**UNCC, Department of Electrical and Computer Engineering, ECGR4101/5101/6090,
Fall 2004, Homework #9, Due: 11/10/04, at the beginning of class (20 points)**

0. How long did this homework take you? (1 point)
1. Read the articles "Semiconductor use in automobiles rising"
    (http://www.embedded.com/showArticle.jhtml?articleID=50900275) and "Software as lubricant"
    (http://www.embedded.com/showArticle.jhtml?articleID=51000103).
    In four sentences, describe what impact this new information has on someone with your skills. (4 points)
2. What general purpose I/O port bit is shared with the TA2IN signal? (1 point)
3. Write C code to configure timer TA2 to overflow every 19.33 ms (or as close as possible). Generate an output pulse on TA_{2OUT}. Assume the MCU's clock runs at 17 MHz. What is the actual period of the signal generated? (12 points)
4. List the changes needed in the code of the previous problem so that the timer will only count when TA_{2IN} is low. (3 points)