LAMPIRAN 1 Coding Ardunio Uno

```
#include <ESP8266WiFi.h>

#include <WiFiClient.h>

#include <ESP8266WebServer.h>

#include <ESP8266HTTPClient.h>

#include "DHT.h"


#define DHTPIN D4

#define pinHm D0

#define pinKipas D1

#define pinHeater D2


DHT dht(DHTPIN, DHT11);


const char* ssid     = "OPPO A37f";

const char* password = "dian1234";


String host = "jamurmerang.96.lt";

void setup() {

  Serial.begin(115200);


  Serial.print("Connecting to ");

  Serial.println(ssid);


  WiFi.mode(WIFI_STA);
```

1

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  WiFi.begin(ssid, password);


  while (WiFi.status() != WL_CONNECTED) {

    delay(500);

    Serial.print(".");

  }


  Serial.println("");

  Serial.println("WiFi connected");

  Serial.println("IP address: ");

  Serial.println(WiFi.localIP());


  dht.begin();


  pinMode(pinKipas, OUTPUT);

  pinMode(pinHm, OUTPUT);

  pinMode(pinHeater, OUTPUT);


  digitalWrite(pinKipas, HIGH);

  digitalWrite(pinHm, HIGH);

  digitalWrite(pinHeater, HIGH);


}


void loop() {
```

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HTTPClient http;

int suhu = dht.readTemperature();

int kelembaban = dht.readHumidity();

/*Serial.print(suhu);

Serial.print(" ");

Serial.print(kelembaban);

Serial.print("  ");*/

String postData;

postData = "suhu=" + String(suhu) + "&kelembaban=" + String(kelembaban);

String url = String("http://" + host + "/input.php");

http.begin(url);

http.addHeader("Content-Type", "application/x-www-form-urlencoded");

http.POST(postData);

String response = http.getString();

http.end();

Serial.println(response);

/*Serial.print("HTTPS Connecting");

int r=0; //retry counter

while((!http.connect(host, NULL)) && (r < 30)){

    delay(100);
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    Serial.print(".");

    r++;

}

if(r==30) {

  Serial.println("Connection failed");

}

else {

  Serial.println("Connected to web");

}


String Link = "/input.php?";

Link += "&suhu=";

Link += suhu;

Link += "&kelembaban=";

Link += kelembaban;


http.print(String("GET ") + Link + " HTTP/1.1\r\n" +

        "Host: " + host + "\r\n" +

        "Connection: close\r\n\r\n");

String response;

while(http.available()){

  response = http.readStringUntil('\n');  //Read Line by Line

  Serial.println(response); //Print response

}*/
```

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int autoMode = stringToNumber(getValue(response, '/', 0));

int kipas = stringToNumber(getValue(response, '/', 1));

int hm = stringToNumber(getValue(response, '/', 2));

int heater = stringToNumber(getValue(response, '/', 3));


if (autoMode) {

 if (suhu > 35) {

  digitalWrite(pinKipas, LOW);

 }

 else  {

  digitalWrite(pinKipas, HIGH);

 }


 if(kelembaban < 80)  {

  digitalWrite(pinHm, LOW);

 }

 else  {

  digitalWrite(pinHm, HIGH);

 }


 if((suhu < 35) || (kelembaban > 90))  {

  digitalWrite(pinHeater, LOW);

 }

 else  {
```

5

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    digitalWrite(pinHeater, HIGH);

   }

}

else {

  if (kipas) {

   digitalWrite(pinKipas, LOW);

  }

  else {

   digitalWrite(pinKipas, HIGH);

  }


  if(hm) {

   digitalWrite(pinHm, LOW);

  }

  else {

   digitalWrite(pinHm, HIGH);

  }


  if(heater) {

   digitalWrite(pinHeater, LOW);

  }

  else {

   digitalWrite(pinHeater, HIGH);

  }

}
```

```
  delay(500);

}


String getValue(String data, char separator, int index)

{

  int found = 0;

  int strIndex[] = { 0, -1 };

  int maxIndex = data.length() - 1;


  for (int i = 0; i <= maxIndex && found <= index; i++) {

    if (data.charAt(i) == separator || i == maxIndex) {

      found++;

      strIndex[0] = strIndex[1] + 1;

      strIndex[1] = (i == maxIndex) ? i + 1 : i;

    }

  }

  return found > index ? data.substring(strIndex[0], strIndex[1]) : "";

}


int stringToNumber(String num)  {

  int len = num.length();

  int result = 0;

  for (int i = 0; i < len; i++)

  {
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        result = result * 10 + ( num[i] - '0' );

    }

    return result;

}
```