# ECE 375 PRELAB 7

**Lab Time: Tuesday 4-6**

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# QUESTIONS

1.  List the correct sequence of AVR assembly instructions needed to store the contents of registers R25:R24 into Timer/Counter1's 16-bit register, TCNT1. (You may assume that registers R25:R24 have already been initialized to contain some 16-bit value.)

    Out TCNT1L, r24

    Out TCNT1H, r25

2.  List the correct sequence of AVR assembly instructions needed to load the contents of Timer/Counter1's 16-bit register, TCNT1, into registers R25:R24.

    In r24, TCNT1L

    In r25, TCNT1H

3.  Suppose Timer/Counter0 (an 8-bit timer) has been configured to operate in Normal mode, and with no prescaling (i.e., clkT0 = clkI/O = 16 MHz). The decimal value "128" has just been written into Timer/Counter0's 8-bit register, TCNT0. How long will it take for the TOV0 flag to become set? Give your answer as an amount of time, not as a number of cycles.

    (Max – value) * prescale / clkI/O

    = 7.9375 micro seconds

# REFERENCE