const int pingPin = 3;

const int ledPin = 9;

void setup() {

Serial.begin(9600);

pinMode(ledPin, OUTPUT);

}

void loop() {

long duration, cm;

pinMode(pingPin, OUTPUT);

digitalWrite(pingPin, LOW);

delayMicroseconds(2);

digitalWrite(pingPin, HIGH);

delayMicroseconds(5);

digitalWrite(pingPin, LOW);

pinMode(pingPin, INPUT);

duration = pulseIn(pingPin, HIGH);

cm = microsecondsToCentimeters(duration);

Serial.print(“Distance: “);

Serial.print(cm);

Serial.print(“cm”);

Serial.println();

if(cm &lt; 100) {

digitalWrite(ledPin, HIGH);

}

else {

digitalWrite(ledPin, LOW);

}

delay(100);

}

long microsecondsToCentimeters(long microseconds) {

return microseconds / 29 / 2;

}