



```

1  int baselineTemp = 0;
2  int celsius = 0;
3  int fahrenheit = 0;
4
5  void setup()
6  {
7      pinMode(A0, INPUT);
8      Serial.begin(9600);
9
10     pinMode(2, OUTPUT);
11     pinMode(3, OUTPUT);
12     pinMode(4, OUTPUT);
13 }
14
15 void loop()
16 {
17     baselineTemp = 40;
18
19     celsius = map((analogRead(A0) - 20) * 3.04), 0, 1023, -40, 125);
20
21     fahrenheit = ((celsius * 9) / 5 + 32);
22     Serial.print(celsius);
23     Serial.print(" C, ");
24     Serial.print(fahrenheit);
25     Serial.println(" F");
26
27     if (celsius < baselineTemp) {
28         digitalWrite(2, LOW);
29         digitalWrite(3, LOW);
30         digitalWrite(4, LOW);
31     }
32     if (celsius >= baselineTemp && celsius < baselineTemp + 10) {
33         digitalWrite(2, HIGH);
34         digitalWrite(3, LOW);
35         digitalWrite(4, LOW);
36     }
37     if (celsius >= baselineTemp + 10 && celsius < baselineTemp + 20)
38         digitalWrite(2, HIGH);
39         digitalWrite(3, HIGH);
40         digitalWrite(4, LOW);
41     }
42     if (celsius >= baselineTemp + 20 && celsius < baselineTemp + 30)
43         digitalWrite(2, HIGH);
44         digitalWrite(3, HIGH);
45         digitalWrite(4, HIGH);
46     }
47     if (celsius >= baselineTemp + 30) {
48         digitalWrite(2, HIGH);
49         digitalWrite(3, HIGH);
50         digitalWrite(4, HIGH);
51     }
52     delay(1000);
53 }

```