#include <Arduino.h>

const int trigPin = 4; // define the trigger pin

const int echoPin = 5; // define the echo pin

const int ledPin = 2; // define the LED pin

void setup() {

**Serial**.begin(9600);

  pinMode(trigPin, OUTPUT);

  pinMode(echoPin, INPUT);

  pinMode(ledPin, OUTPUT);

}

void loop() {

  long duration, distance;

  digitalWrite(trigPin, LOW);

  delayMicroseconds(2);

  digitalWrite(trigPin, HIGH);

  delayMicroseconds(10);

  digitalWrite(trigPin, LOW);

  duration = pulseIn(echoPin, HIGH);

  distance = duration \* 0.034 / 2; // convert the duration to distance in centimeters

**Serial**.print("Distance: ");

**Serial**.print(distance);

**Serial**.println(" cm");

  if (distance < 10) { // adjust this value based on your sensor's range

    digitalWrite(ledPin, HIGH); // turn on the LED

    delay(500); // blink delay

    digitalWrite(ledPin, LOW); // turn off the LED

    delay(500); // blink delay

  }

  delay(1000); // wait for a second before next measurement

}

