

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

SAVE

SHARE

Docs

sketch.ino

diagram.json

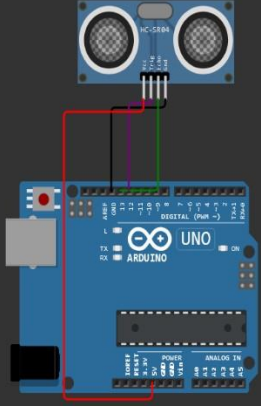
Ultrasonic.h

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   distance = ultrasonic.read(CM);
12
13   Serial.print("Distance in CM: ");
14   Serial.println(distance);
15   if (distance < 100)
16     Serial.print("alert");
17   Serial.println();
18   delay(1000);
19 }
20 }
```

Simulation



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