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Praktek 1

```
#include <WiFi.h>
#include <WiFiClientSecure.h>
#include <UniversalTelegramBot.h>

// Wifi network station credentials
#define WIFI_SSID "RPLA_2.4"
#define WIFI_PASSWORD "utdijogja"

// Telegram BOT Token (Get from Botfather)
#define BOT_TOKEN "7650684774:AAGob6Ye1lWLl0ZtvmRbhDjqZAoXHN9a0ik"

#define LED1 19
#define LED2 18
#define LED3 5
#define LED4 17

const unsigned long BOT_MTBS = 1000; // mean time between scan messages

WiFiClientSecure secured_client;
UniversalTelegramBot bot(BOT_TOKEN, secured_client);
unsigned long bot_lasttime; // last time messages' scan has been done

int led1Status = 0;
int led2Status = 0;
int led3Status = 0;
int led4Status = 0;

void handleNewMessages(int numNewMessages)
{
  Serial.print("handleNewMessages ");
  Serial.println(numNewMessages);

  for (int i = 0; i < numNewMessages; i++)
  {
    String chat_id = bot.messages[i].chat_id;
    String text = bot.messages[i].text;
```

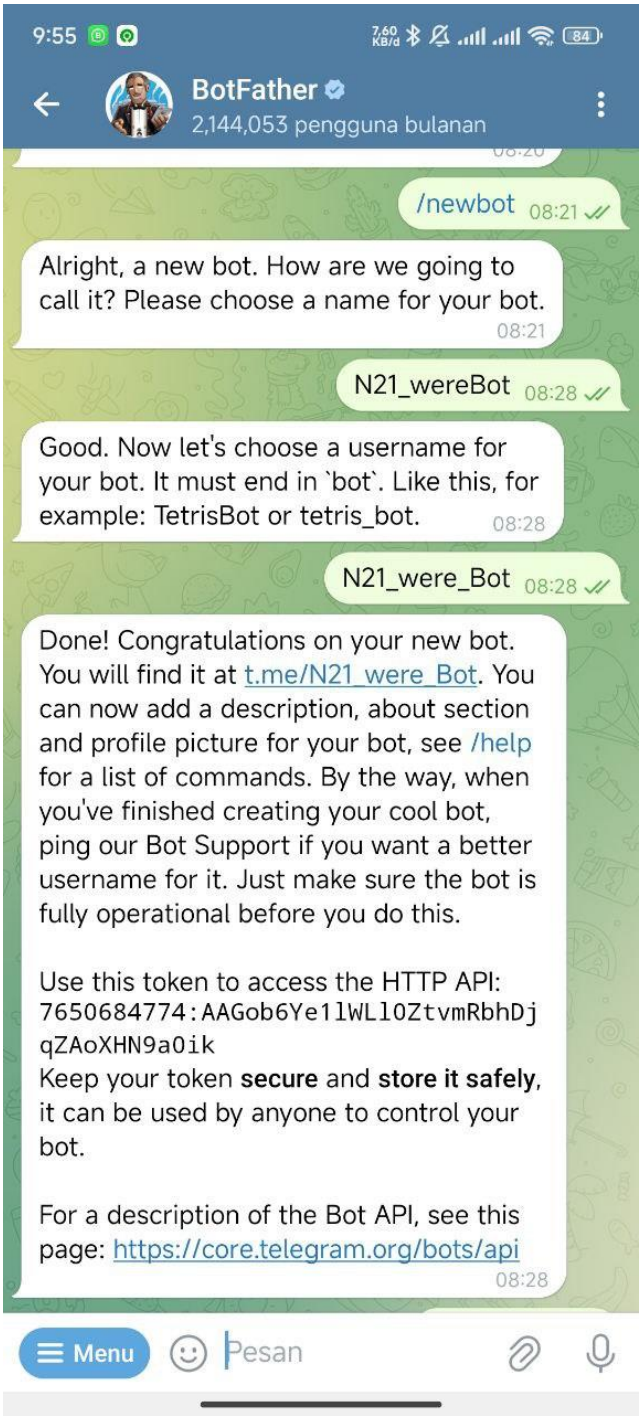
```
String from_name = bot.messages[i].from_name;
if (from_name == "")
  from_name = "Guest";

// Commands for LED 1
if (text == "/led1on")
{
  digitalWrite(LED1, HIGH);
  led1Status = 1;
  bot.sendMessage(chat_id, "Led1 ON", "");
}
if (text == "/led1off")
{
  digitalWrite(LED1, LOW);
  led1Status = 0;
  bot.sendMessage(chat_id, "Led1 OFF", "");
}

// Commands for LED 2
if (text == "/led2on")
{
  digitalWrite(LED2, HIGH);
  led2Status = 1;
  bot.sendMessage(chat_id, "Led2 ON", "");
}
if (text == "/led2off")
{
  digitalWrite(LED2, LOW);
  led2Status = 0;
  bot.sendMessage(chat_id, "Led2 OFF", "");
}

// Commands for LED 3
if (text == "/led3on")
{
  digitalWrite(LED3, HIGH);
  led3Status = 1;
  bot.sendMessage(chat_id, "Led3 ON", "");
}
if (text == "/led3off")
{
  digitalWrite(LED3, LOW);
  led3Status = 0;
  bot.sendMessage(chat_id, "Led3 OFF", "");
}

// Commands for LED 4
if (text == "/led4on")
```

```
    {
      digitalWrite(LED4, HIGH);
      led4Status = 1;
      bot.sendMessage(chat_id, "Led4 ON", "");
    }
    if (text == "/led4off")
    {
      digitalWrite(LED4, LOW);
      led4Status = 0;
      bot.sendMessage(chat_id, "Led4 OFF", "");
    }

    if (text == "/status")
    {
      String statusMessage = "Status:\n";
      statusMessage += "Led1: " + String(led1Status ? "ON" : "OFF") + "\n";
      statusMessage += "Led2: " + String(led2Status ? "ON" : "OFF") + "\n";
      statusMessage += "Led3: " + String(led3Status ? "ON" : "OFF") + "\n";
      statusMessage += "Led4: " + String(led4Status ? "ON" : "OFF") + "\n";
      bot.sendMessage(chat_id, statusMessage, "");
    }

    if (text == "/start")
    {
      String welcome = "Welcome to Universal Arduino Telegram Bot library, " + from_name + ".\n";
      welcome += "This is Flash Led Bot example.\n\n";
      welcome += "/led1on : to switch Led1 ON\n";
      welcome += "/led1off : to switch Led1 OFF\n";
      welcome += "/led2on : to switch Led2 ON\n";
      welcome += "/led2off : to switch Led2 OFF\n";
      welcome += "/led3on : to switch Led3 ON\n";
      welcome += "/led3off : to switch Led3 OFF\n";
      welcome += "/led4on : to switch Led4 ON\n";
      welcome += "/led4off : to switch Led4 OFF\n";
      welcome += "/status : Returns current status of all LEDs\n";
      bot.sendMessage(chat_id, welcome, "");
    }
  }
}

void setup()
{
  Serial.begin(115200);
  Serial.println();

  pinMode(LED1, OUTPUT);
  pinMode(LED2, OUTPUT);
  pinMode(LED3, OUTPUT);
```

```
  pinMode(LED4, OUTPUT);
  delay(10);

  digitalWrite(LED1, LOW);
  digitalWrite(LED2, LOW);
  digitalWrite(LED3, LOW);
  digitalWrite(LED4, LOW);

  Serial.print("Connecting to Wifi SSID ");
  Serial.print(WIFI_SSID);
  WiFi.begin(WIFI_SSID, WIFI_PASSWORD);
  secured_client.setCACert(TELEGRAM_CERTIFICATE_ROOT);

  while (WiFi.status() != WL_CONNECTED)
  {
    Serial.print(".");
    delay(500);
}
  Serial.print("\nWiFi connected. IP address: ");
  Serial.println(WiFi.localIP());

  Serial.print("Retrieving time: ");
  configTime(0, 0, "pool.ntp.org");
  time_t now = time(nullptr);
  while (now < 24 * 3600)
  {
    Serial.print(".");
    delay(100);
    now = time(nullptr);
  }
  Serial.println(now);
}

void loop()
{
  if (millis() - bot_lasttime > BOT_MTBS)
  {
    int numNewMessages = bot.getUpdates(bot.last_message_received + 1);

    while (numNewMessages)
    {
      Serial.println("got response");
      handleNewMessages(numNewMessages);
      numNewMessages = bot.getUpdates(bot.last_message_received + 1);
    }

    bot_lasttime = millis();
  }
```

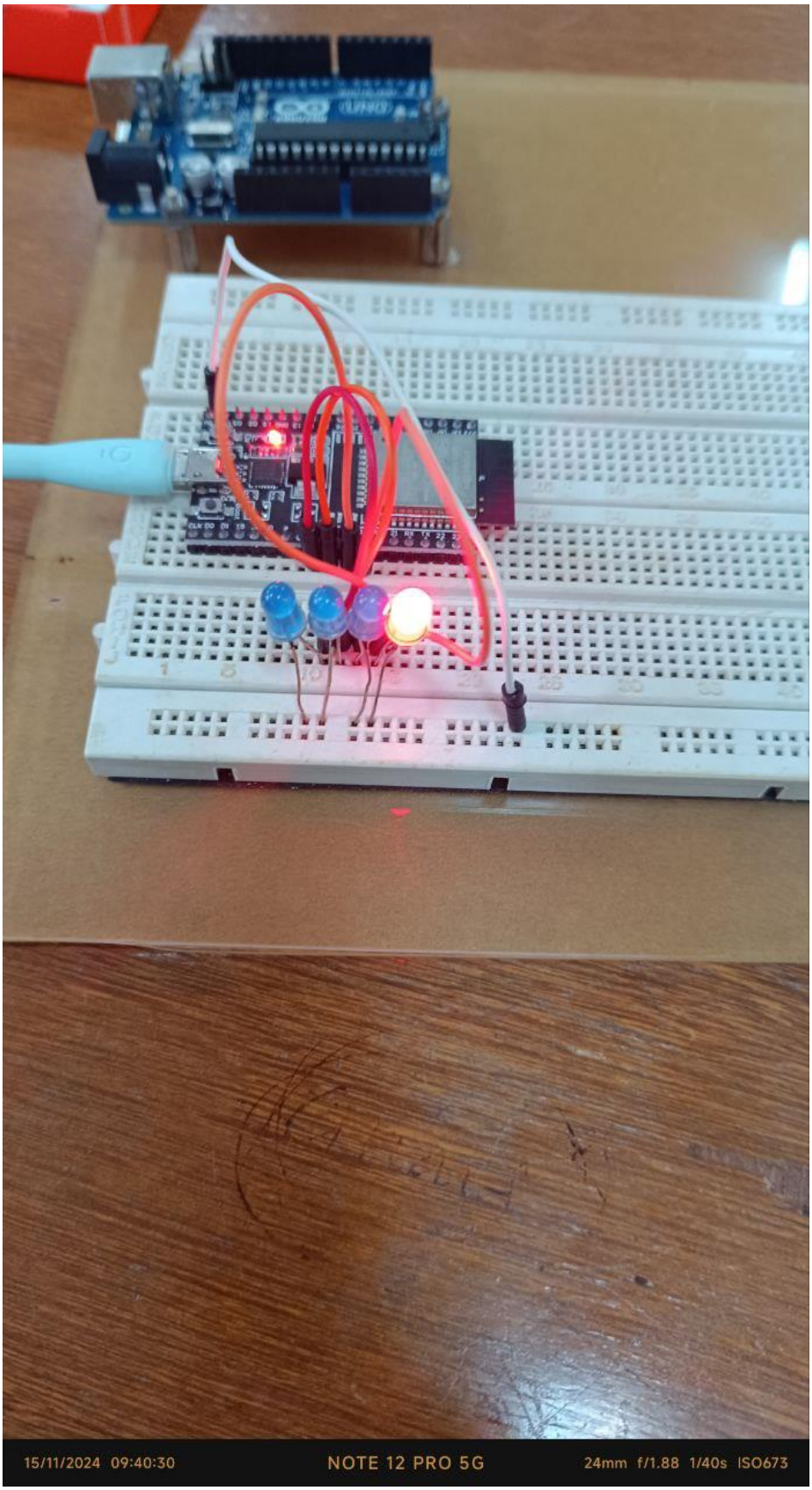
```
}
E (2777) wifi:Association refused temporarily, comeback time 0 mSec
E (2784) wifi:Association refused temporarily, comeback time 0 mSec
E (2791) wifi:Association refused temporarily, comeback time 0 mSec
E (2799) wifi:Association refused temporarily, comeback time 0 mSec
E (2806) wifi:Association refused temporarily, comeback time 0 mSec
E (2813) wifi:Association refused temporarily, comeback time 0 mSec
E (2820) wifi:Association refused temporarily, comeback time 0 mSec
.........
WiFi connected. IP address: 172.18.104.149
Retrieving time: .....................................1731638291
got response
handleNewMessages 1
got response
handleNewMessages 1
got response
handleNewMessages 1
got response
handleNewMessages 1
```

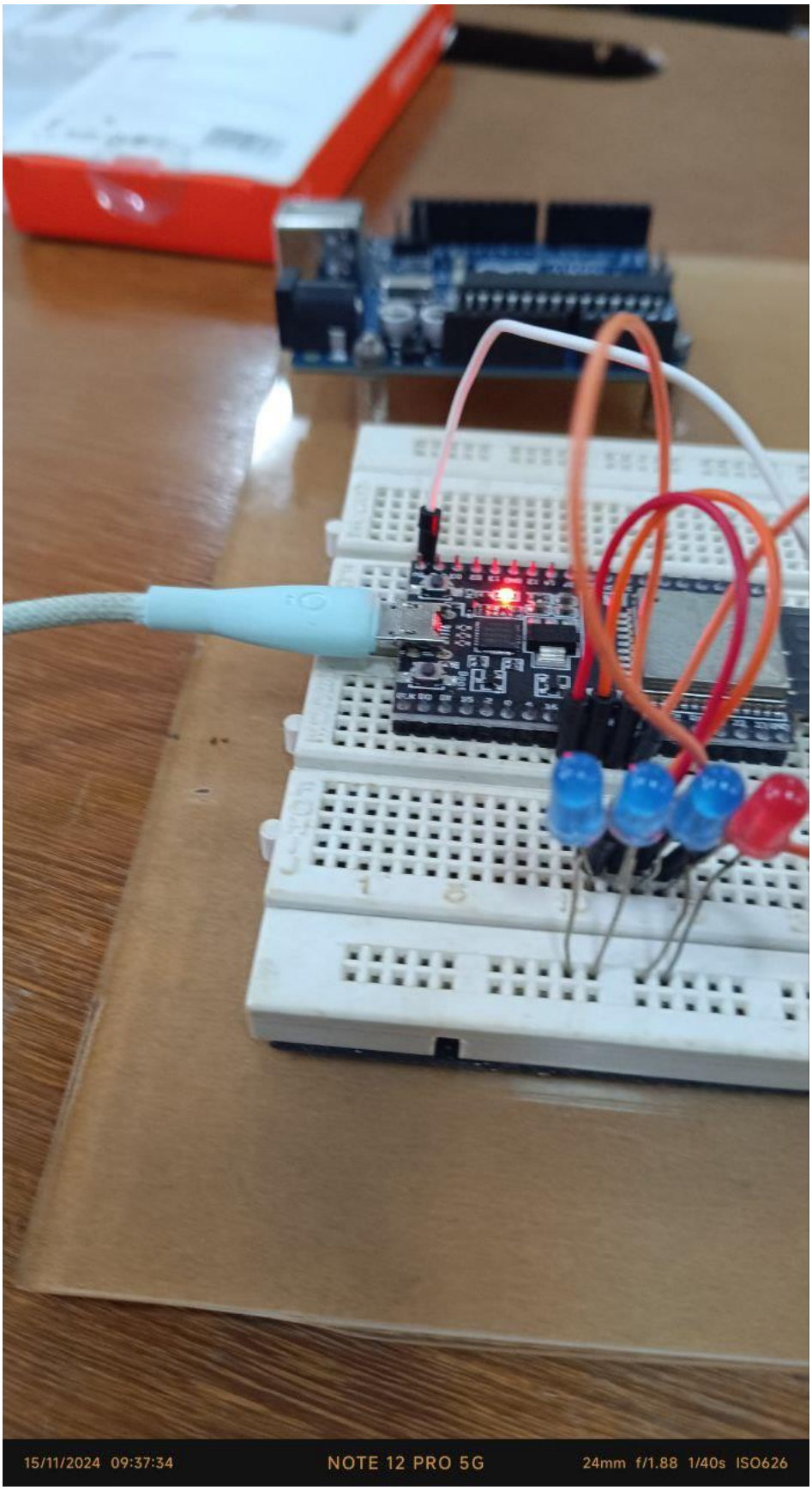
Code berjalan sesuwai arahan saat menerima pesan dari telegram akan di munculkan di serial monitor

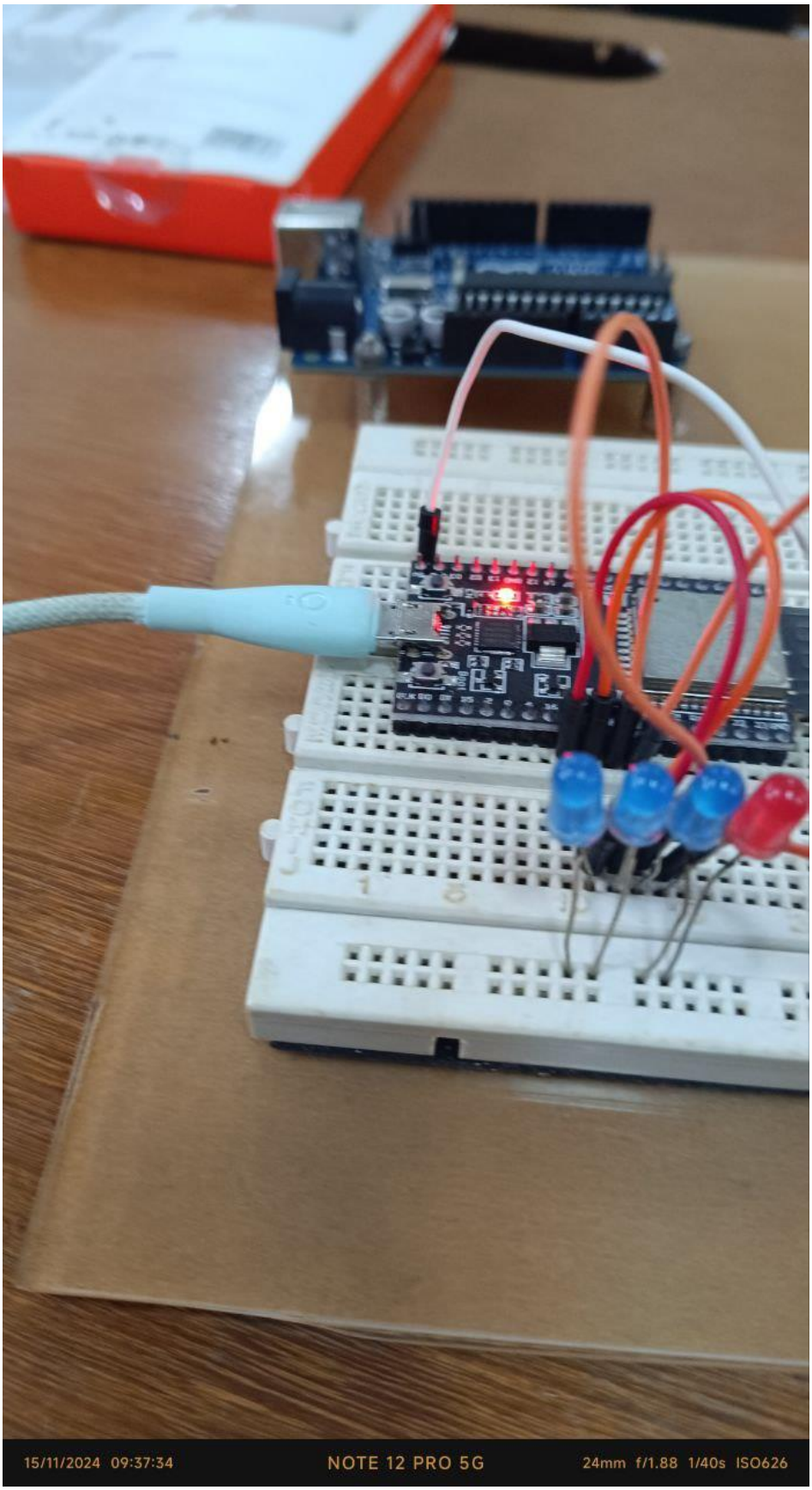


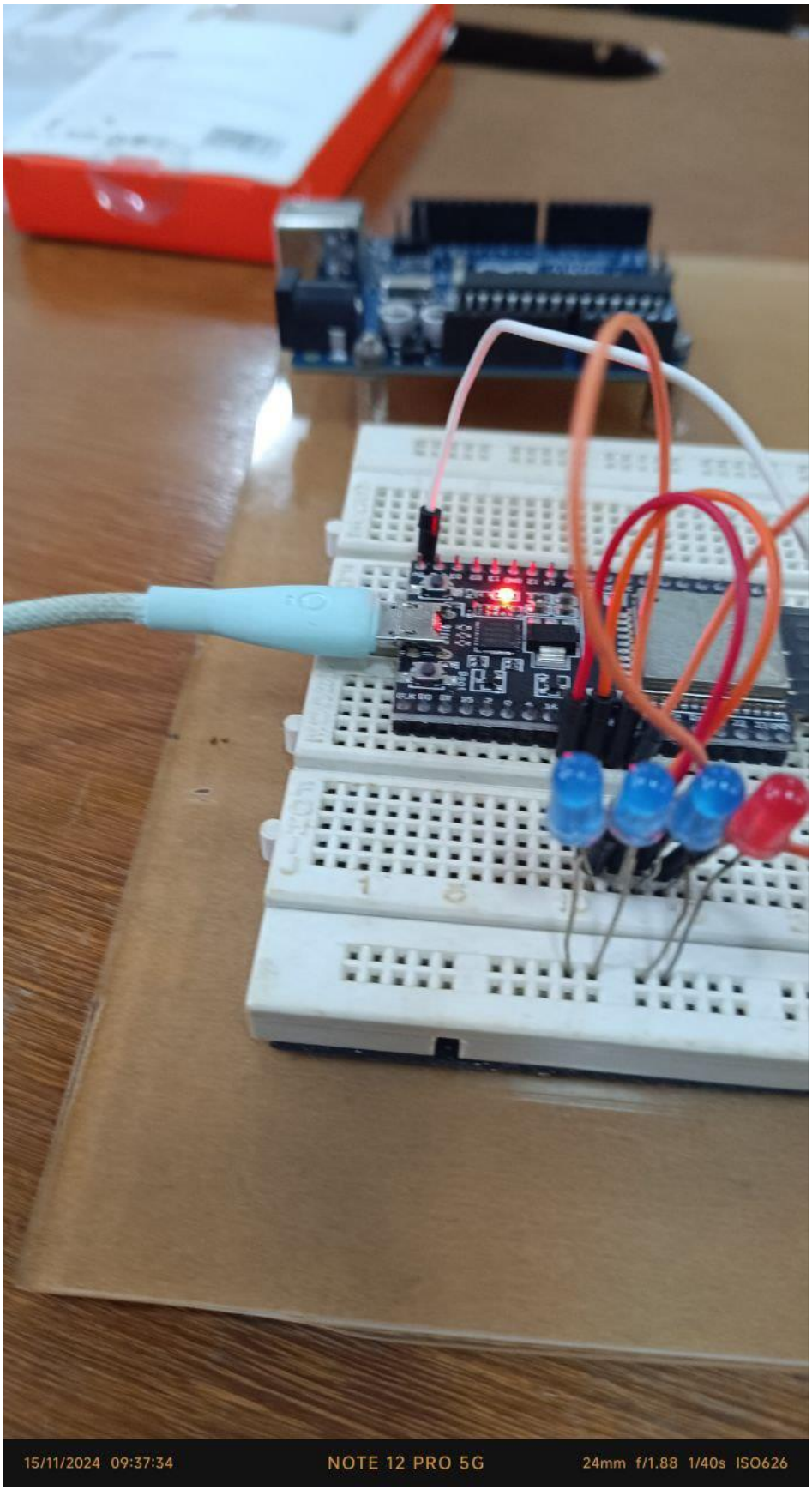
Mendapatkan token dan membuat nama bod nya

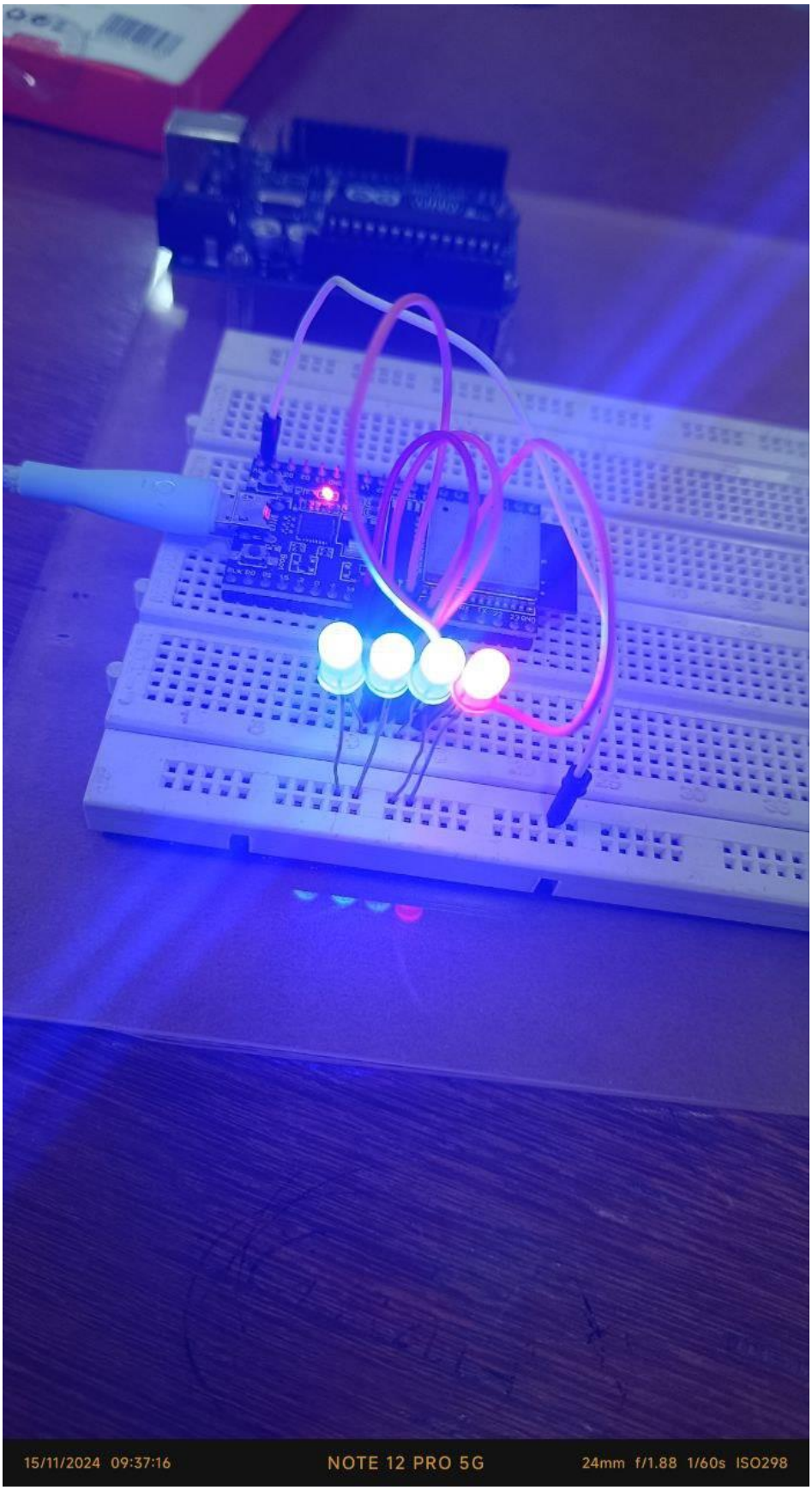
Memasukan inputan


15/11/2024 09:40:30
NOTE 12 PRO 5G
24mm f/1.88 1/40s ISO673


15/11/2024 09:37:34
NOTE 12 PRO 5G
24mm f/1.88 1/40s ISO626


15/11/2024 09:37:34
NOTE 12 PRO 5G
24mm f/1.88 1/40s ISO626


15/11/2024 09:37:34
NOTE 12 PRO 5G
24mm f/1.88 1/40s ISO626


15/11/2024 09:37:16
NOTE 12 PRO 5G
24mm f/1.88 1/60s ISO298