

تمرین 2.

```
<include <mega32.h#

Declare your global variables here //

;static unsigned int time_count

Timer1 overflow interrupt service routine //

(interrupt [TIM1_OVF] void timer1_ovf_isr(void

}

Reinitialize Timer1 value //

;TCNT1H=0xC2F7 >> 8

;TCNT1L=0xC2F7 & 0xff

Place your code here //

;time_count++

(if (time_count==64

}

;(PORTC.0!=(PORTC.0

;time_count=0

{

{
```

DDRC=(1<<DDC7) | (1<<DDC6) | (1<<DDC5) | (1<<DDC4) | (1<<DDC3) | (1<<DDC2) | (1<<DDC1) | (1<<DDC0); ← خروجی بودن پورت c

// Timer/Counter 1 initialization // Clock source: System Clock // Clock value: 15.625 kHz // Timer Period: 1 s

TCCR1A=(0<<COM1A1) | (0<<COM1A0) | ← OC1A output: Disconnected وصل نباشند Output Compare پینهای
(0<<COM1B1) | (0<<COM1B0) | ← OC1B output: Disconnected وصل نباشند Output Compare پینهای
(0<<WGM11) | (0<<WGM10); ← Mode: Normal top=0xFFFF مد نرمال
TCCR1B=(0<<ICNC1) | (0<<ICES1) | ← Noise Canceler=Off, Input Capture=on Falling Edge حذف نویز و تشخیص لبه
(0<<WGM13) | (0<<WGM12) | ← Mode: Normal top=0xFFFF مد نرمال
(0<<CS12) | (0<<CS11) | (1<<CS10); ← prescaling بدون

TCNT1H=0xC2; TCNT1L=0xF7; ← مقدار (C2F7)؛ برای شروع شمارش
ICR1H=0x00; ICR1L=0x00; OCR1AH=0x00; OCR1AL=0x00; OCR1BH=0x00; OCR1BL=0x00; ← مقدار ابتدا و انتهای شمارش در برخی مدها

// Timer(s)/Counter(s) Interrupt(s) initialization

TIMSK=(0<<OCIE2) | (0<<TOIE2) |
(0<<TICIE1) | ← Timer/Counter1 Input Capture Interrupt غیرفعال کردن
(0<<OCIE1A) | ← Timer/Counter1 Compare A Match Interrupt غیرفعال کردن
(0<<OCIE1B) | ← Timer/Counter1 Compare B Match Interrupt غیرفعال کردن
(1<<TOIE1) | ← Timer/Counter1 Overflow Interrupt فعال کردن
(0<<OCIE0) | (0<<TOIE0);

```
#asm("sei")
time_count=0;
while (1)
{
}
```

}

A