

Code:

```
const int IR_PIN = 5;      // IR sensor output pin
const int LED_PIN = 12;    // LED pin

void setup() {
    pinMode(IR_PIN, INPUT);          // Set IR sensor pin as input
    pinMode(LED_PIN, OUTPUT);        // Set LED pin as output
    digitalWrite(LED_PIN, LOW);      // Start with LED OFF
    Serial.begin(9600);             // Initialize serial communication
}

void loop() {
    int irValue = digitalRead(IR_PIN); // Read IR sensor state

    if (irValue == LOW) {
        // Object detected
        digitalWrite(LED_PIN, HIGH);   // Turn ON LED
        Serial.println("Obstacle Detected");
    } else {
        // No object
        digitalWrite(LED_PIN, LOW);    // Turn OFF LED
        Serial.println("No Obstacle");
    }

    delay(200); // Delay for stability
}
```

sketch_oct10a | Arduino IDE 2.3.6

File Edit Sketch Tools Help

Arduino Uno

sketch_oct10a.ino

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2 const int LED_PIN = 12;    // LED pin
3
4 void setup() {
5     pinMode(IR_PIN, INPUT);    // Set IR sensor pin as input
6     pinMode(LED_PIN, OUTPUT);  // Set LED pin as output
7     digitalWrite(LED_PIN, LOW); // Start with LED OFF
8     Serial.begin(9600);       // Initialize serial communication
9 }
10
11 void loop() {
12     int irValue = digitalRead(IR_PIN); // Read IR sensor state
13
14     if (irValue == LOW) {
15         // Object detected
16         digitalWrite(LED_PIN, HIGH);   // Turn ON LED
17         Serial.println("Obstacle Detected");
18     } else {
19         // No object
20         digitalWrite(LED_PIN, LOW);   // Turn OFF LED
}
```

Output Serial Monitor X

Message (Enter to send message to 'Arduino Uno' on COM6)

No Obstacle
No Obstacle

New Line 9600 baud

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