

پاسخ کویز پنجم ریزپردازنده

```

Include 'M64DEF.INC'
.ORG 0x0000                                BREQ next6
JMP main                                    CPI R18,0x01
.ORG 0x0020                                BREQ next2
JMP Timer0_ISR                             JMP next4
.ORG 0x0050                                next6 : INC R17
main : LDI R16,low(RAMEND)                  CPI R17,101
      OUT SPL,R16                          BRNE next1
      LDI R16,high(RAMEND)                 LDI R18,0x01
      OUT SPH,R16                          JMP next2
      LDI R16,0x07                         next1 : OUT PORTB,R17
      OUT TCCR0,R16                       RETI
      LDI R16,252                         next2 : INC R19
      OUT TCNT0,R16                       LDI R17,100
      LDI R16,0x01                         CPI R19,101
      OUT TIMSK,R16                       BRNE next3
      LDI R16,0xFF                         LDI R18,0x02
      OUT DDRB,R16                       JMP next4
      CLR R16                             next3 : OUT PORTB,R17
      CLR R17                             RETI
      CLR R18                             next4: DEC R17
      CLR R19                             OUT PORTB,R17
      SEI                                 CPI R17,0
Loop : JMP Loop                           BREQ next5
Timer0_ISR : LDI R16,252                   RETI
      OUT TCNT0,R16                       next5 : CLR R18
      CPI R18,0x00                       CLR R19
                                           RETI

```

$$f_t = \frac{4 / 0.96 \text{MHz}}{1024} = 4 \text{KHz} \rightarrow T_t = 1 / 4 \text{KHz} = 0.25 \text{msec} \rightarrow \frac{1 \text{msec}}{T_t} = 4 \rightarrow 256 - 4 = 252$$

تایمر صفر هر یک میلی ثانیه وقفه ارسال می کند.