

Fase_5/Ir_Alem_1/wokwi_teste.py

```
1 import network
2 import time
3 from machine import Pin
4 import dht
5 import ujson
6 import urequests
7
8 sensor = dht.DHT22(Pin(15))
9
10 def connect_to_wifi():
11     print("Connecting to WiFi", end="")
12     sta_if = network.WLAN(network.STA_IF)
13     sta_if.active(True)
14     sta_if.connect('Wokwi-GUEST', '')
15     while not sta_if.isconnected():
16         print(".", end="")
17         time.sleep(0.1)
18     print("Connected to WiFi:", sta_if.isconnected())
19     print("IP Address:", sta_if.ifconfig()[0])
20
21 connect_to_wifi()
22 api_url = "https://g12bbd4aea16cc4-orcl1.adb.ca-toronto-1.oraclecloudapps.com/ords/fiap/leituras/"
23
24 prev_weather = ""
25 while True:
26     print("Measuring weather conditions... ", end="")
27     sensor.measure()
28     humidity = sensor.humidity() # temperature = sensor.temperature()
29     payload = {
30         "data_leitura": "2025-02-27T13:16:36.333Z",
31         "sensor": "DHT22",
32         "valor": humidity
33     }
34     message = ujson.dumps(payload)
35
36     if message != prev_weather:
37         print("Reporting to Server:", message)
38         headers = {"Content-Type": "application/json"}
39         try:
40             response = urequests.post(api_url, headers=headers, data=message)
41             if response.status_code == 201:
42                 print("Response Status Code:", response.status_code)
43                 print("Response Content:", response.text)
44                 print("Data successfully posted to the server!")
45             else:
46                 print("Failed to post data. Status code:", response.status_code)
47             response.close()
48         except Exception as e:
49             print("Error:", e)
50         prev_weather = message
51
52     time.sleep(5)
53
```