Homework 7

**Note:** HW is due at the end of class meeting.

1. What is wrong with the following code to get the 16-bit value of the TCNT register?

   LDAB $85 ; Get the low byte
   LDAA $84 ; Get the high byte

2. How is the TCNT clock prescaler programmed?

3. When is the timer overflow flag set?

4. What timing resolution can be achieved with the output compare?

5. Write a small section of code to set the Output Compare 2 I/O pin to toggle on every comparison.

6. What two registers control which data bits are output when the Output Compare 7 flag is set?

7. Write a short section of code demonstrating how to reset the Input Capture 2 Flag C2F.

8. Write a short section of code demonstrating how to enable the real time interrupt and to set the nominal rate to 16.384 ms assuming a 8 MHz E-clock.

9. Write a short section of code demonstrating how to enable the Pulse Accumulator as an event counter counting rising edges.

10. What bit in what register must be set to enable the Pulse Accumulator Input Edge interrupt?