**ASSIGNMENT-2**

**2. Develop an "Automatic garage door opening system". Use an Ultrasonic sensor to detect if there is a vehicle in front of the garage.**

**Automatic Garage Door Opening System**

int trigpin=11;

int echopin=10;

#include<Servo.h>

Servo myservo;

void setup()

{

Serial.begin(9600);

myservo.attach(7);

pinMode(trigpin,OUTPUT);

pinMode(echopin,INPUT);

myservo.write(0);

}

void loop()

{

digitalWrite(trigpin,HIGH);

delay(1000);

digitalWrite(trigpin,LOW);

float duration=pulseIn(echopin,HIGH);

float distance=duration\*0.0345/2;

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”);

}

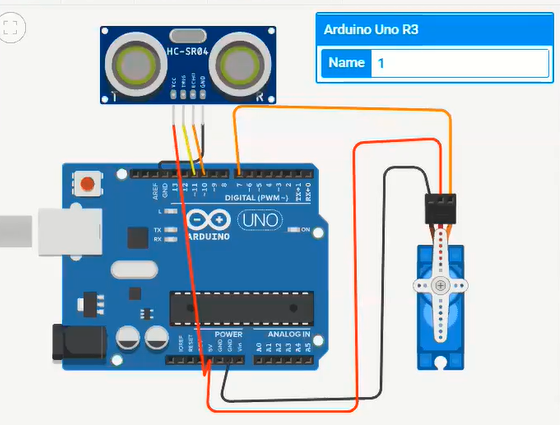
else {

myservo.write(0);

}

}

**Schematic Diagram**



**Output**

