

Assignment -4

Assignment Date	12 November 2022
Student Name	Kishore S M
Student Roll Number	722819104063
Maximum Marks	2 Marks

Question-1:

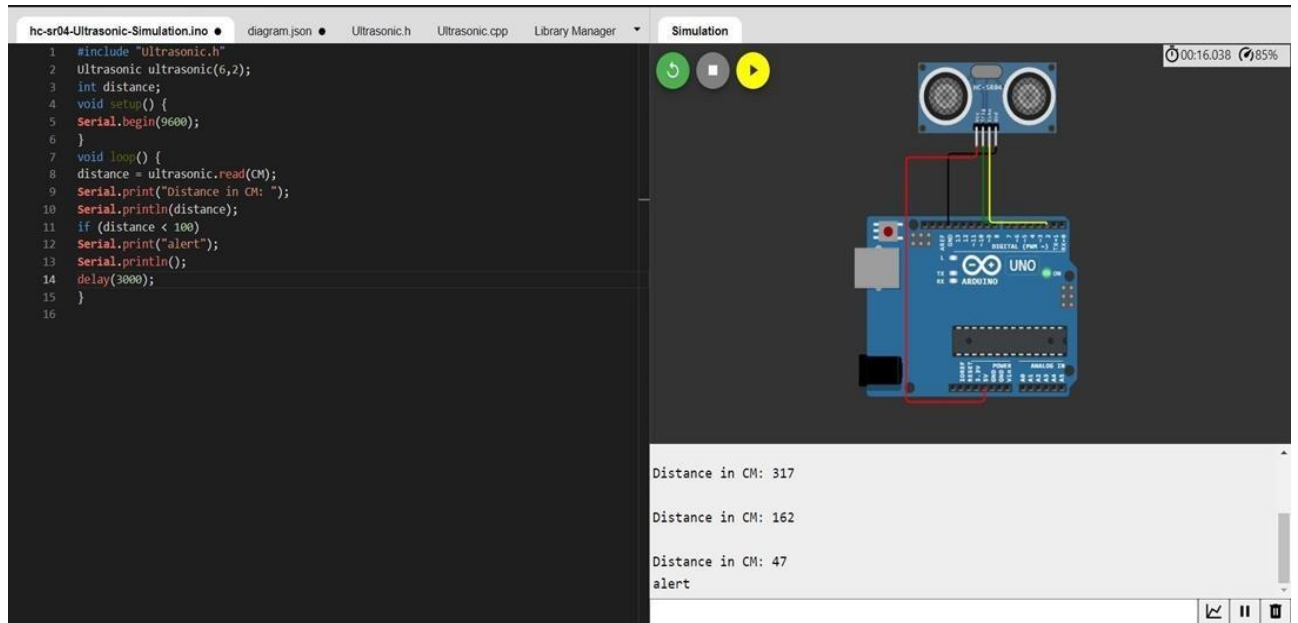
Write code and connections in wokwi for the ultrasonicsensor.

Whenever the distance is less than 100 CMS send an "alert" to the IBM cloud and display in the device recent events.

Solution :

```
#include "Ultrasonic.h"
Ultrasonic ultrasonic(6,2);
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(3000);
}
```

Output :



The screenshot displays the Arduino IDE interface with a simulation running. The code on the left defines an ultrasonic sensor module and prints distance readings. The simulation on the right shows an Arduino Uno connected to an HC-SR04 sensor. The serial monitor at the bottom shows the output of the code.

```
1 #include "Ultrasonic.h"
2 Ultrasonic ultrasonic(6,2);
3 int distance;
4 void setup() {
5   Serial.begin(9600);
6 }
7 void loop() {
8   distance = ultrasonic.read(CM);
9   Serial.print("Distance in CM: ");
10  Serial.println(distance);
11  if (distance < 100)
12    Serial.print("alert");
13    Serial.println();
14    delay(3000);
15  }
16
```

Distance in CM: 317

Distance in CM: 162

Distance in CM: 47

alert