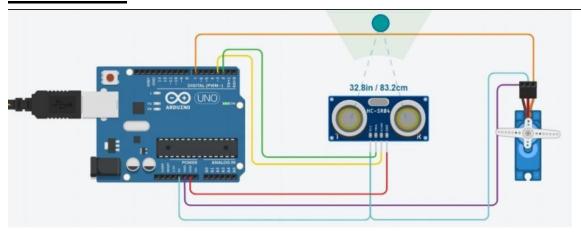
<u>Assignment 2:</u> (Using servo motor)

Code:

```
#include<Servo.h>
                        //servo header file
const int MIN_DIST = 100; // centimeters
Servo s;
                  //
void setup()
{
 Serial.begin(9600);
 pinMode(2, OUTPUT); // set arduino pin 2 to output mode
                        // set arduino pin 3 to input mode
 pinMode(3, INPUT);
 s.attach(7);
                         // attaches the servo on pin 7 to the servo object
 s.write(0);
void loop()
 digitalWrite(2, HIGH);
 delayMicroseconds(10);
 digitalWrite(2, LOW); // generate 10-microsecond pulse to TRIG pin
 float dur = pulseIn(3, HIGH);
 float dis = (dur*0.0343)/2;
                               // calculate the distance
 if(dis < MIN_DIST)
                  // rotate servo motor to 90 degree to open garage door
   s.write(90);
 delay(2000);
                  // rotate servo motor to 0 degree to close garage door
 s.write(0);
Serial.print("Distance in cm: ");
 Serial.println(dis);//display the dsitance
}
```

OUTPUT:



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