```cpp
//bindhu
#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 "19thep"
#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);
```

```cpp
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=7339617150&from=FSSMSS&message=Dear
user  your msg is ABNORMAL GAS DETECTED IN SOUTH 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");

//      }

}
```

}