

ASSIGNMENT NO 7
Square Wave Generation

Malhar Kulkarni

32243

```
#include <p18f4550.h>

extern void _startup(void);

#pragma interrupt _timer_ISR
void _timer_ISR(void) {
    INTCONbits.TMR0IF = 0;
    PORTBbits.RB0 = !PORTBbits.RB0;
}

#pragma code RESET_INTERRUPT_VECTOR = 0x1000
void reset(void) {
    _asm
        goto _startup
    _endasm
}

#pragma code

#pragma code HIGH_INTERRUPT_VECTOR = 0x1008
void high_ISR(void) {
    _asm
        goto _timer_ISR
    _endasm
}

#pragma code

#pragma code LOW_INTERRUPT_VECTOR = 0x1018
```

```
void low_ISR(void) {  
}
```

#pragma code

```
void main() {  
    ADCON1 = 0x0F;  
    INTCON2bits.RBPU = 0;  
    TRISBbits.TRISB0 = 0;  
    PORTBbits.RB0 = 0;  
  
    TOCON = 0x03;  
    TMR0H = 0x6D;  
    TMR0L = 0x82;  
    INTCONbits.TMR0IF = 0;  
    INTCONbits.TMR0IE = 1;  
    INTCONbits.GIEH = 1;  
    INTCONbits.GIEL = 1;  
    TOCONbits.TMR0ON = 1;  
  
    while (1);  
}
```

OUTPUT :

