

ASSIGNMENT-3

Build wowki product, use ultrasonic sensor and detect the distance from the object. Whenever distance is less than 100ms upload the value to the IBM Cloud. In recent device events upload the data from wowki.

PROGRAM:

```
int t_p=5;
int e_p=18;
float ss=0.034;
long durn;
float dist_cm;
void setup()
{
    Serial.begin(115200);
    pinMode(t_p, OUTPUT);
    pinMode(e_p, INPUT);
}
void loop()
{
    digitalWrite(t_p, LOW);
    delayMicroseconds(2);
    digitalWrite(t_p, HIGH);
    delayMicroseconds(10);
    digitalWrite(t_p, LOW);
    durn=pulseIn(e_p, HIGH);
    dist_cm=durn*ss/2;
    Serial.print("distance= ");
    Serial.println(dist_cm);
    delay(1000);
}
```

}

LINK: <https://wokwi.com/projects/364808951913611265>

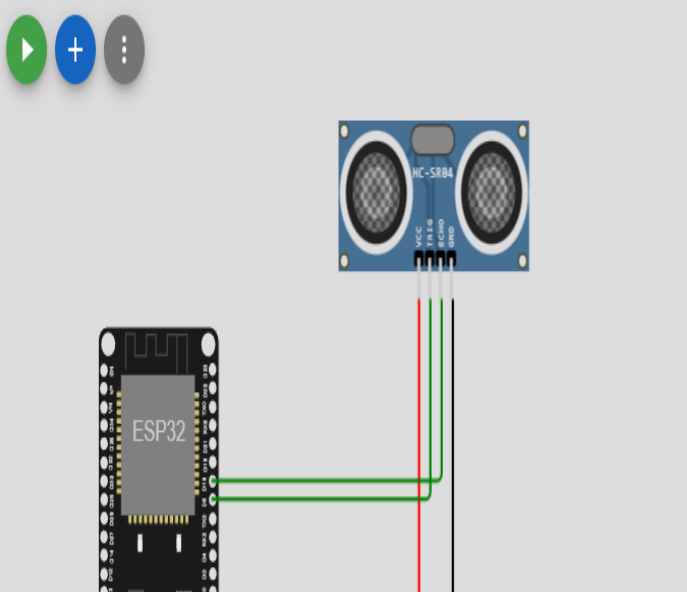
WOKWI

SAVE SHARE Assignment 3 Docs

sketch.ino diagram.json Library Manager

```
1 int t_p=5;
2 int e_p=18;
3 float ss=0.034;
4 long durn;
5 float dist_cm;
6
7 void setup() {
8
9   Serial.begin(115200);
10  pinMode(t_p, OUTPUT);
11  pinMode(e_p, INPUT);
12
13 }
14
15 void loop()
16 {
17   digitalWrite(t_p, LOW);
18   delayMicroseconds(2);
19   digitalWrite(t_p, HIGH);
20   delayMicroseconds(10);
21   digitalWrite(t_p, LOW);
22   durn=pulseIn(e_p, HIGH);
23   dist_cm=durn*ss/2;
24   Serial.print("distance= ");
25   Serial.println(dist_cm);
26   delay(1000);
27 }
```

Simulation



distance= 399.94
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