

## NalaiyaThiran(IBM)ASSIGNMENT – 4

Write code and connections in wokwi for ultrasonic sensor. Whenever distance is less than 100cms, send “alert” to IBM Cloud and display in device recent events.

Code:

```
#include "Ultrasonic.h"

Ultrasonic ultrasonic(12, 13);
int distance;

void setup() {
    Serial.begin(9600);
}

void loop() {

    distance = ultrasonic.read(CM);

    Serial.print("Distance in CM: ");
    Serial.println(distance);if
    (distance<100)
        Serial.print("alert");
    Serial.println();
    delay(1000);
}
```

# Output:

Activities Google Chrome Nov 5 12:29 PM

W sketch.ino - Wokwi Arduino x

wokwi.com/projects/347469230158905939

WhatsApp Cliq

WOKWI

SAVE SHARE sketch.ino Docs

sketch.ino diagram.json Ultrasonic.h Ultrasonic.cpp Library Manager

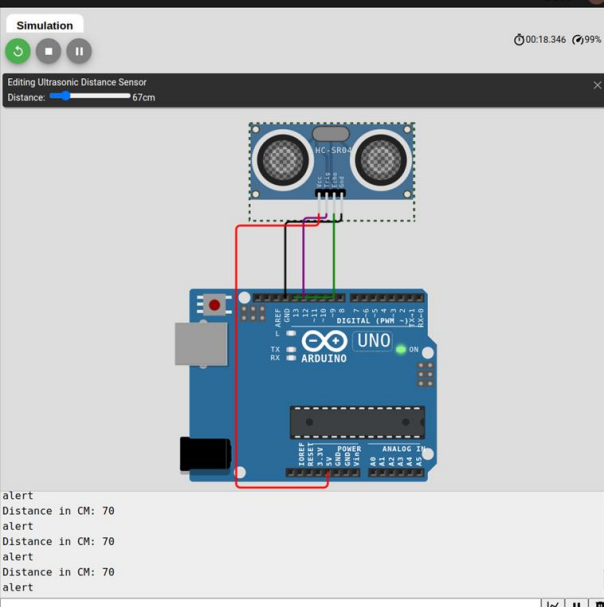
```
1 {
2   "version": 1,
3   "author": "Brinda",
4   "editor": "wokwi",
5   "parts": [
6     {
7       "type": "wokwi-arduino-uno",
8       "id": "uno",
9       "top": 259.31,
10      "left": 31.86,
11      "rotate": 0,
12      "hide": false,
13      "attrs": {}
14    },
15    {
16      "type": "wokwi-hc-sr04",
17      "id": "ultrasonic",
18      "top": 86.99,
19      "left": 109.89,
20      "rotate": 0,
21      "hide": false,
22      "attrs": { "distance": "100" }
23    }
24  ],
25  "connections": [
26    [ "uno:GND.1", "ultrasonic:GND", "black", [ "v-8", "*", "v8" ] ],
27    [ "uno:13", "ultrasonic:ECHO", "green", [ ] ],
28    [ "uno:12", "ultrasonic:TRIG", "purple", [ "*", "v4" ] ],
29    [ "uno:5V", "ultrasonic:VCC", "red", [ "v16", "h-96", "*", "v12" ] ]
30  ]
31 }
```

Simulation

00:18.346 99%

Editing Ultrasonic Distance Sensor

Distance: 67cm



alert  
Distance in CM: 70  
alert  
Distance in CM: 70  
alert  
Distance in CM: 70  
alert

LINK:

<https://wokwi.com/projects/347469230158905939>