

```
1 /*
2  * Experiment No. 8
3  * Program statement: Write an embedded C program for generating waveform
4  * using timer interrupt for following activity.
5  * Roll no.- 312046      Batch no.- B2
6  * Date of performance- 12/09/2018
7  */
8
9 #include<P18F452.h>
10 #pragma config OSC = HS
11 #pragma config PWRT = OFF
12 #pragma config WDT = OFF
13 #pragma config DEBUG = OFF
14 #pragma config LVP = OFF
15 #define output PORTCbits.RC4
16
17 #pragma interrupt resetTimer
18
19 void resetTimer(void){           //ISR ROUTINE
20 if(INTCONbits.TMR0IF == 1){
21 output =~output;
22 TMR0H = 0b11111100;           //Delay of 0.5 ms
23 TMR0L =0b00011000;           //65536 - 1000 = 64536
24 INTCONbits.TMR0IF = 0;
25 }
26
27 }
28
29 #pragma code highPriority = 0x08 //INTERRUPT VECTOR ADDRESS
30 void highPriority(void){
31 _asm
32 GOTO resetTimer
33 _endasm
34 }
35
36 #pragma code
37 void main(void){
38 TRISCbits.TRISC4 = 0;           //Set RC4 as O/p
39 T0CON = 0b00001000;           //Timer 0 16bit, byass prescaler
40 TMR0H = 0b11111100;           //Delay of 0.5 ms
41 TMR0L =0b00011000;           //65536 - 1000 = 64536
```

E:/ANIL TE PRACS/MCA FILES/expt 8.X/exp8\_a.c

```
42 INTCONbits.TMR0IF = 0;           //Initialise TMR0 Int. Flag to 0
43 INTCONbits.TMR0IE = 1;           //Enable the timer 0 int.
44 T0CONbits.TMR0ON = 1;             //Start the timer
45 INTCONbits.GIE = 1;               //set the global int. enable bit
46 while(1);
47 }
```