#include <Servo.h>.

const int trigPin = 8;

const int echoPin = 9;

// defining time and distance

long duration;

int distance;

Servo myServo; // Object servo

void setup() {

pinMode(trigPin, OUTPUT); // trigPin as an Output

pinMode(echoPin, INPUT); // echoPin as an Input

Serial.begin(9600);

myServo.attach(10); // Pin Connected To Servo

}

void loop() {

// rotating servo i++ depicts increment of one degree

for(int i=15;i<=165;i++){

myServo.write(i);

delay(30);

distance = calculateDistance();

Serial.print(i);

Serial.print(",");

Serial.print(distance);

Serial.print(".");

}

// Repeats the previous lines from 165 to 15 degrees

for(int i=165;i>15;i--){

myServo.write(i);

delay(30);

distance = calculateDistance();

Serial.print(i); Serial.print(",");

Serial.print(distance);

Serial.print(".");

}

}

int calculateDistance(){

digitalWrite(trigPin, LOW);

delayMicroseconds(2);

// Sets the trigPin on HIGH state for 10 micro seconds

digitalWrite(trigPin, HIGH);

delayMicroseconds(10);

digitalWrite(trigPin, LOW);

duration = pulseIn(echoPin, HIGH);

distance= duration\*0.034/2;

return distance;

}