```
;Analog_Comparator_Polling.asm
        PROCESSOR PIC16F628
        #include <P16F628.INC>
        __CONFIG    _CP_OFF & _MCLRE_ON & INTRC_OSC_NOCLKOUT & _LVP_OFF
        & _WDT_OFF

        ORG     0x00
        goto    main
main:
        call    init
inf_loop:
        btfss   CMCON,C2OUT
        goto    SET_HIGH
SET_LOW:
        bsf     PORTB,0
        bcf     PORTB,1
        goto    OVER
SET_HIGH:
        bcf     PORTB,0
        bsf     PORTB,1
OVER:
        goto    inf_loop

init:
        banksel TRISA       ; Select Bank1
        movlw   B'00000110' ; RA1, RA2 are input pins
        movwf   TRISA
        clrw
        movwf   TRISB       ; Port B is output
        banksel PORTB       ; select Bank0
        clrw
        movwf   PORTB
        movlw   .5          ; 5 = B'0000101' ;Analog comparator in mode 5
        (single C2)
        movwf   CMCON
        return
        END
```