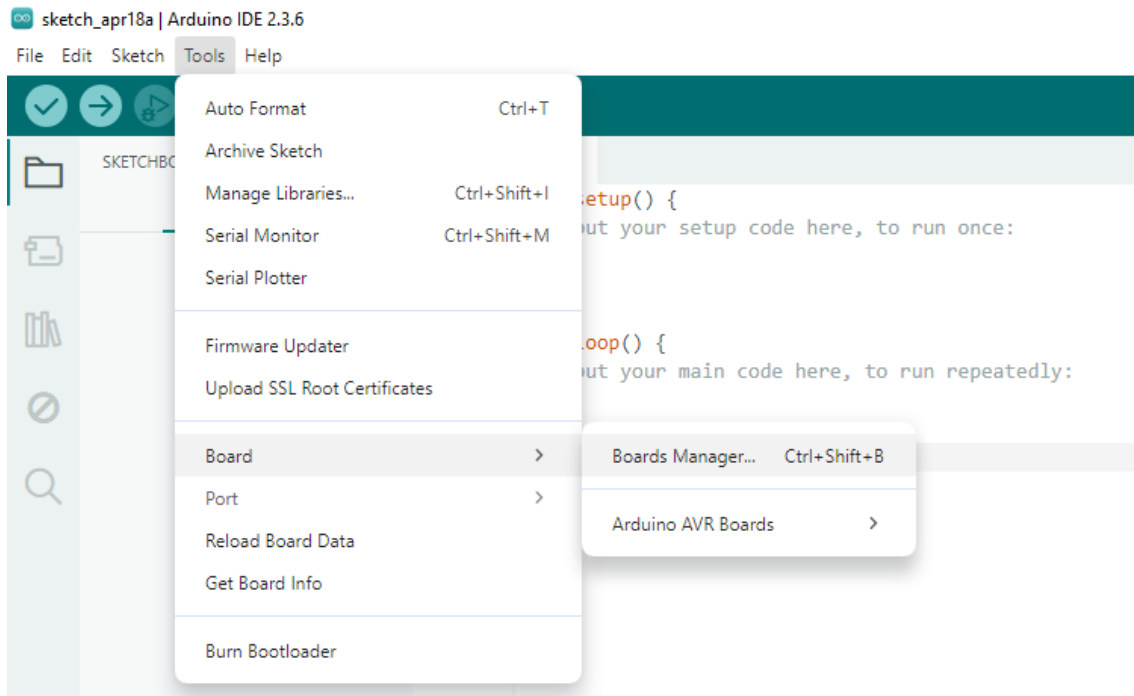
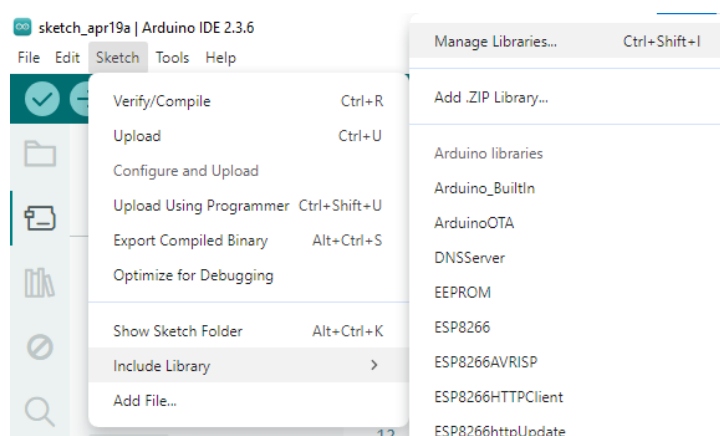
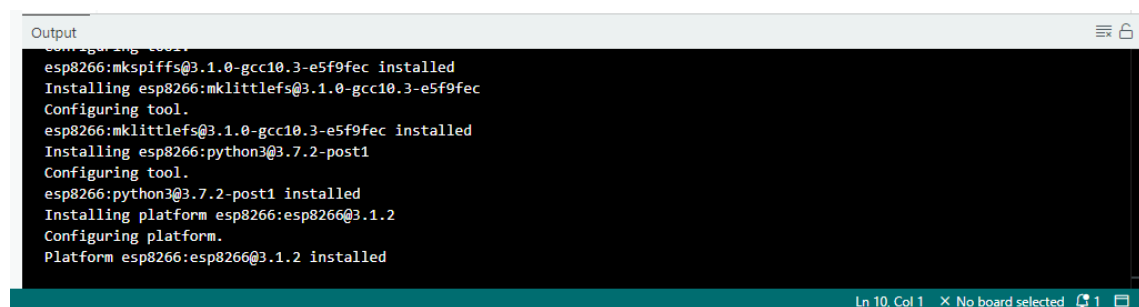
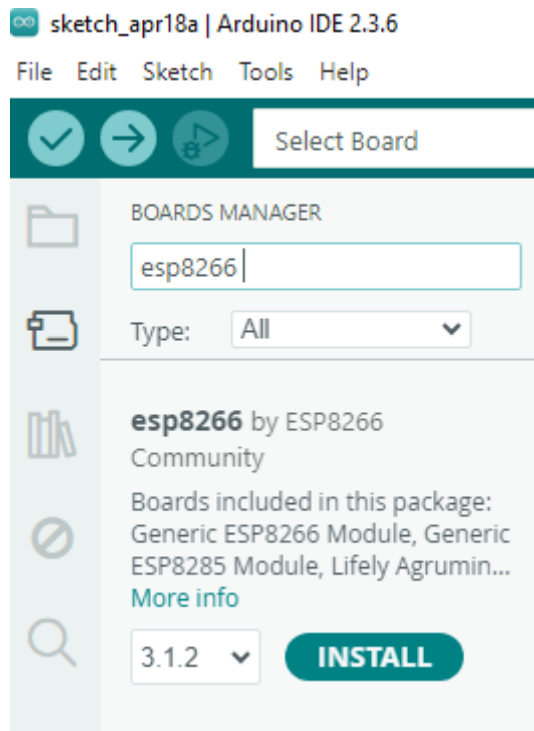
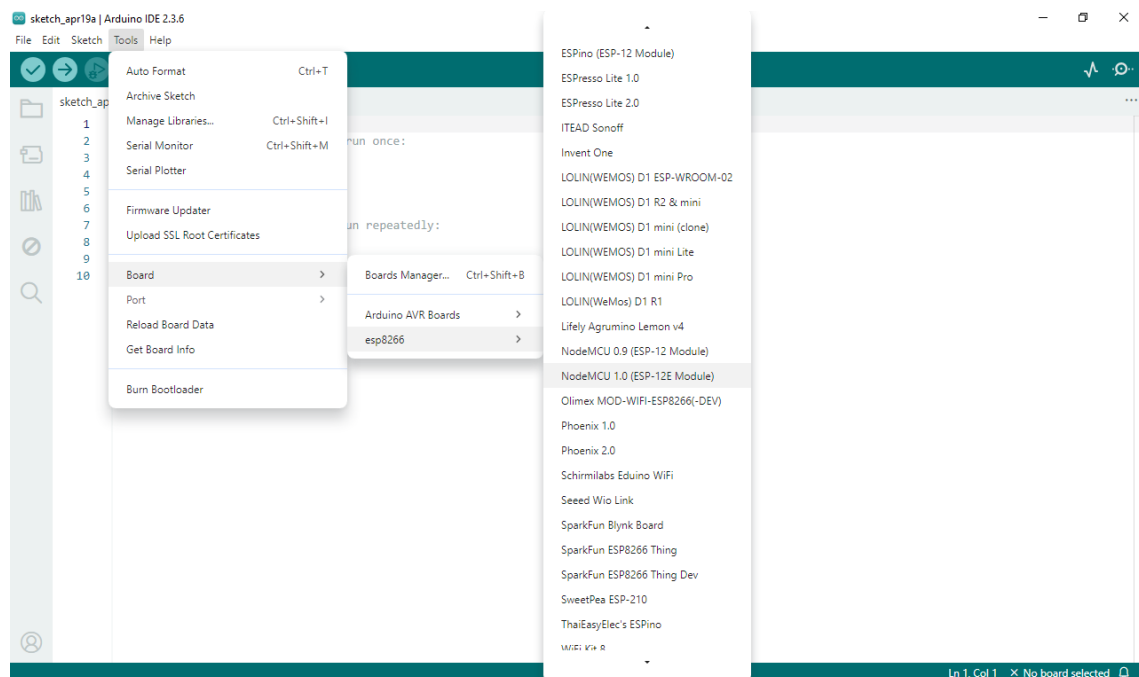
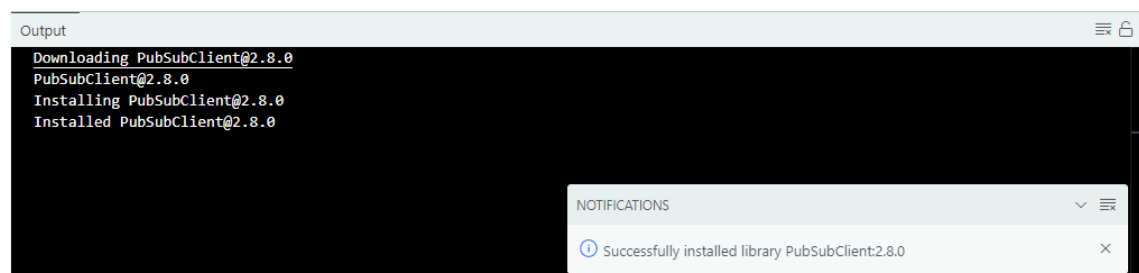
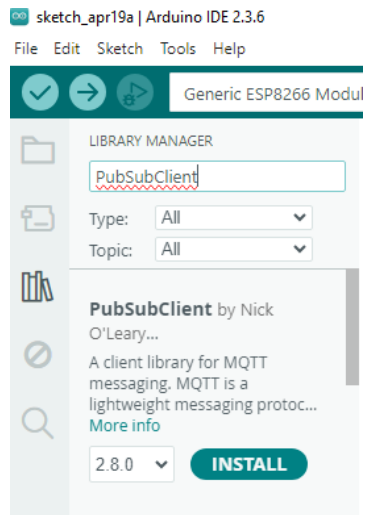
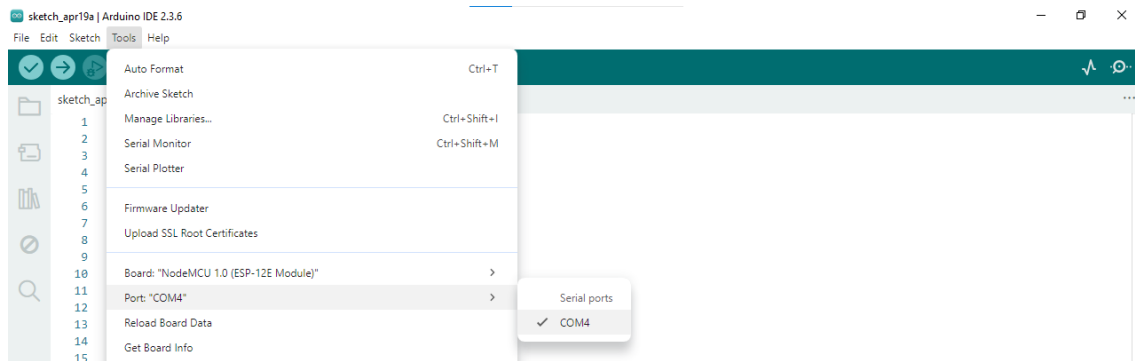


http://arduino.esp8266.com/stable/package_esp8266com_index.json

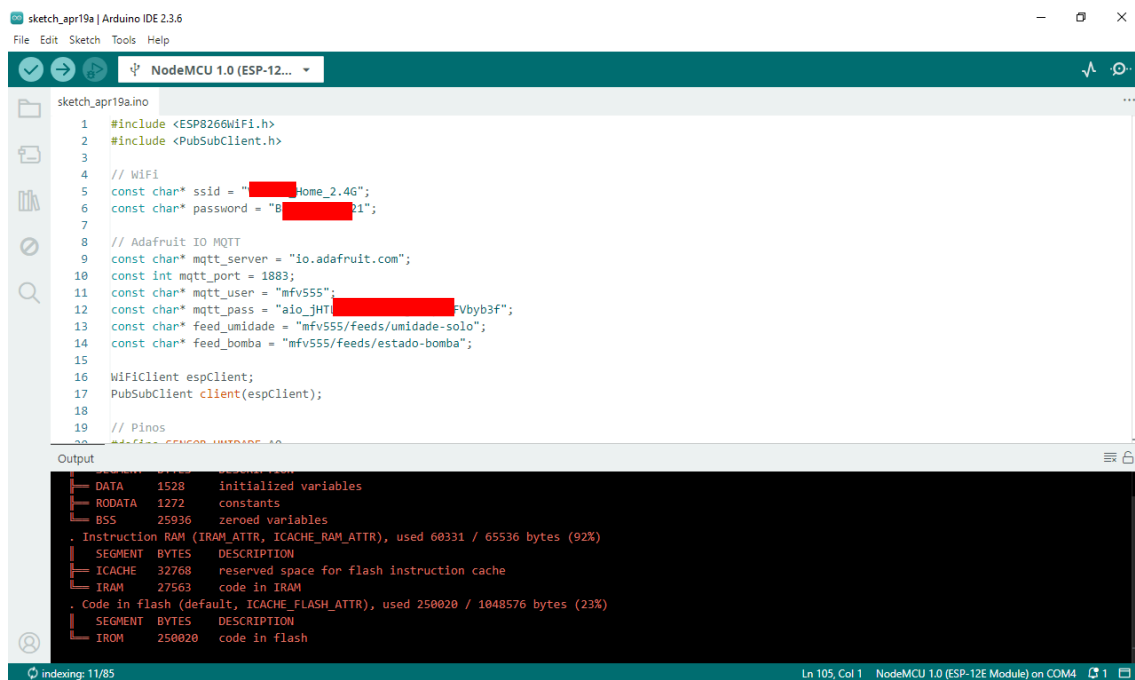
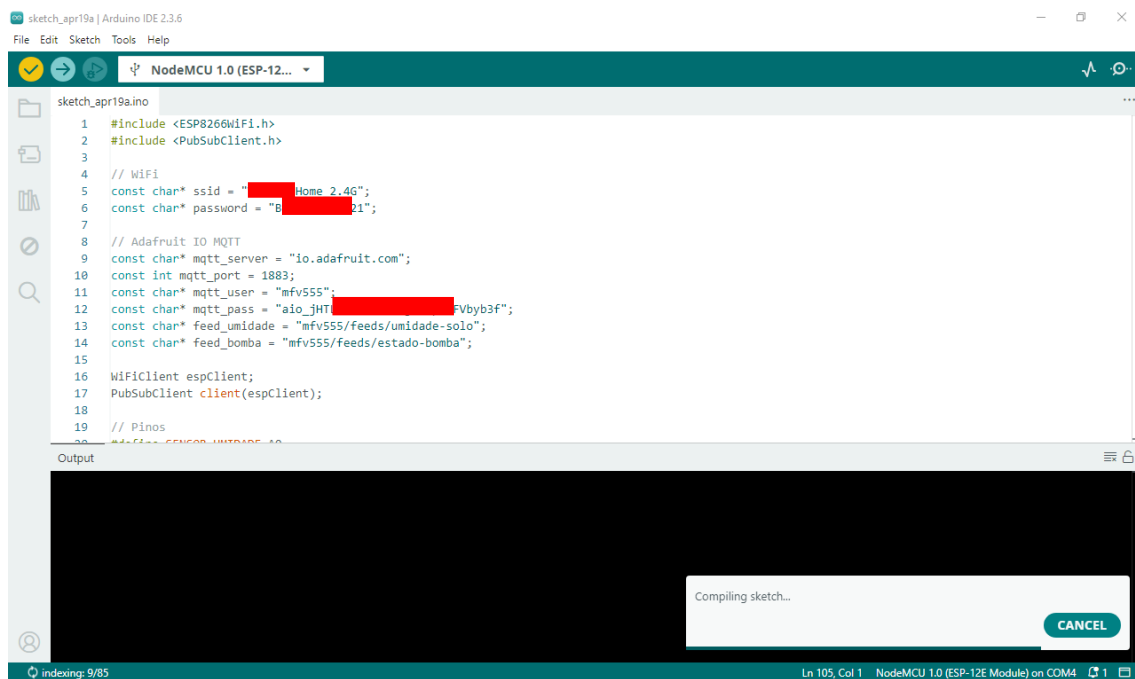








Verificação do código:



Upload

sketch_apr19a | Arduino IDE 2.3.6

File Edit Sketch Tools Help

NodeMCU 1.0 (ESP-12...

sketch_apr19a.ino

```
1 #include <ESP8266WiFi.h>
2 #include <PubSubClient.h>
3
4 // WiFi
5 const char* ssid = "Home 2.4G";
6 const char* password = "821";
7
8 // Adafruit IO MQTT
9 const char* mqtt_server = "io.adafruit.com";
10 const int mqtt_port = 1883;
11 const char* mqtt_user = "mfv555";
12 const char* mqtt_pass = "aio_jHTFVbyb3f";
13 const char* feed_umidade = "mfv555/feeds/umidade-solo";
14 const char* feed_bomba = "mfv555/feeds/estado-bomba";
15
16 WiFiClient espClient;
17 PubSubClient client(espClient);
18
19 // Pinos
20 #define SENSOR_UMIDADE_A0
```

Output

Writing at 0x0008000... (23 %)
Writing at 0x000c000... (30 %)
Writing at 0x0010000... (38 %)
Writing at 0x0014000... (46 %)
Writing at 0x0018000... (53 %)
Writing at 0x001c000... (61 %)
Writing at 0x0020000... (69 %)
Writing at 0x0024000... (76 %)
Writing at 0x0028000... (84 %)
Writing at 0x002c000... (92 %)

Uploading...

CANCEL

indexing: 27/86

Ln 105, Col 1 NodeMCU 1.0 (ESP-12E Module) on COM4 2

sketch_apr19a | Arduino IDE 2.3.6

File Edit Sketch Tools Help

NodeMCU 1.0 (ESP-12...

sketch_apr19a.ino

```
72 setup_wifi();
73 client.setServer(mqtt_server, mqtt_port);
74 client.setCallback(callback);
75 }
76
77 void loop() {
78   if (!client.connected()) {
79     reconnect();
80   }
81   client.loop();
82
83   int valor_umidade = analogRead(SENSOR_UMIDADE);
84   Serial.print("Umidade: ");
85   Serial.println(valor_umidade);
86
87   // Publica umidade no Adafruit IO
88   char buffer[10];
89   sprintf(buffer, sizeof(buffer), "%d", valor_umidade);
90   client.publish(feed_umidade, buffer);
91 }
```

Output

Writing at 0x0020000... (69 %)
Writing at 0x0024000... (76 %)
Writing at 0x0028000... (84 %)
Writing at 0x002c000... (92 %)
Writing at 0x0030000... (100 %)
Wrote 284528 bytes (288685 compressed) at 0x00000000 in 19.4 seconds (effective 117.6 kbit/s).
Hash of data verified.
Leaving...
Hard resetting via RTS pin...

NOTIFICATIONS

Done uploading.

Done compiling.

Ln 105, Col 1 NodeMCU 1.0 (ESP-12E Module) on COM4 2

sketch_apr19a | Arduino IDE 2.3.6

File Edit Sketch Tools Help

NodeMCU 1.0 (ESP-12...

SKETCHBOOK

sketch_apr19a

```
sketch_apr19a.ino
83 int valor_umidade = analogRead(SENSOR_UMIDADE);
84 Serial.print("Umidade: ");
85 Serial.println(valor_umidade);
86
87 // Publica umidade no Adafruit IO
88 char buffer[10];
89 snprintf(buffer, sizeof(buffer), "%d", valor_umidade);
90 client.publish(feed_umidade, buffer);
91
92 // Modo automático (prioridade solo seco)
93 if (valor_umidade > limite_umidade) {
94   // solo seco
95   digitalWrite(RELE, LOW); // liga bomba
96   client.publish(feed_bomba, "Ligada");
97 } else if (estado_manual == "Desligada") {
98   // solo úmido e comando manual é "Desligada"
99   digitalWrite(RELE, HIGH); // desliga bomba
100  client.publish(feed_bomba, "Desligada");
101 }
```

Output Serial Monitor X

Message (Enter to send message to 'NodeMCU 1.0 (ESP-12E Module)' on 'COM4')

No Line Ending 115200 baud

```
16:50:20.717 -> Umidade: 1024
16:50:30.686 -> Tentando conectar ao MQTT...Conectado.
16:50:31.572 -> Umidade: 1024
16:50:41.536 -> Tentando conectar ao MQTT...Conectado.
16:50:41.968 -> Umidade: 1024
16:50:51.994 -> Tentando conectar ao MQTT...Conectado.
16:50:52.434 -> Umidade: 1024
16:51:02.426 -> Tentando conectar ao MQTT...Conectado.
16:51:02.860 -> Umidade: 1024
```

NEW SKETCH

CLI Daemon Offline indexing: 10/85

Ln 100, Col 45 NodeMCU 1.0 (ESP-12E Module) on COM4 2

