

```
1  /**
2   Endothermic Action - Mission Possible MK2
3   Ward Melville HS Science Olympiad - Team A - 2017-2018
4   endoTiny.ino
5   Purpose: Triggers the next action when the resistance of a thermistor changes more than a
        threshold value.
6
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8   @version 1.1 1/26/2018
9   */
10
11 // Definitions for microcontroller pin numbers
12 const int THERMISTOR_PIN = 1;
13 const int OUT_PIN = 4;
14
15 // Variables for states of the pins
16 int thermistorValue;
17 int thermistorBase;
18 const int thermistorThreshold = 50;
19 bool outState = LOW;
20
21 void setup() {
22     // Set the microcontroller pins as either inputs or outputs
23     pinMode(THERMISTOR_PIN, INPUT);
24     pinMode(OUT_PIN, OUTPUT);
25
26     // Set the output pin to low
27     digitalWrite(OUT_PIN, LOW); // Write the output pin to LOW
28
29     // Read the initial value of the thermistor
30     thermistorBase = analogRead(THERMISTOR_PIN);
31 }
32
33 void loop() {
34     thermistorValue = analogRead(THERMISTOR_PIN);
35     if(thermistorValue - thermistorBase >= thermistorThreshold) {
36         // If the difference between the current reading and the initial reading is greater than the
        threshold...
37         digitalWrite(OUT_PIN, HIGH); // Trigger the next action
38     }
39 }
40
```