;--- MSP430 Assembler Code Template for use with TI Code Composer Studio
;
; cdecls C\List, "msp430.h" ; Include device header file
;
; data
a: .byte 3, 6, 3, 1, 3, 6, 0, 3, 0, 3
count1: .space 2
count2: .space 2
count3: .space 2
;
; text ; Assemble into program memory
.retain ; Override ELF conditional linking
.retainrefs ; Additionally retain any sections that have references to current section
;
RESET mov.w #_STACK_END, SP ; Initialize stackpointer
StopWDT mov.w #WDTPW|WDT Hold, &WDTCTL ; Stop watchdog timer
;
; Main loop here
;
for_cond:
  cmp.w #10, R5 ; (i >= 10) = ~(i<10)
  jge for_break

stuff1_label: cmp.b #3, a(R5)
  jeq stuff1_label

stuff2_label: inc.w &count3 ; defaultstuff
  jmp switch_break

stuff2_label: inc.w &count2
  jmp switch_break

stuff1_label: inc.w &count1

switch_break:

for_break: inc.w R5
  jmp for_cond

loop: jmp loop
;
Stack Pointer definition
;
global __STACK_END
.sect .stack
Interrupt Vectors

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