

WEEK-1 ASSIGNMENT

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INTERN DOMAIN: IOT

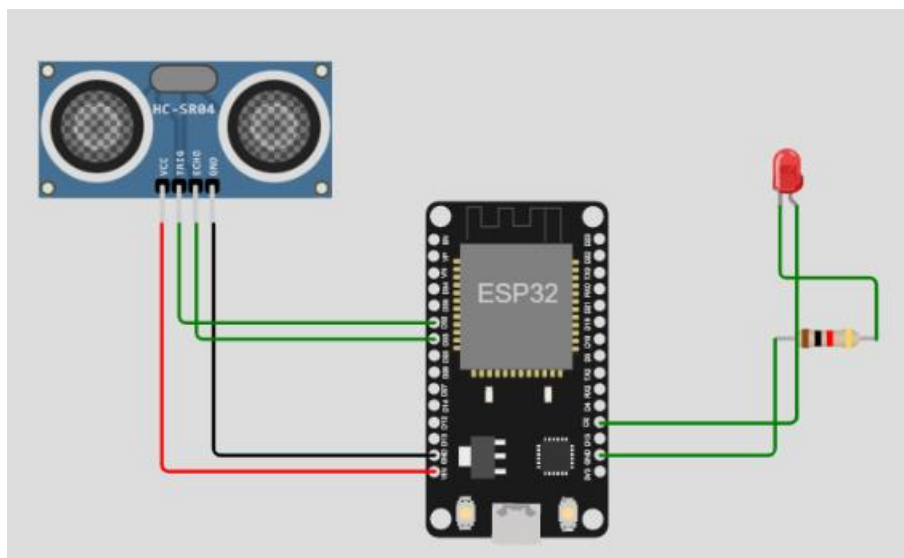
AIM:

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

WOKWI LINK:

<https://wokwi.com/projects/365401866421580801>

CIRCUIT DIAGRAM:



CODE:

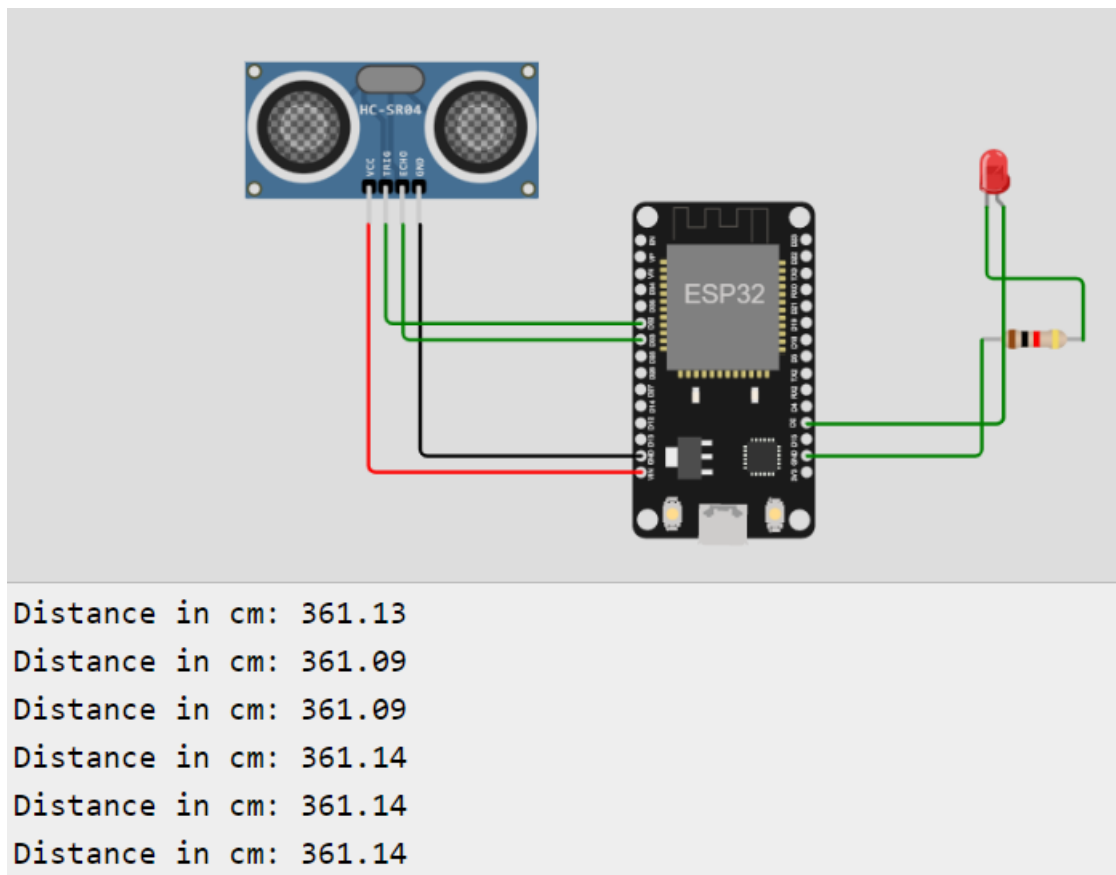
```
int t=32;
int e=33;
void setup()
{
  Serial.begin(9600);
  pinMode(t,OUTPUT);
  pinMode(e,INPUT);
  pinMode(2,OUTPUT);
}

void loop()
{
  digitalWrite(t,LOW);
  digitalWrite(t,HIGH);
  delayMicroseconds(10);
  digitalWrite(t,LOW);
  float duration = pulseIn(e,HIGH);
  float distance = (duration*0.0343)/2;
  Serial.print("Distance in cm: ");
  Serial.println(distance);
  if(distance<100)
  {
    digitalWrite(2,HIGH);
  }
  else
  {
```

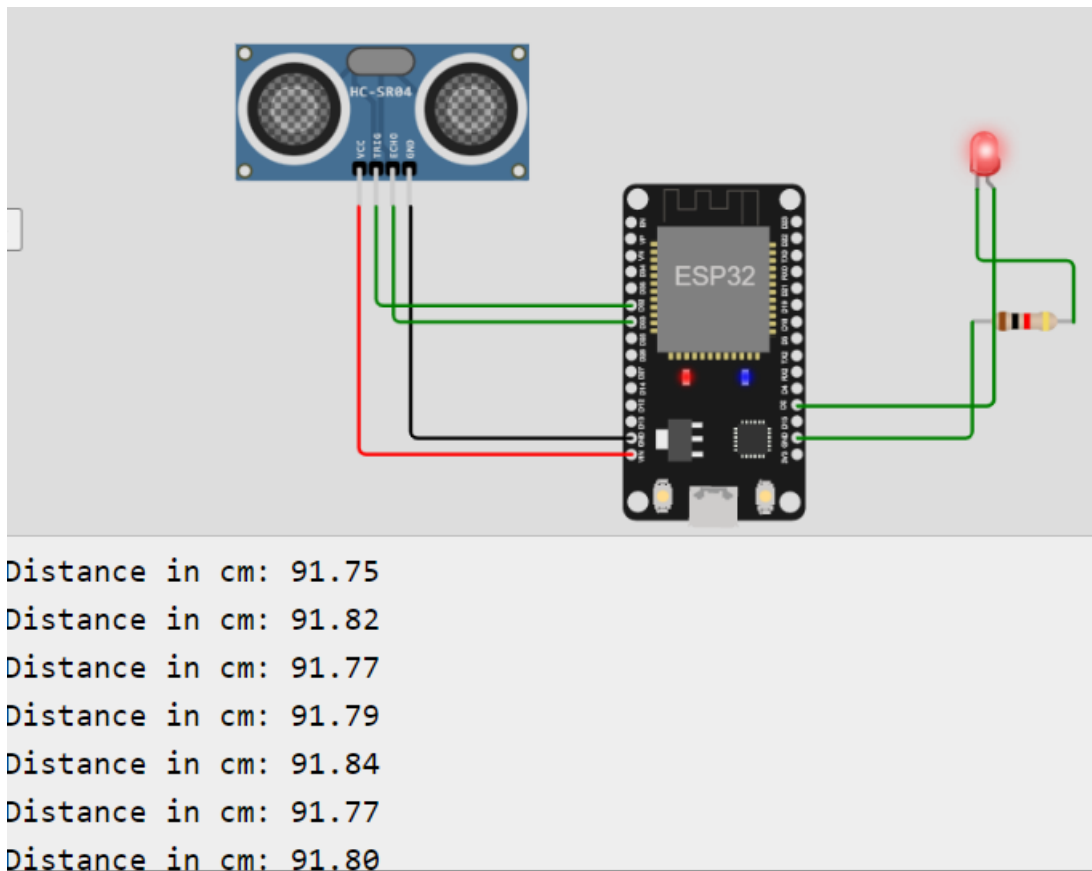
```
    digitalWrite(2,LOW);  
}  
}
```

OUTPUT:

**WHEN THE DISTANCE IS GREATER THAN 100cm FOR
ULTRASONIC SENSOR:**



WHEN THE DISTANCE IS LESS THAN 100cm FOR ULTRASONIC SENSOR:



RESULT:

Thus, the given task has been performed successfully.