

ASSIGNMENT-3

NAME	PARAMESHWARI .S
ASSIGNMENT NAME	Build wowki product, use ultrasonic sensor and detect the distance from the object. Whenever distance is less than 100cms

LINK: <https://wokwi.com/projects/365040448176137217>

The screenshot displays the Wokwi web-based simulation environment. The interface includes a top navigation bar with the Wokwi logo, a 'SAVE' button, a 'SHARE' button, a heart icon, the project name 'paramu assingement', and links to 'Docs' and 'SIGN IN'. Below the navigation bar, the 'sketch.ino' file is open, showing the following code:

```
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 }
```

The right pane shows a simulation of the hardware. It features an ESP32 microcontroller board connected to an HC-SR04 ultrasonic sensor. The sensor is connected to the ESP32 via three wires: a green wire for VCC, a red wire for GND, and a black wire for the trig pin. The sensor's echo pin is connected to the ESP32's pin 18. The simulation interface includes a 'Simulation' tab with a play button, a plus button, and a menu button. The bottom status bar shows the system clock as 11:13 AM on 18-05-2023.

WOKWI

paramu assigement

Docs SIGN IN

sketch.ino diagram.json Library Manager

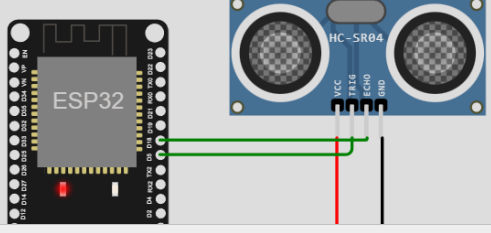
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24     Serial.print("distance= ");
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27 }

```

Simulation

00:04.999 66%



distance= 94.96
distance= 94.98
distance= 94.98
distance= 94.98
distance= 94.98

Type here to search

11:15 AM 18-05-2023

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);  
}
```