

ASSIGNMENT 4

DATE	19th September
STUDENT NAME	KALAISELVI S
STUDENT ROLL NUMBER	917719C040
MAXIMUM MARKS	2 MARKS

QUESTION:

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.

LINK:

<https://wokwi.com/projects/347139072983040596>

SOLUTION:

Sketch.ino

```
void setup() {  
  // put your setup code here, to run once:  
  Serial.begin(115200);  
  Serial.println("Hello, ESP32!");  
}  
void loop() {  
  // put your main code here, to run repeatedly:  
  delay(10); // this speeds up the simulation  
}
```

Diagram.json

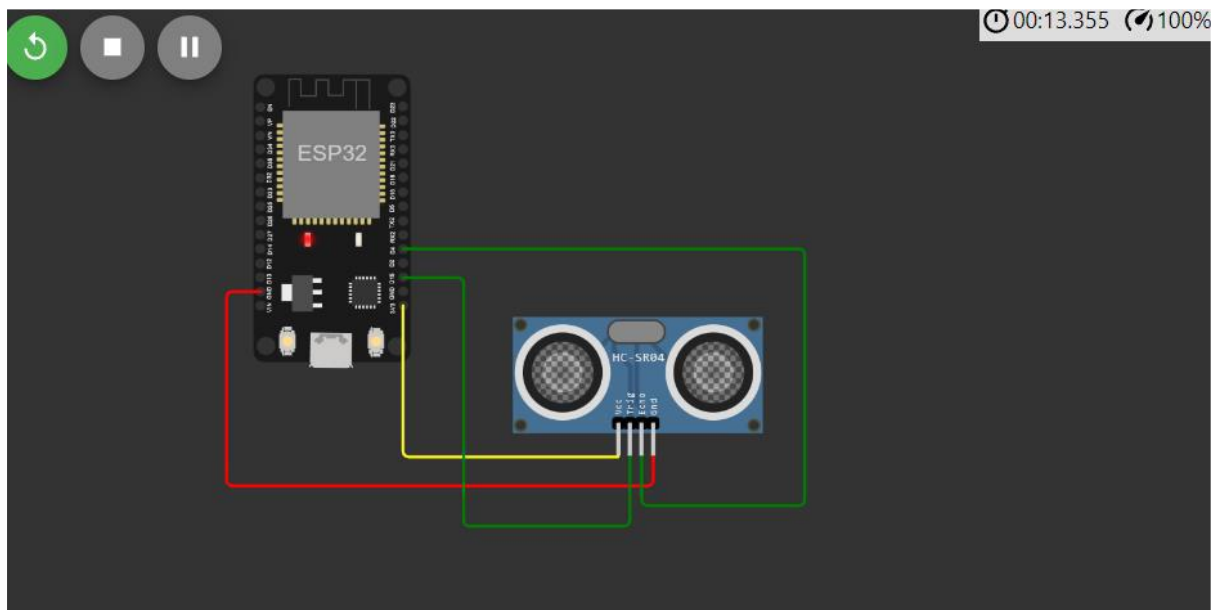
```
{  
  "version": 1,  
  "author": "19C040_KALAISELVI S",
```

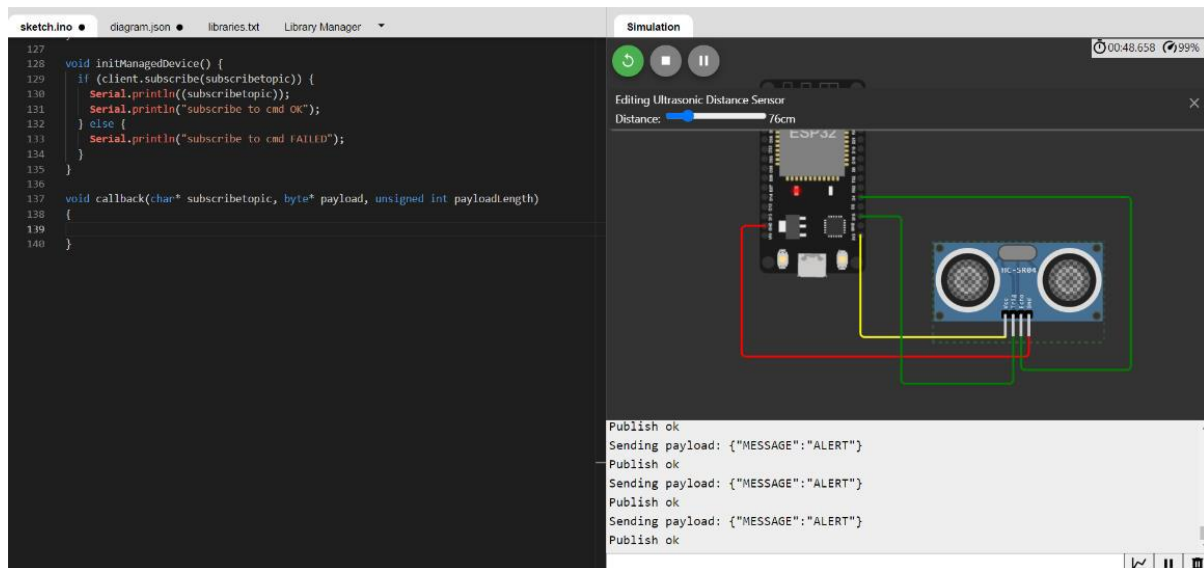
```

"editor": "wokwi",
"parts": [
  { "type": "wokwi-esp32-devkit-v1", "id": "esp", "top": -0.67, "left": 70.67,
"attrs": { } },
  { "type": "wokwi-hc-sr04", "id": "ultrasonic1", "top": 0.63, "left": -154.17,
"attrs": { } }
],
"connections": [
  [ "esp:TX0", "$serialMonitor:RX", "", [ ] ],
  [ "esp:RX0", "$serialMonitor:TX", "", [ ] ],
  [ "ultrasonic1:GND", "esp:GND.2", "black", [ "v0" ] ],
  [ "ultrasonic1:ECHO", "esp:D12", "green", [ "v0" ] ],
  [ "ultrasonic1:TRIG", "esp:D13", "green", [ "v0" ] ],
  [ "ultrasonic1:VCC", "esp:VIN", "red", [ "v0" ] ]
]
}

```

SCREENSHOTS:





Browse

Action

Device Types

Interfaces

Add Device

<

12

Connected

abcd

Device

Oct 19, 2022 10:06 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
Data	{"MESSAGE":"ALERT"}	json	a few seconds ago
Data	{"MESSAGE":"ALERT"}	json	a few seconds ago
Data	{"MESSAGE":"ALERT"}	json	a few seconds ago
Data	{"MESSAGE":"ALERT"}	json	a few seconds ago
Data	{"MESSAGE":"ALERT"}	json	a few seconds ago

>

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Disconnected

zxcv

Device

Oct 20, 2022 6:11 PM