

To Interface IR sensor with MSP430G2553, turn OFF a LED connected at port 1 if a person is detected.

```
#include <msp430.h>

#define IR_SENSOR_PIN    BIT0 // Input from IR sensor (adjust as needed)
#define LED_PIN           BIT0 // Output to control LED on P1.0

void main(void)
{
    WDTCTL = WDTPW | WDTHOLD; // Stop the Watchdog Timer

    P1DIR &= ~IR_SENSOR_PIN; // Set IR sensor pin as input
    P1REN |= IR_SENSOR_PIN; // Enable pull-up resistor on IR sensor pin
    P1OUT |= IR_SENSOR_PIN; // Set pull-up resistor

    P1DIR |= LED_PIN; // Set LED pin (P1.0) as output
    P1OUT &= ~LED_PIN; // Initially turn off the LED

    while (1)
    {
        if (P1IN & IR_SENSOR_PIN) // Check if IR sensor output is High (object detected)
        {
            P1OUT |= LED_PIN; // Turn on the LED on P1.0
        }
        else
        {
            P1OUT &= ~LED_PIN; // Turn off the LED on P1.0
        }
    }
}
```