Name:-
Roll_no:-
Subject:-
Class:-

EXPERIMENT NO:-

```
/*CALCULATIONS

 * required time = 100ms  Fosc=48Mhz

 * TMR value = 0xFFFF - (required time) / (4 * Tosc * Prescaler)

 *         = 0xFFFF - (0.1 * 48000000) / (4 * 256)

 *         = 0xFFFF - 0x124F

 * TMR      = 0xEDB0

 * TMRH = 0xED

 * TMRL = 0xB0

 */

#include <p18f4550.h>


void interrupt timer_isr(void)

{

          if(TMR0IF == 1)                    //If timer0 interrupt flag is set.....

   {

    TMR0ON = 0;                    // Stop the timer

    TMR0IF = 0;                   //Clear the interrupt flag

    TMR0H = 0xED;                   //Reload Timer0

    TMR0L = 0xB0;

    LATB =~LATB;                   //Toggle PORTB

    TMR0ON = 1;                    // Start the timer
```

```
   }
}



void main()
{
        ADCON1 = 0x0F;       //Configuring the PORTE pins as digital I/O
        TRISB = 0;              //Configruing the LED port pins as outputs
        LATB = 0xFF;             //Setting the initial value of the LED's after reset
        T0CON = 0x07;  //Set the timer to 16-bit mode,internal instruction cycle clock,1:256 prescaler
        TMR0H = 0xED;            // Reset Timer0 to 0x48E5 TO MAKE DELAY OF 1 SECOND
        TMR0L = 0xB0;
        INTCONbits.TMR0IF = 0;     // Clear Timer0 overflow flag
        INTCONbits.TMR0IE = 1;           // TMR0 interrupt enabled
        T0CONbits.TMR0ON = 1;                    // Start timer0
        INTCONbits.GIE = 1;                      // Global interrupt enabled
        while(1);     //Program execution stays here until the timer overflow interrupt is generated
}
```