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#include "msp.h"
#include "My_LEDS.h"
/**
 * main.c
 */
#define DELAY100MS 100000 * 1// DELAY * 1 mS assuming 3 MHz clock

int main(void)
{
    WDT_A->CTL = WDT_A_CTL_PW | WDT_A_CTL_HOLD; // watchdog

    // Blink RED LED to show code is running
    setup_RED_LED();

    // Set up Pin 2.5 as IO
    P2->SEL1 &= ~BIT5;
    P2->SEL0 &= ~BIT5;

    // set P2.5 as input with pulldown resistor
    P2->DIR &= ~BIT5;
    P2->REN |= BIT5;
    P2->OUT |= BIT5;

    P2->IES |= BIT5;    // Interrupt on high-to-low transition
    P2->IFG &= ~BIT5;   // Clear P2.5 interrupt flag
    P2->IE  |= BIT5;    // Enable interrupt for P2.5

    P1->OUT |= (BIT0);  /* turn on P1.0 red LED */

    // Enable Port 2 on the NVIC
    NVIC->ISER[1] = 1 << ((PORT2_IRQn) & 31); // 31

    __enable_irq();    // Enable global interrupt

    while(1){
        __sleep();      // go to sleep interrupts
    }
}

void PORT2_IRQHandler(void)
{
    if(P2->IFG & BIT5){
        P1->OUT ^= BIT0; // Toggle Bit0
    }
    P2->IFG &= ~BIT5;    // Clear the interrupt flag
}

```