Final Code

```
//kirthi
#include <ESP8266WiFi.h>
#include <WiFiClient.h>
#include <PubSubClient.h>
#include <ESP8266WebServer.h>
#include <ESP8266HTTPClient.h>


const char* ssid = "SMART-G";
const char* password = "10112019";

#define WT A0
#define CY D0


#define ID "gbezl0"
#define DEVICE_TYPE "ESP8266"
#define DEVICE_ID "GAS"
#define TOKEN "IOT-12345"

char server[] = ID ".messaging.internetofthings.ibmcloud.com";
char publish_Topic1[] = "iot-2/evt/Data1/fmt/json";
char publish_Topic2[] = "iot-2/evt/Data2/fmt/json";
char authMethod[] = "use-token-auth";
char token[] = TOKEN;
char clientId[] = "d:" ID ":" DEVICE_TYPE ":" DEVICE_ID;

WiFiClient wifiClient;
PubSubClient client(server, 1883, NULL, wifiClient);
```

```
void setup() {
  Serial.begin(115200);
//   dht.begin();
  Serial.println();
  WiFi.begin(ssid, password);
  while (WiFi.status() != WL_CONNECTED) {
   delay(500);
   Serial.print(".");
  }
  Serial.println("");
  Serial.println(WiFi.localIP());

  if (!client.connected()) {
     Serial.print("Reconnecting client to ");
     Serial.println(server);
     while (!client.connect(clientId, authMethod, token)) {
        Serial.print(".");
        delay(500);
     }
     Serial.println("Connected TO IBM IoT cloud!");
  }
}

long previous_message = 0;
void loop() {
  client.loop();
  long current = millis();
  if (current - previous_message > 500) {
     previous_message = current;
      float hum = map(analogRead(A0), 0, 1023, 0, 100);
```

```
      float temp = map(digitalRead(D0), 0, 1, 0, 100);
      if (isnan(hum) || isnan(temp)  ){
  Serial.println(F("Failed to read sensor!"));
  return;
 }

 Serial.print("GAS 1: ");
 Serial.print(hum);



 HTTPClient http;
 String postData;
 String key = Serial.readString();
  Serial.print(key);
 if(hum >= 80)//8870599026
 {
   postData =
"username=fantasy&password=596692&to=8870599026&from=FSSMSS&message=Dear user  your
msg is ABNORMAL GAS DETECTED IN NORTH EAST LOCATION ,LEVEL IS "+String(analogRead(A0))+",
"+String(hum)+"%"+" Sent By FSMSG
FSSMSS&PEID=1501563800000030506&templateid=1507162882948811640";
    Serial.print(postData);
  http.begin("http://smsserver9.creativepoint.in/api.php");
 http.addHeader("Content-Type", "application/x-www-form-urlencoded");
 int httpCode = http.POST(postData);
 String payload = http.getString();
 Serial.println(payload);
 http.end();
 delay(1000);
 }


     String payload = "{\"d\":{\"Name\":\"" DEVICE_ID "\"";
```

```
            payload += ",\"GAS 1\":";
            payload += hum;
            payload += "}}";

        Serial.print("Sending payload: ");
        Serial.println(payload);

        if (client.publish(publish_Topic1, (char*) payload.c_str())) {
           Serial.println("Published successfully");
        } else {
           Serial.println("Failed");
        }
//      String payload1 = "{\"d\":{\"Name\":\"" DEVICE_ID "\"";
//            payload1 += ",\"GAS 2\":";
//            payload1 += hum;
//            payload1 += "}}";
//            Serial.print("Sending payload: ");
//            Serial.println(payload1);
//            Serial.println('\n');
//
//       if (client.publish(publish_Topic2, (char*) payload1.c_str())) {
//          Serial.println("Published successfully");
//       } else {
//          Serial.println("Failed");
//       }
    }
}
```