

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
```

```
        }
```

```
    }
```

```
}
```