**Assignment**-2

**Automatic garage door opening system**

Code:

// C++ code

//

#include<Servo.h>

Servo myservo;

int trigpin=11;

int echopin=10;

void setup()

{

Serial.begin(9600);

myservo.attach(10);

pinMode(trigpin,OUTPUT);

pinMode(echopin,INPUT);

}

void loop()

{

digitalWrite(trigpin,HIGH);

delay(1000);

digitalWrite(trigpin,LOW);

float duration=pulseIn(echopin,HIGH);

float distance=duration\*0.0343/2;

Serial.print("the distance is");

Serial.println(distance);

if(distance>80){

myservo.write(90);

Serial.println("the garage door is opened");

delay(5000);

myservo.write(0);

Serial.println("the garage door is closed");

}else{

myservo.write(0);

}

}

