

Assignment: 1

Company: Smart-Internz

Domain: Internet of Things

Date: 20-5-2023

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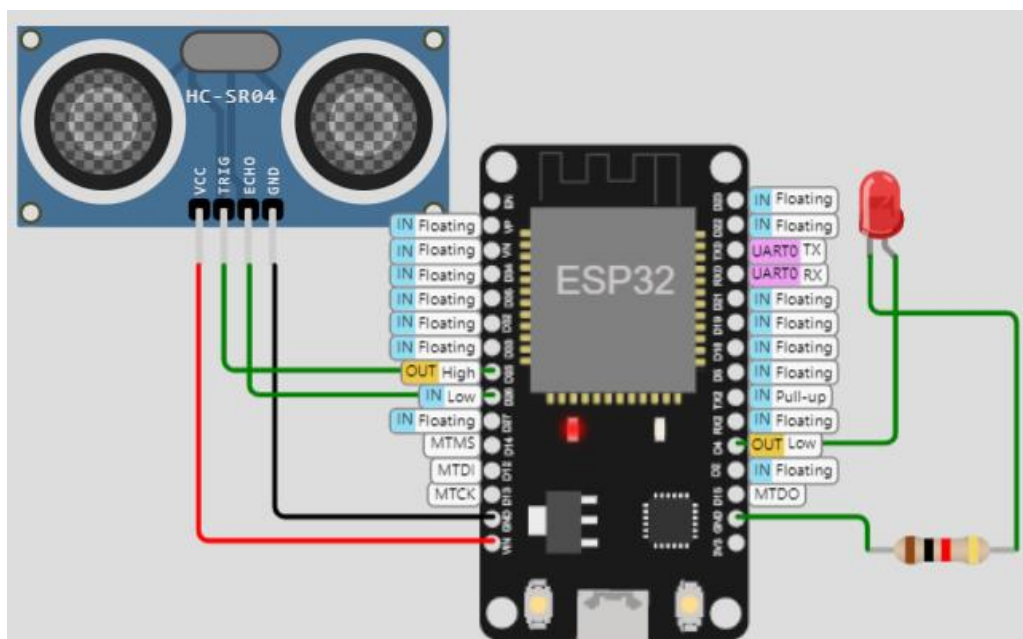
Reg. no.: 20BEC1055

Task: In Wokwi simulator, if the distance is less than 100 cm for ultrasonic sensor, glow a LED.

Wokwi Link:

<https://wokwi.com/projects/365246785209373697>

Circuit:



CODE:

sketch.ino

diagram.json

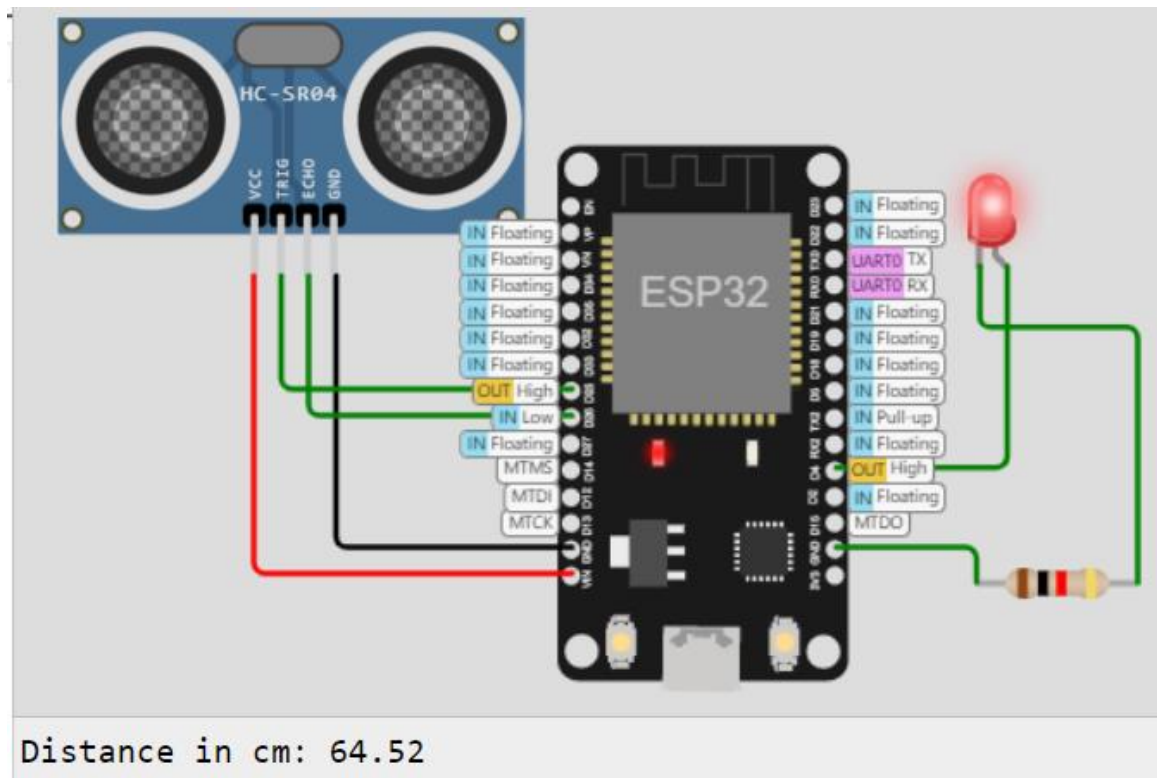
Library Manager



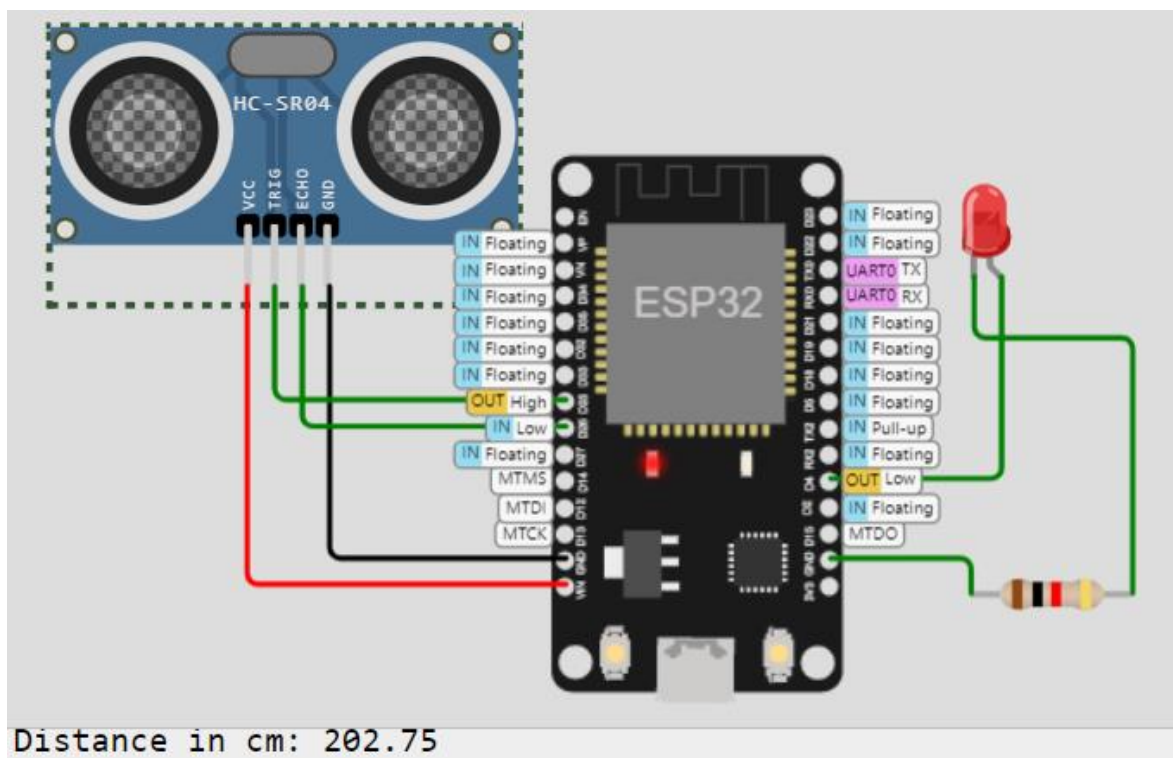
```
1  // Q) In Wokwi simulator, if the distance
2  //    <100 cms for ultrasonic sensor, glow a LED.
3
4  int e = 26;
5  int t = 25;
6
7  void setup()
8  {
9      Serial.begin(9600);
10     pinMode(t , OUTPUT);
11     pinMode(e , INPUT);
12     pinMode(4 , OUTPUT);
13 }
14
15 void loop()
16 {
17     digitalWrite(t , LOW);
18     digitalWrite(t , HIGH);
19     delay(1000);
20     digitalWrite(t , LOW);
21
22     float dur = pulseIn(e,HIGH);
23     float dist = (dur*0.0343)/2;
24
25     Serial.print("Distance in cm: ");
26     Serial.println(dist);
27
28     if(dist<100)
29     { digitalWrite(4 , HIGH); }
30     else
31     { digitalWrite(4 , LOW); }
32 }
```

OUTPUTS:

When distance of ultrasonic sensor is less than 100cm:



When distance of ultrasonic sensor is greater than 100cm:



RESULT: Given task was carried out successfully.