

## Counter1

```
#include <xc.h>
// CONFIG
#pragma config FOSC = HS
                           // Oscillator Selection bits (RC oscillator)
#pragma config WDTE = OFF // Watchdog Timer Enable bit (WDT disabled)
#pragma config PWRTE = OFF  // Power-up Timer Enable bit (PWRT disabled)
                            // Brown-out Reset Enable bit (BOR disabled)
#pragma config BOREN = OFF
                           // Low-Voltage (Single-Supply) In-Circuit
#pragma config LVP = OFF
Serial Programming Enable bit (RB3 is digital I/O, HV on MCLR must be
used for programming)
#pragma config CPD = OFF
                            // Data EEPROM Memory Code Protection bit
(Data EEPROM code protection off)
#pragma config WRT = OFF
                           // Flash Program Memory Write Enable bits
(Write protection off; all program memory may be written to by EECON
control)
#pragma config CP = OFF
                            // Flash Program Memory Code Protection bit
(Code protection off)
// #pragma config statements should precede project file includes.
// Use project enums instead of #define for ON and OFF.
#define _XTAL_FREQ 20000000
main()
{
     char i;
     TRISD0=0;
     TRISC2=TRISC3=0;
     RD0=0;
     GIE=1;
                            //enabling global interrupt
                            //enabling periferal interrupt
     PEIE=1;
     T1SYNC=0;
                            //synchronus mode
                            //prescale assigned to 1:8
     T1CKPS1=0;
     T1CKPS0=0;
                            //-----
     T1OSCEN=1;
                            //external oscilation disable
     TMR1CS=1;
                            //counter mode
     TMR1H=0xff;
                            //initialising timer values
     TMR1L=0xfe;
                            //----
     TMR1ON=1;
                            //timer on
     TMR1IE=1;
     while(1)
                            //running two lights
     {
           RC2 = \sim RC2;
           RC3 = RC3;
           for(i=0;i<=100;i++)
                 __delay_ms(10);
     }
}
interrupt isr()
{
     RD0=1;
     TMR1IF=0;
                           //clearing flag
}
```