气象监测项目：

//温湿度的数据针脚

#define DHT11PIN 7

//温湿度库对应的头文件

#include <dht11.h>

//全局变量

dht11 DHT11;

//数据

String strData;

#include <LiquidCrystal.h>

// initialize the library with the numbers of the interface pins

LiquidCrystal lcd(12, 11, 5, 4, 3, 2);

//初始化函数

void setup()

{

//设置串口的波特率

Serial.begin(9600);

//设置针脚端口的模式

pinMode(DHT11PIN, OUTPUT);

pinMode(7,OUTPUT);

// set up the LCD's number of columns and rows:

lcd.begin(16, 2);

}

//循环执行

void loop()

{

//读取温湿度的数据

int chk = DHT11.read(DHT11PIN);

//温度

float temp = (float)DHT11.temperature;

Serial.print("Tep: ");

Serial.print(temp);

Serial.println("C");

//湿度

float humi = (float)DHT11.humidity;

Serial.print("Hum: ");

Serial.print((float)DHT11.humidity);

Serial.println("%");

delay(500);

digitalWrite(7,HIGH);

lcd.setCursor(0, 0);

lcd.print("Tep: ");

lcd.print((float)DHT11.temperature, 2);

lcd.print("C");

if((float)DHT11.temperature >30)

{

digitalWrite(7,LOW);

}

// set the cursor to column 0, line 1

// (note: line 1 is the second row, since counting begins with 0):

lcd.setCursor(0, 1);

// print the number of seconds since reset:

lcd.print("Hum: ");

lcd.print((float)DHT11.humidity, 2);

lcd.print("%");

delay(200);

}