

**Assignment -4**  
Wokwi simulation

Assignment Date	27 October 2022
Student Name	Raghul B
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Maximum Marks	2 Marks

### Question-1:

Write code and connections in wokwi for the ultrasonic sensor. Whenever the distance is less than 100 cms send an "alert" to the IBM cloud and display in the device recent events. Upload document with wokwi share link and images of IBM cloud.

### Solution:

#### Code:

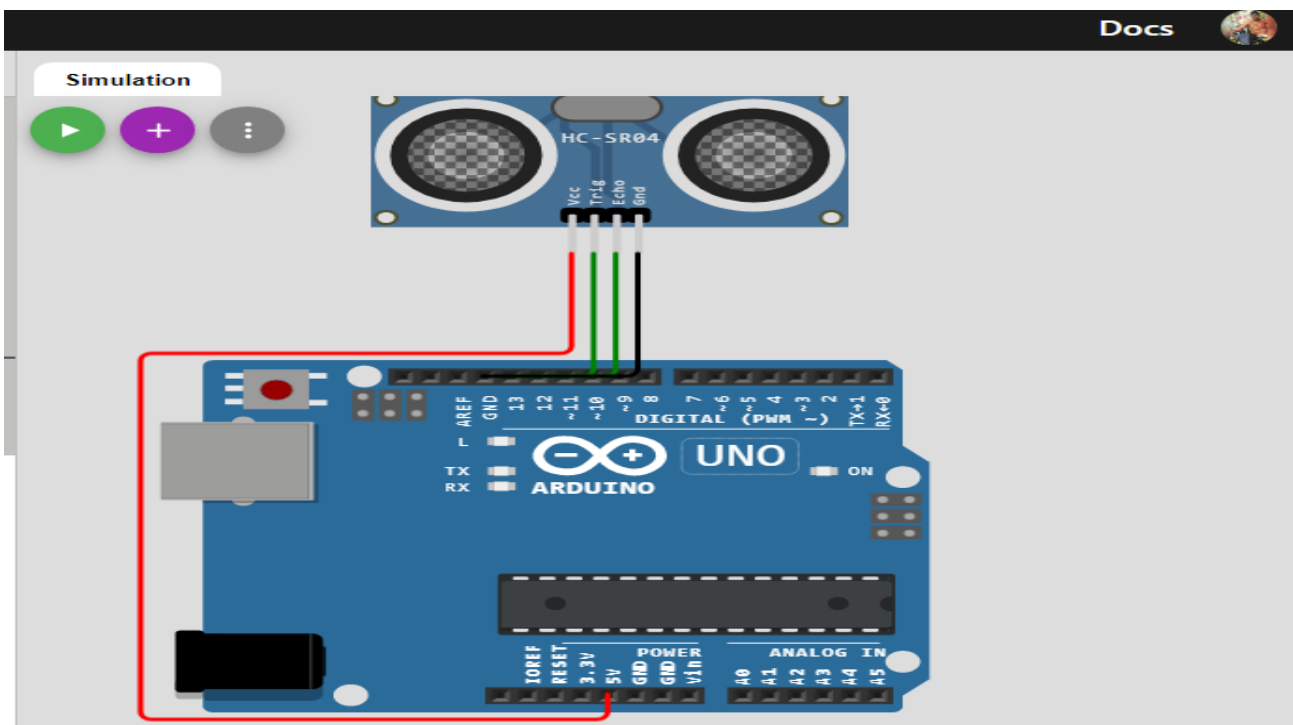
```
#include "Ultrasonic.h"
```

```
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);  
  
  distance = ultrasonic.read(INC);  
  
  Serial.print("Distance in Inches: ");  
  Serial.println(distance);  
  
  delay(1000);  
}
```

## Circuit:



## Output:

wokwi.com/projects/new/arduino-uno

Gmail YouTube Maps

WOKWI SAVE SHARE Docs

sketch.ino diagram.json libraries.txt Library Manager

```
1 #include "Ultrasonic.h"
2 Ultrasonic ultrasonic(12, 13);
3 int distance;
4
5 void setup() {
6   Serial.begin(9600);
7 }
8
9 void loop() {
10
11   distance = ultrasonic.read(CM);
12
13   Serial.print("Distance in CM: ");
14   Serial.println(distance);
15
16   distance = ultrasonic.read(INCH);
17
18   Serial.print("Distance in Inches: ");
19   Serial.println(distance);
20
21   delay(1000);
22 }
23
```

Simulation

Distance in CM: 246  
Distance in Inches: 97  
Distance in CM: 246  
Distance in Inches: 97  
Distance in CM: 142  
Distance in Inches: 56

Wokwi link: <https://wokwi.com/projects/346969084398666324>