Assignment-4

Assignment Date	22 October 2022
Student Name	Kiruthika J
Student Roll Number	211419106136
Maximum Marks	2 Marks

Question:

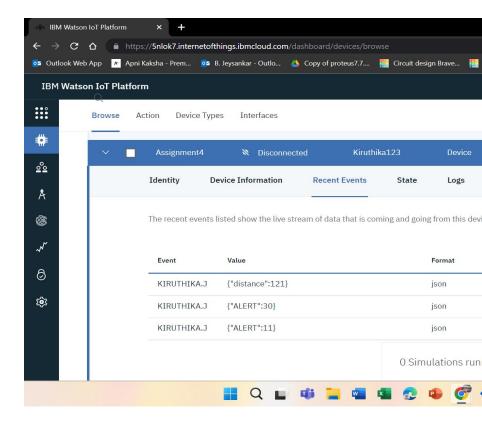
1. Write code and connections in wokwi for ultrasonic sensor. Whenever distance is less than 100 cms send "alert" to IBM cloud and display in device recent events.

Solution:

WOKWI SHARE LINK:

https://wokwi.com/projects/346236896734610003

IMAGE OF IBM CLOUD:



SIMULATION IMAGE:

```
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                  https://wokwi.com/projects/346236896734610003
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WOKWi
                               SHARE
                             libraries.txt
                                          Library Manager
                                                                                             Simulation
 sketch.ino
              diagram.json
    1
         #include <WiFi.h>
         #include <PubSubClient.h>
         void callback(char* subscribetopic,byte* payload, unsigned int payloadLength);
         #define ORG "5nlok7"
    4
         #define DEVICE_TYPE "Kiruthika123"
         #define DEVICE_ID "Assignment4"
         #define TOKEN "WvZOTU1&hM3e!EI*z0"
         String data3;
   10
         char server[]= ORG ".messaging.internetofthings.ibmcloud.com";
         char publishTopic[]="iot-2/evt/KIRUTHIKA.J/fmt/json";
   11
   12
         char subscribeTopic[]="iot-2/cmd/test/fmt/String";
   13
         char authMethod[]="use-token-auth";
   14
         char token[]=TOKEN;
         char clientID[]="d:"ORG":"DEVICE_TYPE":"DEVICE_ID;
   15
   16
                                                                                          publish ok
   17
         WiFiClient wifiClient;
                                                                                          Measured di
         PubSubClient client(server,1883,callback,wifiClient);
   18
                                                                                          Sending pay
   19
   20
         #define ECHO_PIN 12
                                                                                          publish ok
   21
         #define TRIG_PIN 13
                                                                                          Measured di
         #define led 14
   22
                                                                                          Sending pay
   23
                                                                                          publish ok
   24
         void setup() {
   25
          // put your setup code here, to run once:
    26
           Serial.begin(115200):
                                                  Q
```

