; Purpose: To demonstrate the blink sketch using pure assembly
; Reference: <http://rwf.co/dokuwiki/doku.php?id=smallcpus>
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; Status: Working
**#include "avr/io.h"
.global setup**
setup:
 sbi \_SFR\_IO\_ADDR(DDRB), DDB5 ; pinMode(13,OUTPUT)
 ret

**.global loop**loop:
 sbi \_SFR\_IO\_ADDR(PORTB), PB5 ; digitalWrite(13,HIGH)
 rcall delay1 ; delay(1000)
 cbi \_SFR\_IO\_ADDR(PORTB), PB5 ; digitalWrite (13,LOW)
 rcall delay1 ; delay(1000);
 ret

delay1:
; Generated by delay loop calculator at <http://www.bretmulvey.com/avrdelay.html>
; Delay 16 000 000 cycles: 1s at 16 MHz
 ldi r18, 82
 ldi r19, 43
 ldi r20, 0
L1: dec r20
 brne L1
 dec r19
 brne L1
 dec r18
 brne L1
 lpm
 nop
 ret