

```
int trigPin = 11;  // Trigger

int echoPin = 12;  // Echo

int LED = 13;

long duration, cm, inches;

void setup() {
  Serial.begin (9600);

  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
  pinMode(LED, OUTPUT);
}

void loop() {
  digitalWrite(trigPin, LOW);
  delayMicroseconds(5);
  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW);
  duration = pulseIn(echoPin, HIGH);

  cm = (duration/2) / 29.1;
  inches = (duration/2) / 74;

  Serial.print(inches);
  Serial.print("in, ");
  Serial.print(cm);
  Serial.print("cm");
  Serial.println();

  if (cm < 5) { digitalWrite(LED, HIGH);
  } else { digitalWrite(LED, LOW);
  }

  delay(250);
}
```