**Check Point 4 程式碼**

**const byte potPin = 15;**

**int val,i;**

**float r2,vol;**

**void setup() {**

**Serial.begin(9600);**

**}**

**void loop() {**

**for(i=0;i<=5;i++) {**

**val = 0.7\*val+0.3\*analogRead(potPin);**

**vol = val\*2.5/4095;**

**r2 = vol\*1000000/2.5;**

**Serial.print("AnalogRead = ");**

**Serial.println(analogRead(potPin));**

**Serial.print("sensorValue = ");**

**Serial.println(val);**

**Serial.print("sensorVoltage = ");**

**Serial.println(vol);**

**Serial.print("R2 = ");**

**Serial.println(r2/1000);**

**delay(500);**

**}**

**}**

|  |  |  |  |
| --- | --- | --- | --- |
| **AnalogRead讀值** | **推測電壓（V）** | **推測電阻值**  **（kΩ）** | **Serial Monitor輸出** |
| **4** | **0** | **3** |  |
| **13** | **0.2** | **70** |  |
| **171** | **0.5** | **200** |  |
| **418** | **1** | **250** |  |
| **1424** | **1.2** | **450** |  |
| **3071** | **1.5** | **500** |  |