int const trigPin = 4;

int const echoPin = 3;

int const buzzPin = 2;

void setup()

{

pinMode(trigPin, OUTPUT);

pinMode(echoPin, INPUT);

pinMode(buzzPin, OUTPUT);

}

void loop()

{

// Duration will be the input pulse width and distance will be the distance to the obstacle in centimeters

int duration, distance;

// Output pulse with 1ms width on trigPin

digitalWrite(trigPin, HIGH);

delay(1);

digitalWrite(trigPin, LOW);

// Measure the pulse input in echo pin

duration = pulseIn(echoPin, HIGH);

// Distance is half the duration devided by 29.1 (from datasheet)

distance = (duration/2) / 29.1;

// if distance less than 0.5 meter and more than 0 (0 or less means over range)

if (distance <= 40 && distance >= 0) {

// Buzz

digitalWrite(buzzPin, HIGH);

} else {

// Don't buzz

digitalWrite(buzzPin, LOW);

}

delay(60);

}