

```

        list p=16f84
#include p16f84.inc

count1 equ    D'3'           ;Most-significant-byte of initial count
count0 equ    D'15'          ;Least-significant-byte of initial count

counter1 equ   0x10          ;Register for MSB of counter
counter0 equ   0x11          ;Register for LSB of counter

        org     0              ;Put initial instruction in Rese
        goto    start

        org     5              ;Put remaining code after interr

start
        movlw   count1         ;Initialize counter registers
        movwf   counter1
        movlw   count0
        movwf   counter0

loop
        movf    counter0,F      ;If counter0 not equal to zero, decrement it.
        btfss   STATUS,Z
        goto    counter0_decrement
        movf    counter1,F      ;If counter1 not equal to zero, decement it.
        btfss   STATUS,Z
        goto    counter1_decrement
        goto    done           ;Otherwise, we're done.

counter0_decrement          ;Decrement LSB of counter
        decf    counter0,F
        goto    loop

counter1_decrement          ;Decrement MSB of counter
        decf    counter1,F
        movlw   H'FF'          ;Decrement LSB of counter from 0.
        movwf   counter0
        goto    loop

done

        END

```