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實驗說明:

•Serial Monitor 顯示目前Temperature, Humidity, Status

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•按下button, Status由(Safety-> Alarm), 同時LED燈亮起

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•當溫度到達28度時， Status由(Safety-> Alarm), 同時LED燈亮起

程式碼：

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| #include "DHTesp.h"  DHTesp dht;  int buttom = 0;  int LED = 0;  float currentTemp;  float currentHumidity;  void setup()  {  pinMode (5,INPUT);  pinMode (0,INPUT);  pinMode (2,OUTPUT);  dht.setup (5,DHTesp::DHT11);  currentTemp = dht.getTemperature();  currentHumidity = dht.getHumidity();  Serial.begin(115200);  Serial.setTimeout(10);  }  void loop()  {  if( digitalRead(0) == LOW)  {  buttom = 1;  Serial.println("buttom = 1");  }  else  {  buttom = 0;  Serial.println("buttom = 0");  }  float temperature = dht.getTemperature();  float humidity = dht.getHumidity();  if(temperature != currentTemp || humidity != currentHumidity){  currentTemp = temperature;  currentHumidity = humidity;  }  Serial.println("Temperature :");  Serial.println(currentTemp);  Serial.println("Humidity :");  Serial.println(currentHumidity);  String Status;  if(currentTemp >= 28 || buttom == 1)  {  Status = "Alarm";  digitalWrite(2, LOW);  }  else  {  Status = "Safety";  digitalWrite(2, HIGH);  }  Serial.println("Status :");  Serial.println(Status);  delay (2000);  } |

Serial Monitor

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| Button = 0  Temp >= 28 | Button = 0  Temp < 28 |
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| Button = 1  Temp >= 28 | Button = 1  Temp < 28 |
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