### 1. Lösung

int trigger=7;

int echo=6;

int speaker=8;

long dauer=0;

long entfernung=0;

void setup() {

Serial.begin (9600);

pinMode(trigger, OUTPUT);

pinMode(echo, INPUT);

pinMode (speaker, OUTPUT);

}

void loop(){

digitalWrite(trigger, LOW);

delay(5);

digitalWrite(trigger, HIGH);

delay(10);

digitalWrite(trigger, LOW);

dauer = pulseIn(echo, HIGH);

entfernung = (dauer/2) \* 0.03432;

Serial.print(entfernung);

Serial.println(" cm");

if (entfernung>10 and entfernung<20){

digitalWrite(speaker, HIGH);

delay (600);

digitalWrite (speaker, LOW);}

if (entfernung>5 and entfernung<=10){

digitalWrite(speaker, HIGH);

delay (400);

digitalWrite (speaker, LOW);

}

if (entfernung<=5){

digitalWrite(speaker, HIGH);

delay (100);

digitalWrite (speaker, LOW);

}

delay(1000); }