#include<Servo.h>

Servo myservo;

int trigpin=7;

int echopin=5;

void setup()

{

pinMode(trigpin,OUTPUT);

pinMode(echopin,INPUT);

myservo.attach(4);

Serial.begin(9600);

}

void loop()

{

digitalWrite(trigpin,HIGH);

delay(1000);

digitalWrite(trigpin,LOW);

int duration=pulseIn(echopin,HIGH);

int distance=duration\*0.034)/2;

Serial.println("the distance is");

Serial.print(distance);

if(distance<=50)

{

myservo.write(180);

Serial.println("door opened");

delay(1000);

}

else

{

myservo.write(0);

Serial.println("door closed");

delay(1000);

}

}