1.APP control robot

1.1.Open source code

Open the tutorial we provide, navigate to the folder of "03_Tutorial_&_Code → Lesson4 Wifi Control → QuadBot_T_ESP", and double-click QuadBot_T_ESP.ino, open the source code.

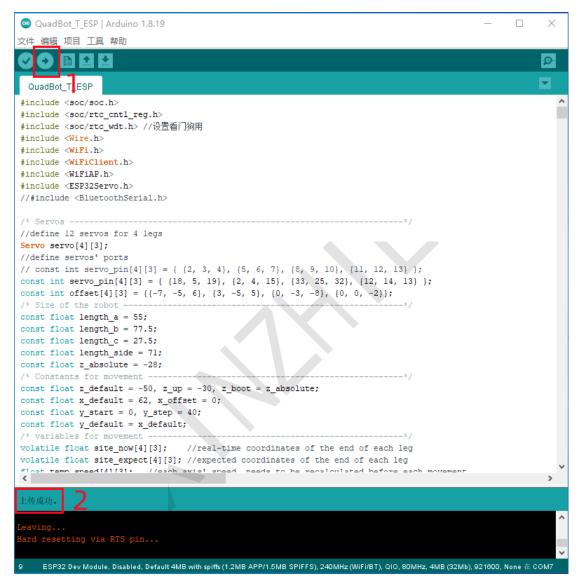
1.2.Compile source code

Click the 1 compile button as shown in the figure below, and if there is no problem, the 2 compile completion prompt will appear.

```
QuadBot_T_ESP | Arduino 1.8.19
文件 编辑 项目 工具 帮助
 QuadBot_T_ESP
#include <soc/soc.h>
#include <soc/rtc_cntl_reg.h>
#include <soc/rtc_wdt.h> //设置看门狗用
#include <Wire.h>
#include <WiFi.h>
#include <WiFiClient.h>
#include <WiFiAP.h>
#include <ESP32Servo.h>
//#include <BluetoothSerial.h>
/* Servos --
//define 12 servos for 4 legs
Servo servo[4][3];
//define servos' ports
// const int servo_pin[4][3] = { \{2, 3, 4\}, \{5, 6, 7\}, \{8, 9, 10\}, \{11, 12, 13\} \};
const int servo_pin[4][3] = { {18, 5, 19}, {2, 4, 15}, {33, 25, 32}, {12, 14, 13} };
const int offset[4][3] = \{\{-7, -5, 6\}, \{3, -5, 5\}, \{0, -3, -8\}, \{0, 0, -2\}\};
/* Size of the robot
const float length_a = 55;
const float length_b = 77.5;
const float length_c = 27.5;
const float length_side = 71;
const float z_absolute = -28;
/* Constants for movement
const float z_default = -50, z_up = -30, z_boot = z_absolute;
const float x_default = 62, x_offset = 0;
const float y_start = 0, y_step = 40;
const float y_default = x_default;
/* variables for movement
volatile float site_now[4][3]; //real-time coordinates of the end of each leg
volatile float site expect[4][3]; //expected coordinates of the end of each leg
项目使用了 670950 字节,占用了 (51%) 程序存储空间。最大为 1310720 字节。
全局变里使用了39756字节,(12%)的动态内存,余留287924字节局部变里。最大为327680字节。
    ESP32 Dev Module, Disabled, Default 4MB with spiffs (1.2MB APP/1.5MB SPIFFS), 240MHz (WiFi/BT), QIO, 80MHz, 4MB (32Mb), 921800, None 在 COM7
```

1.3. Download code to ESP32

Connect the ESP 32 and the computer with a USB cable, select the correct COM port, and then click the 1 "Download" button as shown in the figure below. If everything goes well, the 2 "Upload succeeded" prompt will appear. At this point, the program is downloaded successfully, and then unplug the USB cable.



1.4 Web APP control robot

Mobile phone or computer wireless network scan WIFI (turn off GPRS and other shared networks to ensure that WIFI is the only network used) (specifically operate in the "Settings" "WLAN" of the mobile phone), connect the wifi hotspot named QuadBot-T, and the password is 12345678, as shown in the following figure.



Enter the control page address 192.168.4.1 in the mobile phone or computer web browser, and the following interface will appear if it is correct



According to the interface button prompt, the remote control robot can complete the specified action $_{\circ}$