變數不能大寫。

有單引號(')、換行(\n)要設為脫逸字元。

~~字串變數不用留雙引號~~

★字首單引號前加空格( ),避免被excel去掉。

此空格

若積木只有單行程式碼,換行依據：尾部有沒有；分號

變數若是#define BUTTON\_PIN 3，記得在變數名稱前加空格( ) '#define BUTTON\_PIN '+value\_pin

若每行程式碼前是 → Tab鍵，要改成空格( )

Statements區塊

+ ' \ value\_

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| \_01imi\_espcharge\_init  iMi充電模組ESP32初始化  WiFi設定  Google試算表  \_02imi\_espcharge\_wifi  ssid: 密碼:  “ “  “ “  '//WiFi'  'const char\* ssid = '+value\_ssid+';'  'const char\* password = '+value\_wifipwd+';'  \_03imi\_espcharge\_sheet  ID 工作表名稱  “ “  “ “  '//google 試算表'  'String sheetId='+value\_sheetid+';//試算表id'  'String sheetTag="";'  'const char\* sTag = '+value\_stag+';//工作表名稱' | #include <WiFi.h>  #include <WiFiClientSecure.h>  #include <Wire.h>  #include <Adafruit\_INA219.h>  //https://docs.google.com/spreadsheets/d/1EhpZyQILsXqWKgGFPZdoaBGQzfcb2x20n4-tTqJc-uI/edit#gid=399078205  //====變數設定 Start====  Statements區塊  //====變數設定 End====  //asId不要變更  const char\* asId="AKfycbyR-Yp-uu4nIvnjvnkILaQ5AX8yFxp-UpBO-Sqs0su3ai1N\_BvQsz\_Q";    //測電流電壓  float shuntvoltage = 0;  float busvoltage = 0;  float current\_mA = 0;  float loadvoltage = 0;  float power\_mW = 0;  Adafruit\_INA219 ina219Bat;//太陽能→14500鋰電池  Adafruit\_INA219 ina219Car;//14500鋰電池→小車  //紀錄上一次上傳google sheet時間  unsigned long preMillisBat;  unsigned long preMillisCar;    void setup\_wifi() {  delay(10);  Serial.println();  Serial.print("Connecting to ");  Serial.println(ssid);  WiFi.mode(WIFI\_STA);  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());  }  String URLEncode(const char\* msg)  {  const char \*hex = "0123456789abcdef";  String encodedMsg = "";  while (\*msg!=\'\\0\'){  if( (\'a\' <= \*msg && \*msg <= \'z\')  || (\'A\' <= \*msg && \*msg <= \'Z\')  || (\'0\' <= \*msg && \*msg <= \'9\') ) {  encodedMsg += \*msg;  } else {  encodedMsg += \'%\';  encodedMsg += hex[\*msg >> 4];  encodedMsg += hex[\*msg & 15];  }  msg++;  }  return encodedMsg;  }  void sendToGoogleSheets(const String& dateInclude,const String& data)  {  sheetTag=URLEncode(sTag);  static WiFiClientSecure sheetClient;  sheetClient.setInsecure();  const char\* host="script.google.com";  if (sheetClient.connect(host, 443)) {  const String url = String() +"https://"+host+"/macros/s/"+asId+"/exec?type=insert&dateInclude="+dateInclude+"&sheetId="+sheetId+"&sheetTag="+sheetTag+"&data="+data;  sheetClient.println("GET " + url + " HTTP/1.1");  sheetClient.println(String()+"Host: "+host);  sheetClient.println("Accept: \*/\*");  sheetClient.println("Connection: close");  sheetClient.println();  sheetClient.println();  sheetClient.stop();  }  }  void batCharging(){  int interval = 31;//每隔幾秒紀錄一次  if(millis()-preMillisBat>=interval\*1000){  preMillisBat = millis();    shuntvoltage = ina219Bat.getShuntVoltage\_mV();  busvoltage = ina219Bat.getBusVoltage\_V();//Bus Voltage電池電壓(V)  current\_mA = ina219Bat.getCurrent\_mA();//Current負載電流(mA)  power\_mW = ina219Bat.getPower\_mW();//Power負載功率(mW)  loadvoltage = busvoltage + (shuntvoltage / 1000);//Load Voltage負載電壓(V)    //寫入google試算表  if(power\_mW>0){  sendToGoogleSheets("1",URLEncode((String() + "太陽能板產生能量" + "," + power\_mW + "," + interval).c\_str()));  }  }  }  void carCharging(){  int interval = 61;//每隔幾秒紀錄一次  if(millis()-preMillisCar>=interval\*1000){  preMillisCar = millis();    shuntvoltage = ina219Car.getShuntVoltage\_mV();  busvoltage = ina219Car.getBusVoltage\_V();//Bus Voltage電池電壓(V)  current\_mA = ina219Car.getCurrent\_mA();//Current負載電流(mA)  power\_mW = ina219Car.getPower\_mW();//Power負載功率(mW)  loadvoltage = busvoltage + (shuntvoltage / 1000);//Load Voltage負載電壓(V)    //寫入google試算表  if(power\_mW>0){  sendToGoogleSheets("1",URLEncode((String() + "小車消耗能量" + "," + power\_mW + "," + interval).c\_str()));  }  }  }    void setup(void)  {  Serial.begin(9600);  while (!Serial) {delay(1);}  delay(500);  setup\_wifi();    //測電流電壓初始  if (! ina219Bat.begin()) {  Serial.println("Failed to find ina219Bat chip");  while (1) { delay(10); }  }  if (! ina219Car.begin()) {  Serial.println("Failed to find ina219Car chip");  while (1) { delay(10); }  }  } |
| \_04mi\_espcharge\_writesheet  太陽能板產生能量  寫入Google試算表: 的瓦數  寫入Google試算表: 的瓦數  “小車消耗能量“   |  | | --- | | var code ="";  if(dropdown\_type=="sun"){  code = "batCharging();\n";  }else if(dropdown\_type=="car"){  code = "carCharging();\n";  } | |  |
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