

ASSIGNMENT 4

DATE	19th September
STUDENT NAME	KAVIYA D
STUDENT ROLL NUMBER	917719C042
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

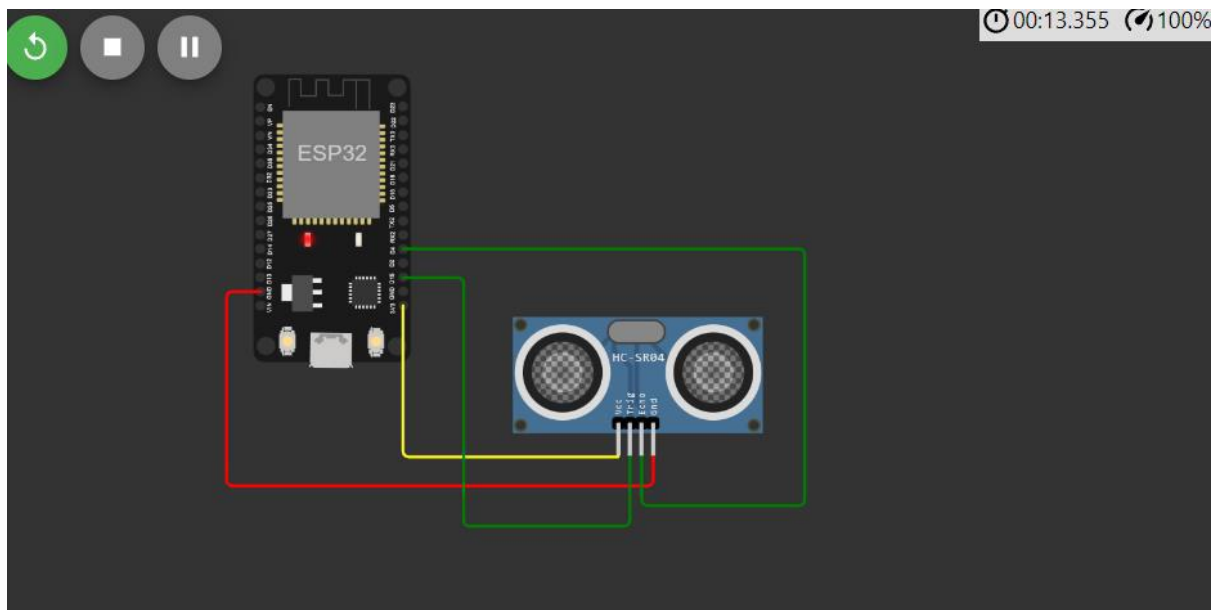
```
{  
  "version": 1,  
  "author": "19C040_KALAISELVI S",
```

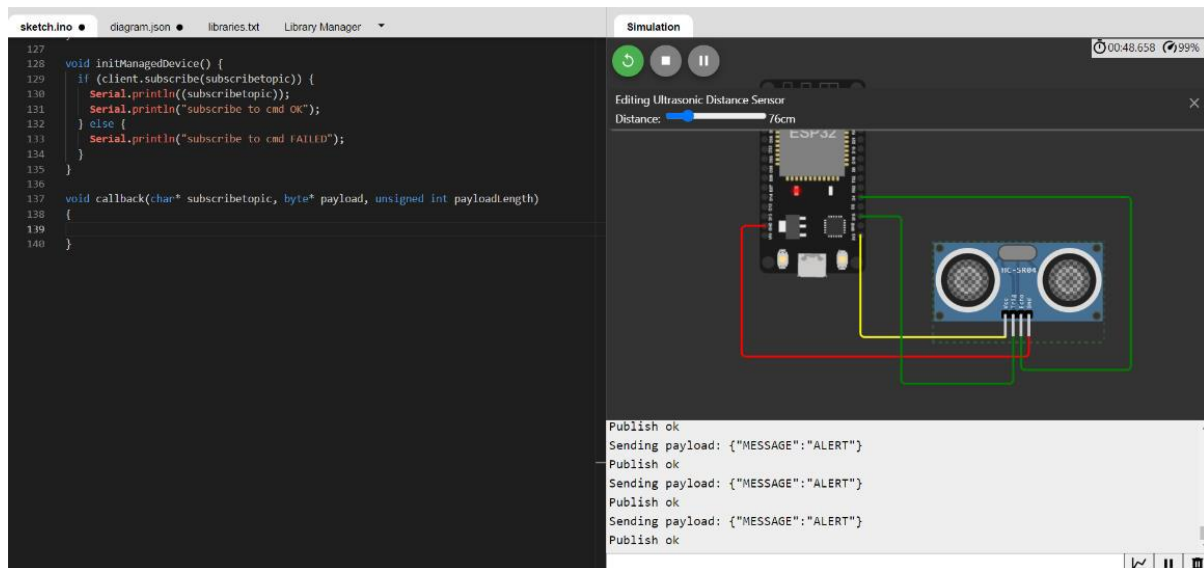
```

"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	

>	12	Disconnected	zxcv	Device	Oct 20, 2022 6:11 PM
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