MSP430 Assembler Code Template for use with TI Code Composer Studio

.cdecls C,LIST,"msp430.h" ; Include device header file

.data
x:  .space 2
y:  .space 2

To be consistent with the class lessons, before running the program use the
memory browser to place 0xAAAA, 0xBBB, 0xCC, and 0xDDD at the bottom of
the stack

.text
; Assemble into program memory
.retain
; Override ELF conditional linking
.and retain current section
.retainrefs
; Additionally retain any sections
; that have references to current
; section

RESET    mov.w #__STACK_END,SP ; Initialize stackpointer
StopWDT   mov.w #WDTPW|WDTHOLD,&WDTCTL ; Stop watchdog timer

push.w #0x1111
push.w #0x2222
push.b #0x33
pop.b R5    ; 0033 gets copied to R5
;pop.w R5    ; CC33 gets copied to R5
pop.w &x
pop.w &y

loop:  jmp loop

Stack Pointer definition

.global __STACK_END
.sect .stack

Interrupt Vectors

.sect ".reset" ; MSP430 RESET Vector
.short RESET