SMARTBRIDGE – IOT EXTERNSHIP

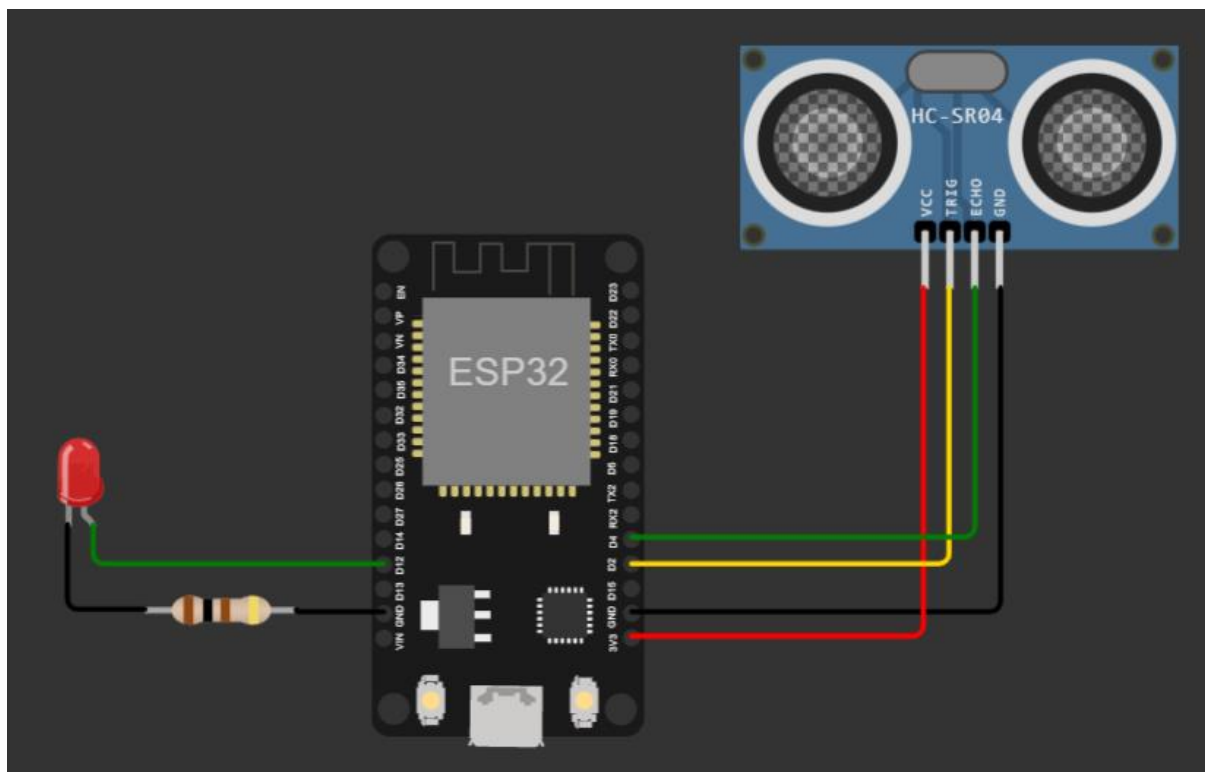| Name: Yukteshwar R	University: VIT Chennai
Reg No: 20BLC1029	Assignment 1

TASK:

If the distance is less than 100cm for an ultrasonic sensor, glow a LED in the WOKWI Simulator.

LINK:

https://wokwi.com/projects/365163245635279873

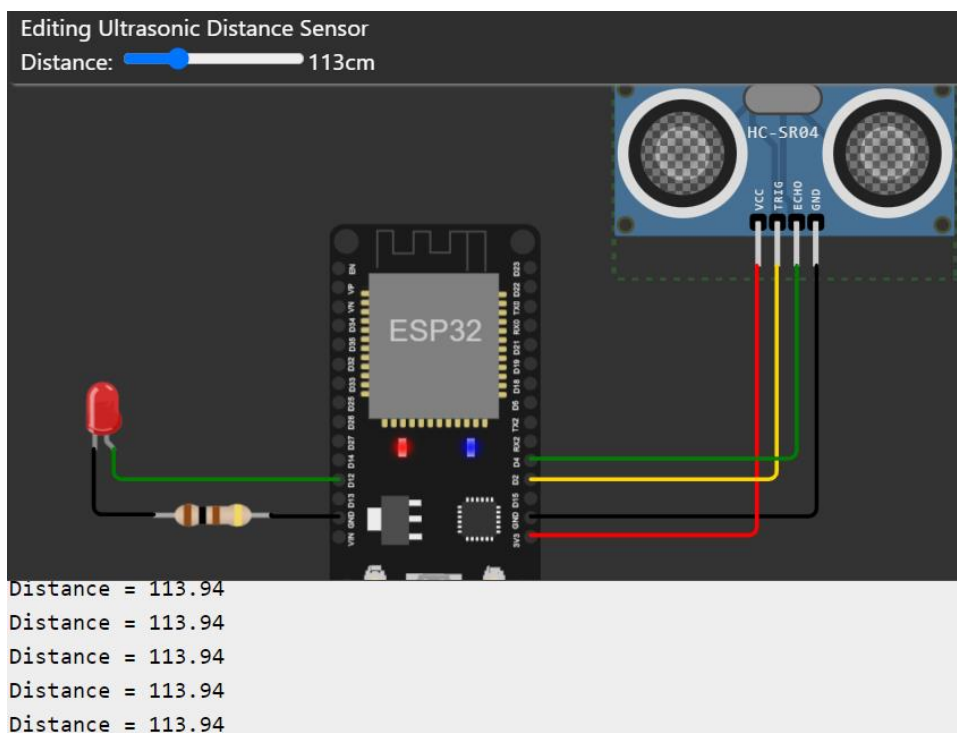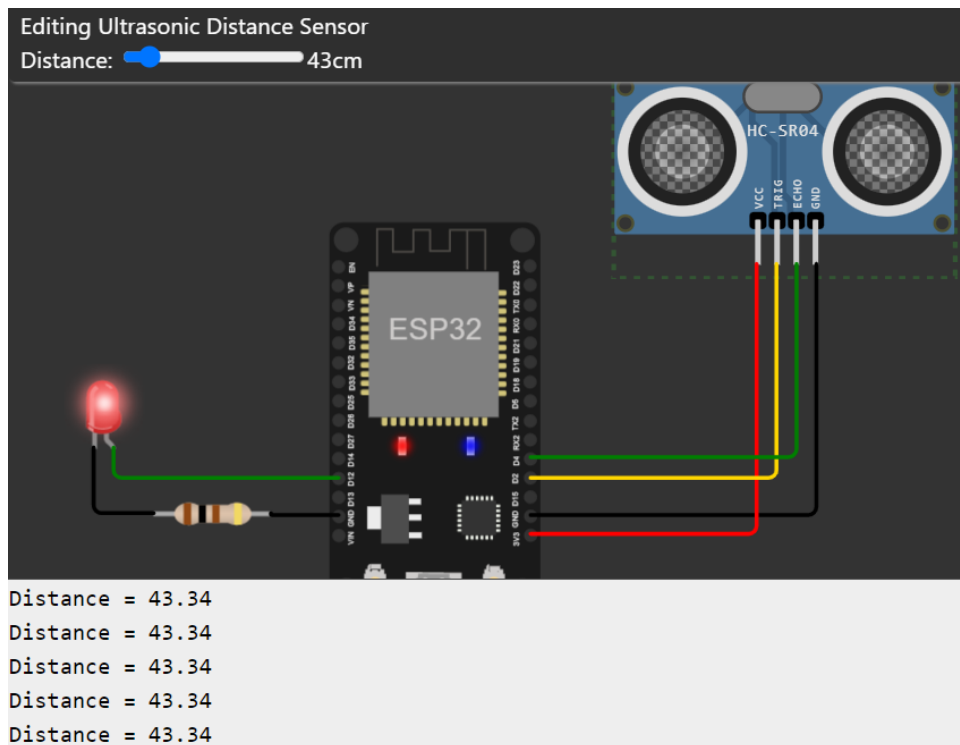## CIRCUIT DIAGRAM:

CODE:

```
1   int t = 2;
2   int e = 4;
3 ∨ void setup() {
4     Serial.begin(115200);
5     pinMode(e,INPUT);   //echo pin
6     pinMode(t,OUTPUT); //trigger pin
7     pinMode(12,OUTPUT); //LED
8   }
9 ∨ void loop() {
10    digitalWrite(t,LOW);
11    digitalWrite(t,HIGH);
12    delay(10);
13    digitalWrite(t,LOW);
14    float dur = pulseIn(e,HIGH);
15    float dis = (dur*0.0343)/2;
16    Serial.print("Distance = ");
17    Serial.println(dis);
18 ∨  if(dis<100)
19       digitalWrite(12,HIGH);
20 ∨  else
21       digitalWrite(12,LOW);
22  }
```

OUTPUT:

When distance > 100:

When distance < 100:


```
Distance = 43.34
Distance = 43.34
Distance = 43.34
Distance = 43.34
Distance = 43.34
```

RESULT:

The given task was implemented successfully.