

# Nalaiya Thiran (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:

Wokwi - Wokwi Arduino and X

https://wokwi.com/projects/346283817036677714

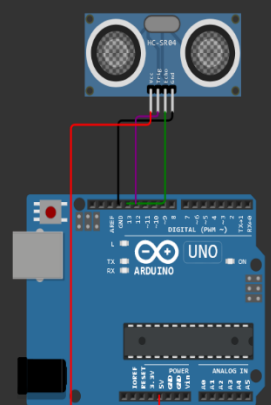
WOKWI SAVE SHARE

Docs D

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

```
1 #include "Ultrasonic.h"
2
3 Ultrasonic ultrasonic(12, 13);
4 int distance;
5
6 void setup() {
7   Serial.begin(9600);
8 }
9
10 void loop() {
11
12   distance = ultrasonic.read(CM);
13
14   Serial.print("Distance in CM: ");
15   Serial.println(distance);
16   if (distance < 100)
17     Serial.print("alert");
18   Serial.println();
19   delay(1000);
20 }
```

Simulation



Distance in CM: 23  
alert  
Distance in CM: 82  
alert  
Distance in CM: 357  
Distance in CM: 135