

ASSIGNMENT -4

DATE	28 TH OCTOBER2022
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MAXIMUM MARKS	4 MARKS

QUESTION:

WRITE A CODE AND CONNECTIONS IN WOKWI FOR ULTRASONIC SENSOR.WHENEVER DISTANCE IS LESS THAN 100 CMS SEND ALERT TO IBM CLOUD AND DISPLAY IN DEVICE EVENTS.

ANSWER :

WOKWI :

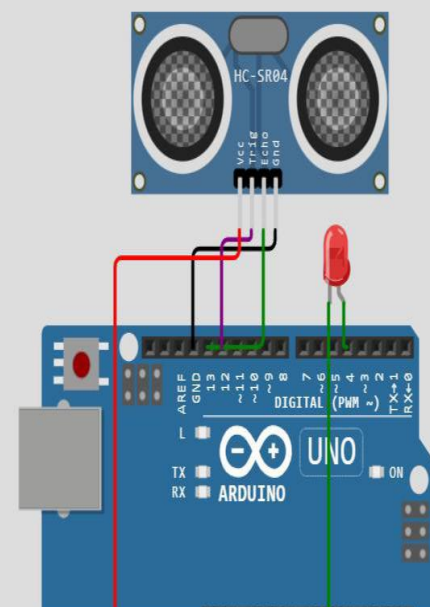
WOKWI

SAVE SHARE

hc-sr04-Ultrasonic-Simulation.ino • diagram.json Ultrasonic.h Ultrasonic.cpp Library Manager

```
1 #include "Ultrasonic.h"
2 Ultrasonic ultrasonic(12, 13);
3 int distance;
4
5 void setup() {
6   Serial.begin(9600);
7   pinMode(6, OUTPUT);
8 }
9
10 void loop() {
11   distance = ultrasonic.read(CM);
12   Serial.print("Distance in CM: ");
13   Serial.println(distance);
14   if(distance<=100)
15   {
16     Serial.println("alert!!!!");
17     digitalWrite(4, HIGH);
18   }
19
20
21   delay(1000);
22 }
```

Simulation



Distance in CM: 50
alert!!!!
Distance in CM: 50
alert!!!!
Distance in CM: 50
alert!!!!

IBM CLOUD

Browse

Action

Device Types

Interfaces

Q

Add Device +

<input type="checkbox"/>	Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
> <input type="checkbox"/>	123	Disconnected	hp1501	Device	Oct 11, 2022 10:32 PM	
▼ <input checked="" type="checkbox"/>	1234	Disconnected	assign4hp	Device	Oct 26, 2022 8:12 PM	→ ...

Identity

Device Information

Recent Events

State

Logs

×

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
event_1hp	{"distance":30}	json	a few seconds ago
event_1hp	{"distance":28}	json	a few seconds ago
event_1hp	{"distance":48}	json	a few seconds ago
event_1hp	{"distance":76}	json	a few seconds ago
event_1hp	{"distance":59}	json	a few seconds ago

1 Simulation running

<

ultrasonic

♥

+ Add New Card

📄 Paste Card

⚙ Settings

Line chart

5 minutes

now

distance

1 Simulation running