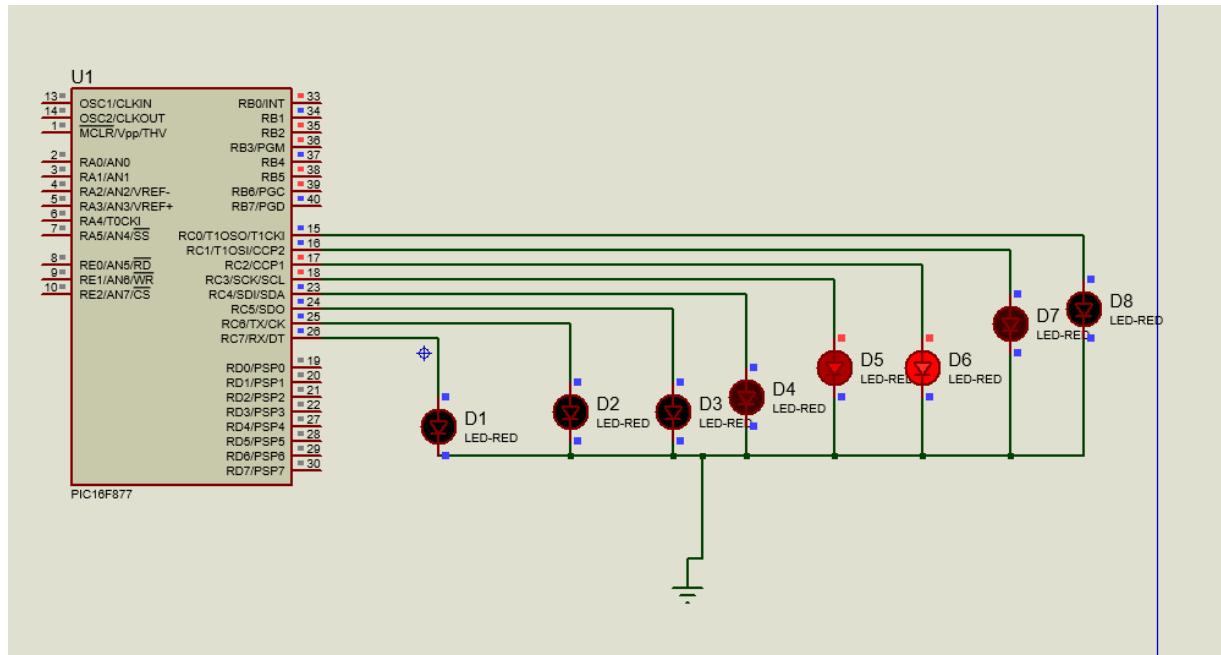
    TMR0 = 12;

    while(1){

        int tens, units, result;
        tens = PORTC / 10;
        units = PORTC % 10;

        result = (units) * 10 + (tens);
        PORTC=result;

    }
}
```



```

#include <xc.h>

void __interrupt() isr(void){
    if(T0IF == 1){
        PORTD++;

        T0IF = 0;
    }
}

void main(void){
    TRISD = 0x00;
    PORTD = 0x00;

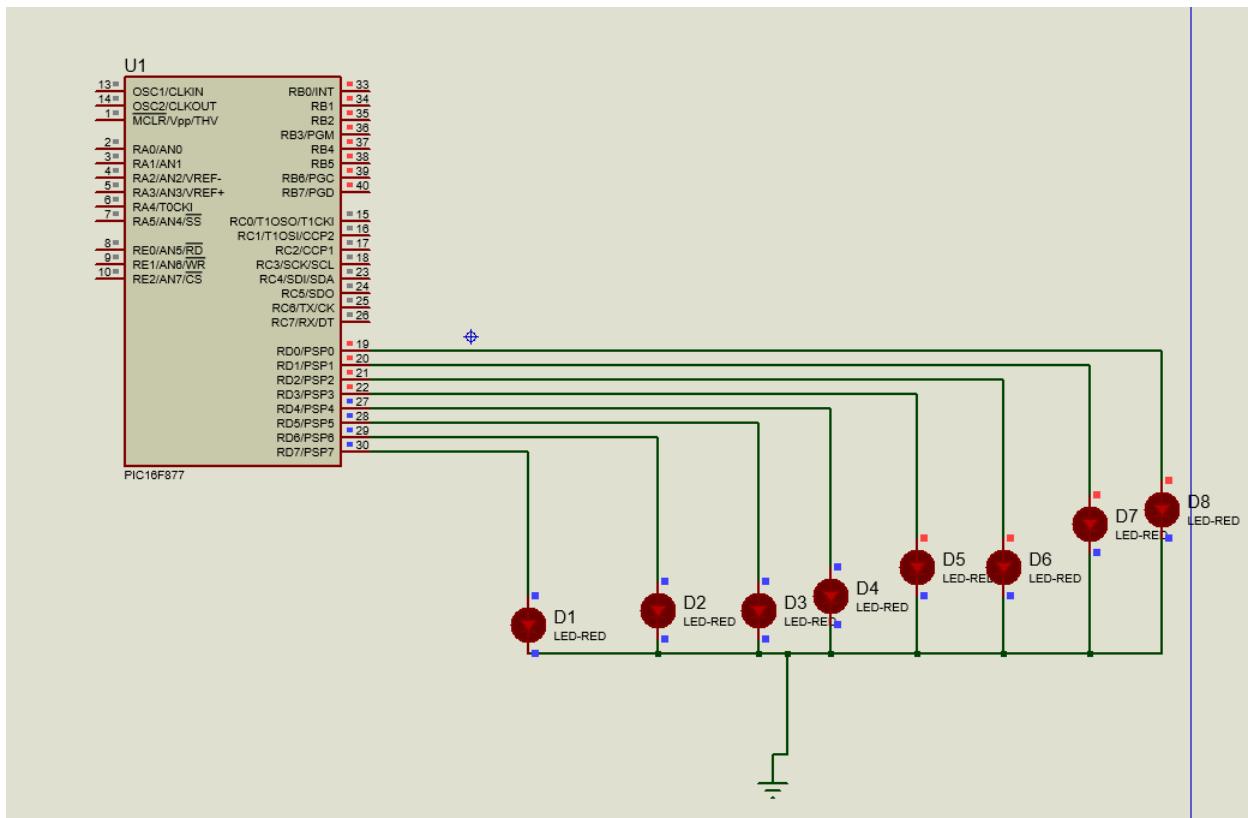
    INTCONbits.GIE = 1;
    INTCONbits.TMR0IF = 1;

    OPTION_REG = 0b00000111;

    while(1){
        PORTD++;

        T0IF = 0;
    }
}

```



### Task3

```
#include <xc.h>

void __interrupt() isr(void){
    if(T0IF == 1){

        RB0=1;
        _delay(2);
        RB0=0;
        _delay(2);

    }
}

void main(void){
    TRISB0 = 0;
    RB0=0;

    INTCONbits.GIE = 1;
    INTCONbits.TMR0IF = 1;

    OPTION_REG = 0b00000111;
    TMR0=0x00;

    while(1){

        RB0=1;
        _delay(2);
        RB0=0;
        _delay(2);

    }
}
```

