

## ASSIGNMENT- 1

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### WOKWI LINK:

With Arduino UNO- <https://wokwi.com/projects/365177109590500353>

With ESP32- <https://wokwi.com/projects/365177953893466113>

### CODE:

1)With Arduino UNO

```
void setup()
{
  pinMode(5, OUTPUT);
  pinMode(4, INPUT);
  pinMode(13, OUTPUT);
  Serial.begin(9600);
}

void loop()
{
  digitalWrite(5,LOW);
  digitalWrite(5,HIGH);
  delayMicroseconds(10);
  digitalWrite(5,LOW);
  float dur=pulseIn(4,HIGH);
  float dis=(dur*0.0343)/2;
  if(dis<100)
  { digitalWrite(13, HIGH);
    delay(1000);}
```

```
else
    {digitalWrite(13, LOW);
    delay(1000);}
Serial.print("Distance: ");
Serial.println(dis);}
```

## 2)With ESP 32

```
void setup()
{
    pinMode(13, OUTPUT);
    pinMode(12, INPUT);
    pinMode(27, OUTPUT);
    Serial.begin(9600);
}

void loop()
{
    digitalWrite(13,LOW);
    digitalWrite(13,HIGH);
    delayMicroseconds(10);
    digitalWrite(13,LOW);
    float dur=pulseIn(12,HIGH);
    float dis=(dur*0.0343)/2;

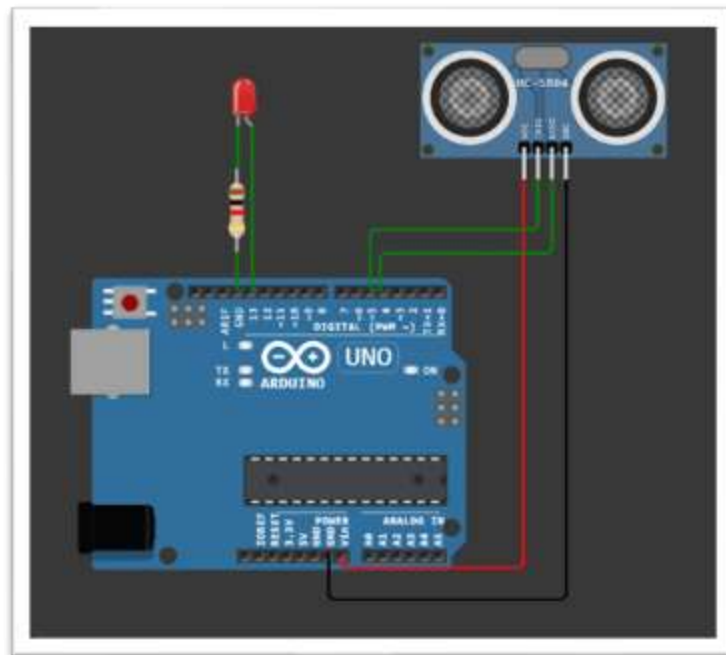
    if(dis<100)
    { digitalWrite(27, HIGH);
    delay(1000);}

    else
    {digitalWrite(27, LOW);
    delay(1000);}
    Serial.print("Distance: ");
```

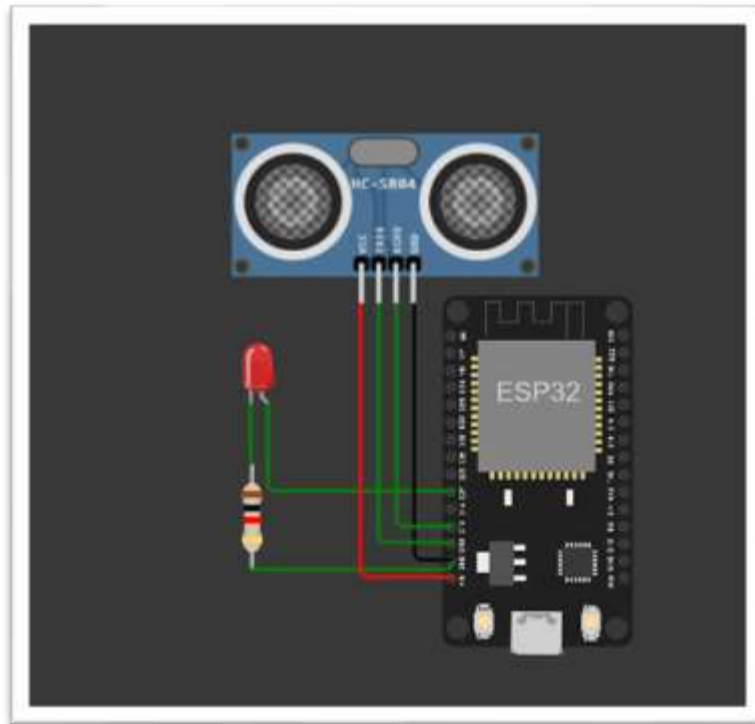
```
Serial.println(dis);  
}
```

### CIRCUIT CONNECTION:

1)With Arduino UNO

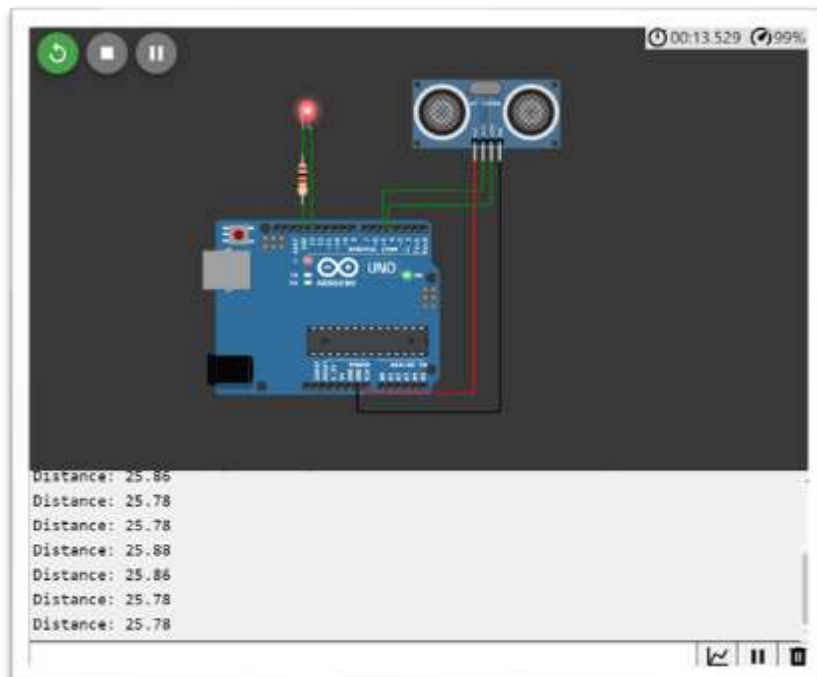


2)With ESP 32



## RESULTS:

1)With Arduino UNO



2)With ESP 32

