

```
int buzzPin = 7;      // Buzzer connected to pin 7
int trigPin = 6;      // Trigger pin for ultrasonic sensor
int echoPin = A0;     // Echo pin for ultrasonic sensor
int IRPin = A1;       // IR sensor connected to analog pin A1
int IRV;              // Variable to store IR sensor value
int duration, distance; // Variables for distance measurement

void setup()
{
    pinMode(trigPin, OUTPUT); // Set trigPin as an OUTPUT
    pinMode(buzzPin, OUTPUT); // Set buzzPin as an OUTPUT
    pinMode(echoPin, INPUT);  // Set echoPin as an INPUT
    pinMode(IRPin, INPUT);    // Set IRPin as an INPUT
    Serial.begin(9600);       // Start serial communication at 9600 baud rate
}
```

```
void loop()
{
    // Measure distance using ultrasonic sensor
    digitalWrite(trigPin, LOW);
    delayMicroseconds(2);
    digitalWrite(trigPin, HIGH);
    delayMicroseconds(10);
    digitalWrite(trigPin, LOW);
    duration = pulseIn(echoPin, HIGH); // Read the pulse duration
    distance = duration * 0.034 / 2; // Calculate distance in cm

    Serial.print("Distance in CM is: ");
    Serial.println(distance);

    // Check if an obstacle is detected
    if (distance < 20) {
        digitalWrite(buzzPin, HIGH); // Turn on the buzzer
        Serial.println("Obstacle detected");
    } else {
        digitalWrite(buzzPin, LOW); // Turn off the buzzer
        Serial.println("Obstacle not detected");
    }

    delay(100); // Wait for 100 ms before the next measurement

    // Read the value from the IR sensor
    IRV = digitalRead(IRPin);
    Serial.print("IR Sensor Value: ");
    Serial.println(IRV);
    delay(1000); // Wait for 1 second before the next loop
}
```







