



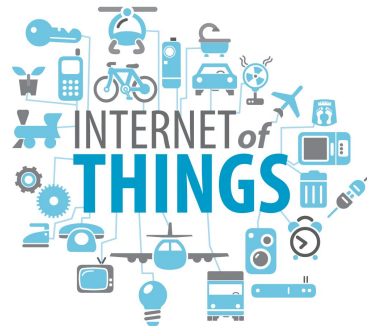
UNIVERSITY OF SCIENCE - VNUHCM

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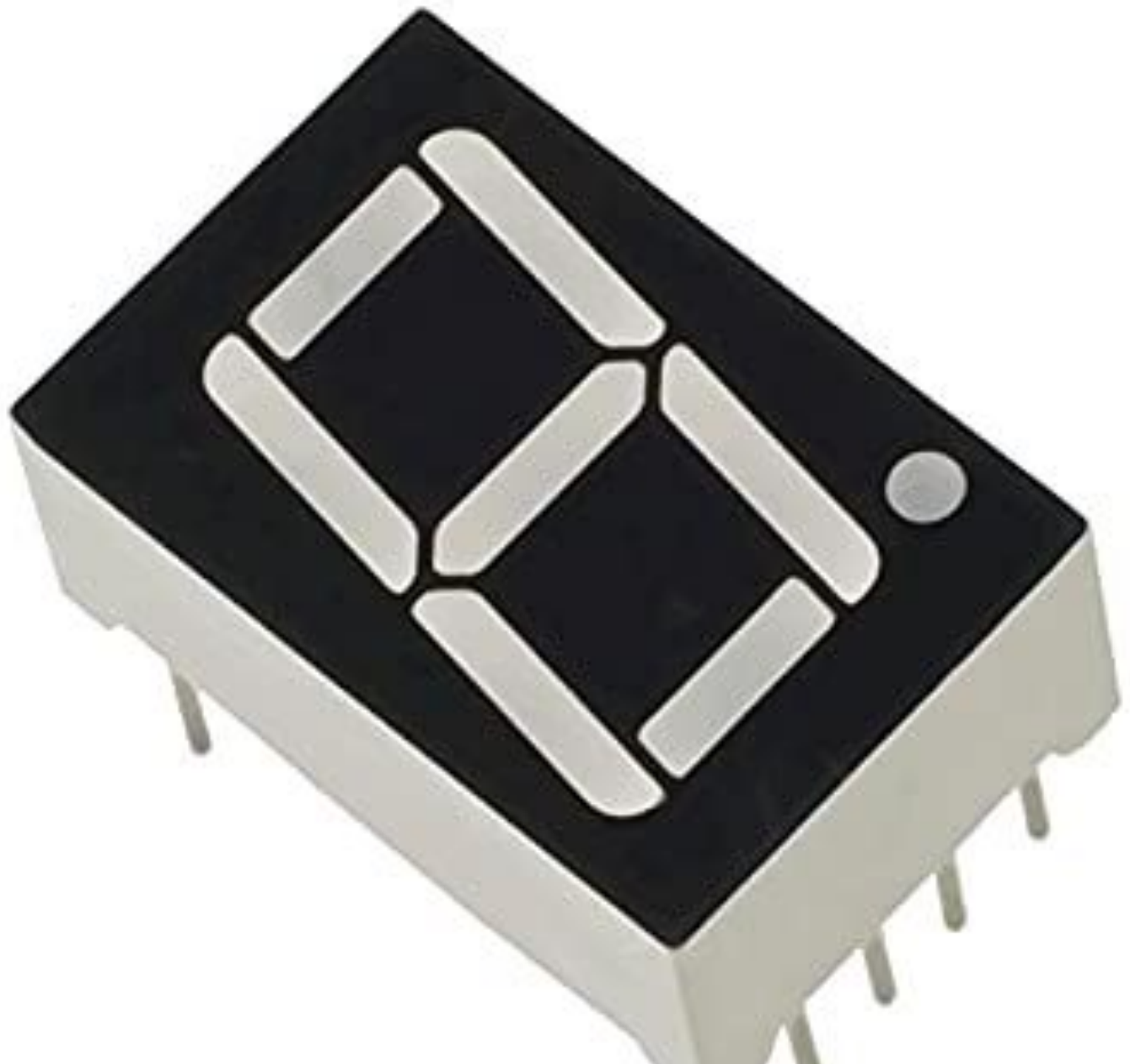
INTERNET OF THINGS

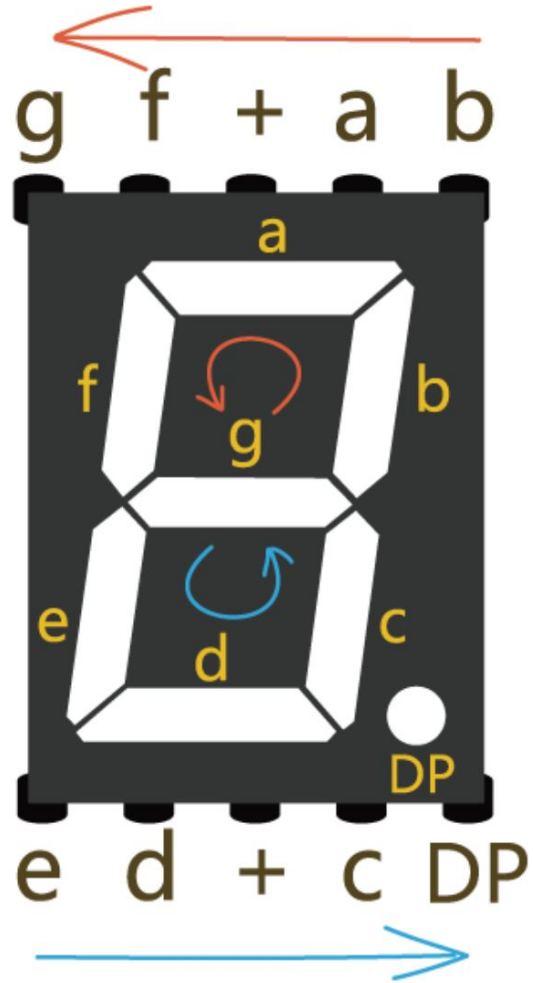
1.13

7-SEGMENT DISPLAY

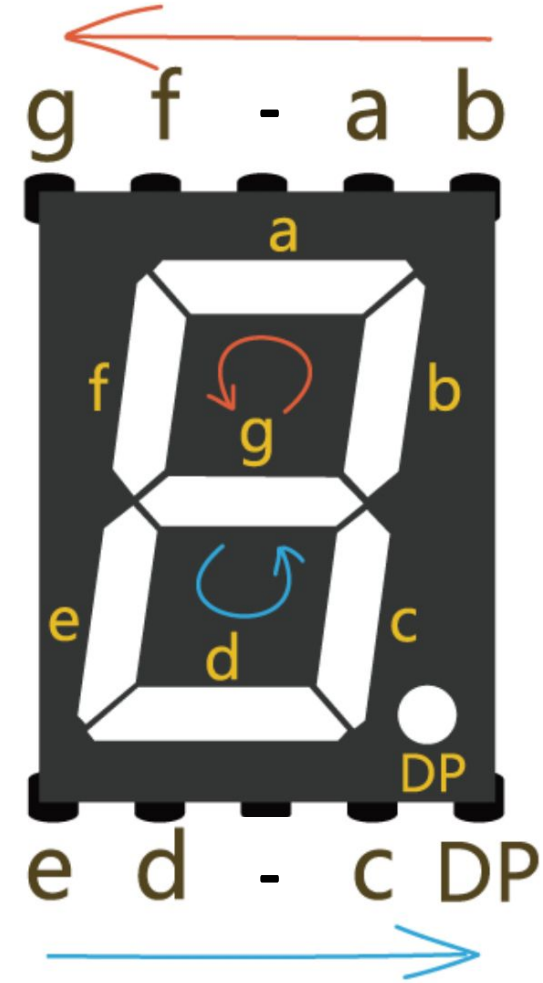


7-Segment Display

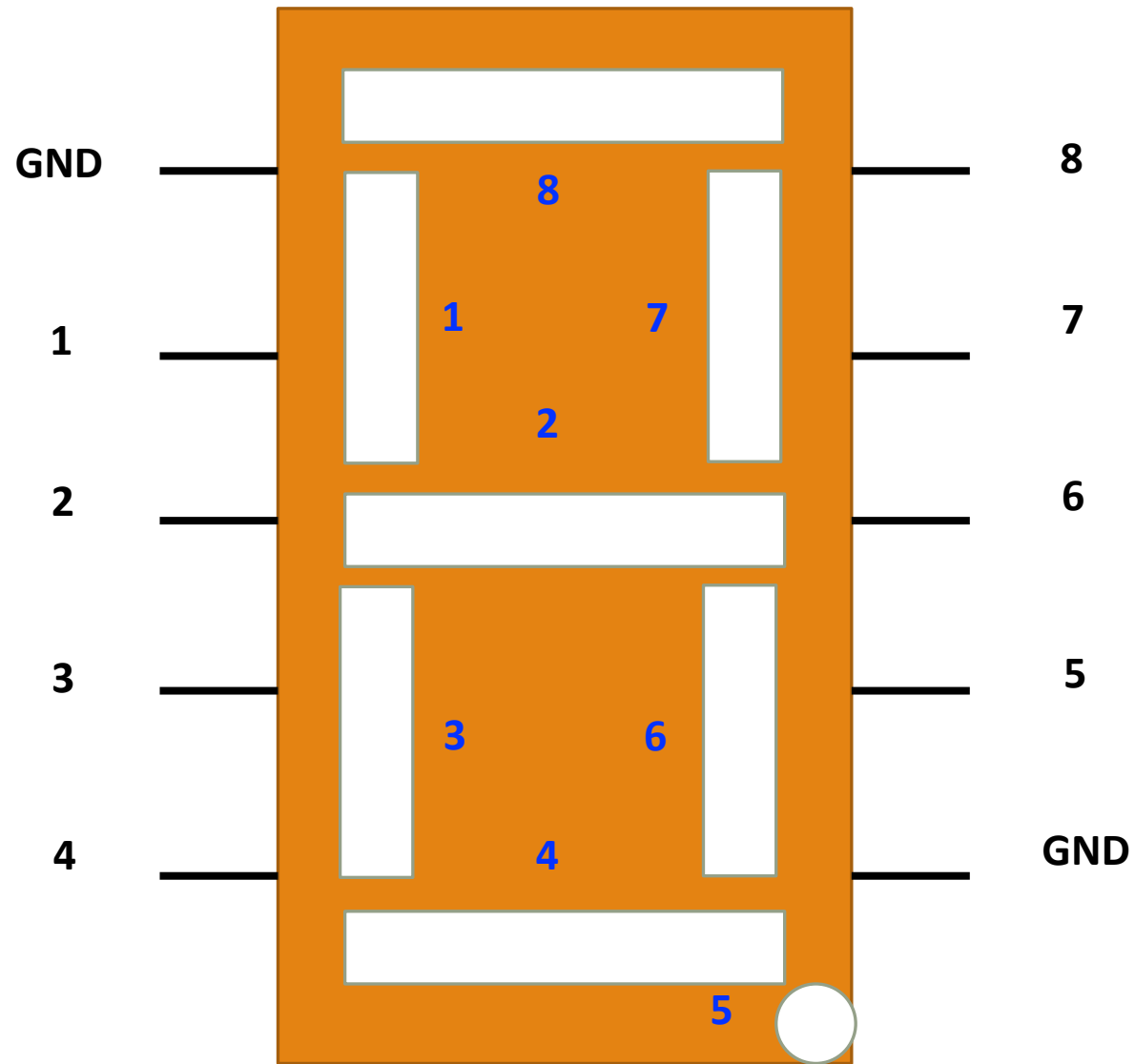




7-Segment Display common Anode



7-Segment Display common Cathode

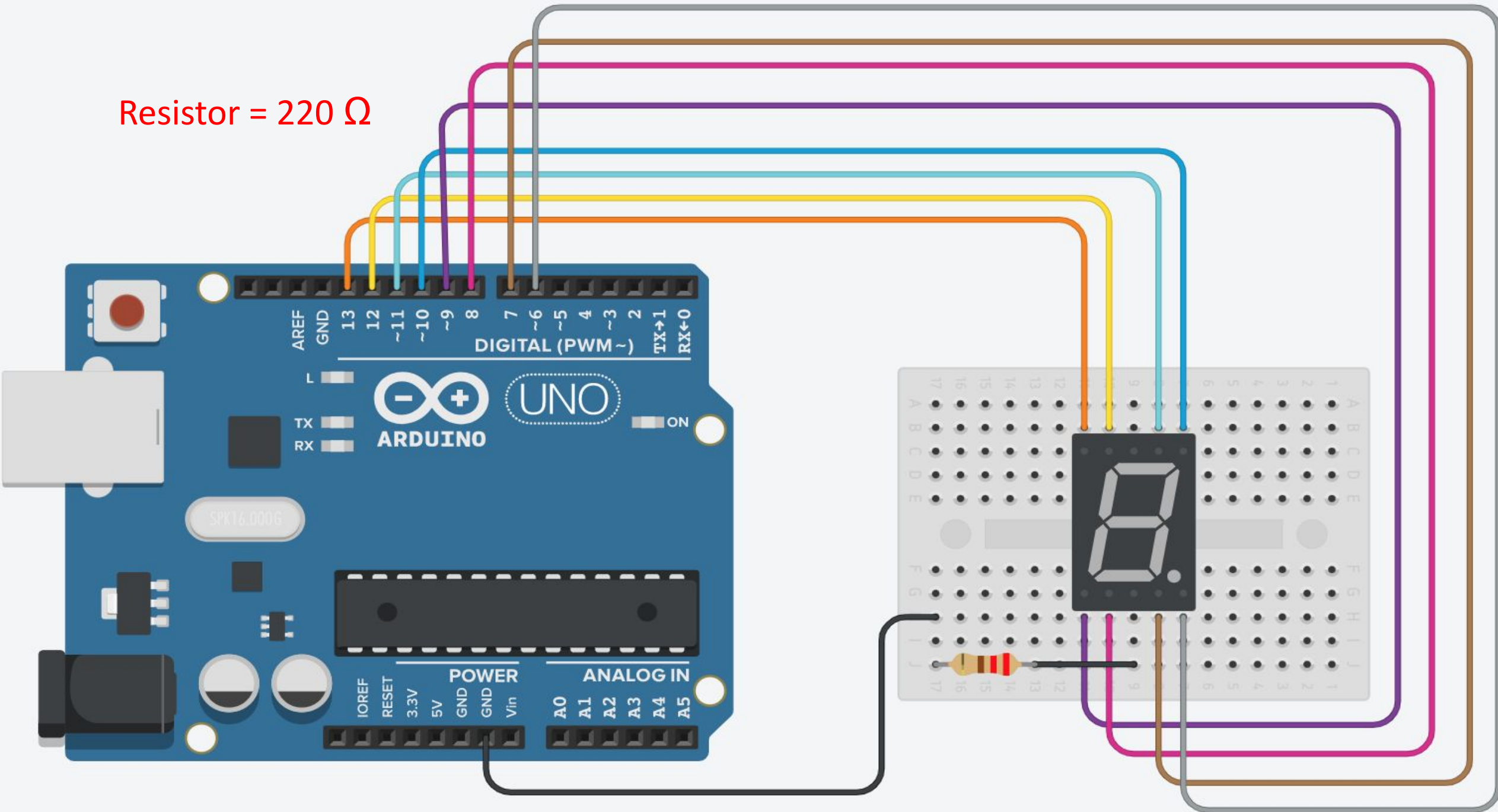


Mini 7-segment
display's datasheet

```
void setup() {  
    for(int pin=2; pin <= 9; pin++) {  
        pinMode(pin, OUTPUT);  
        digitalWrite(pin, LOW);  
    }  
}
```

```
void loop() {  
    //For example, display number zero  
    int n0[8] = {1,0,1,1,0,1,1,1};  
    for(int pin=2; pin <= 9; pin++) {  
        digitalWrite(pin, n0[pin-2]);  
    }  
}
```

Resistor = 220 Ω



```
unsigned const int G = 13;  
unsigned const int F = 12;  
unsigned const int A = 11;  
unsigned const int B = 10;  
unsigned const int E = 9;  
unsigned const int D = 8;  
unsigned const int C = 7;  
unsigned const int DP = 6;
```

```
void setup(void)  
{  
    pinMode(A, OUTPUT);  
    pinMode(B, OUTPUT);  
    pinMode(C, OUTPUT);  
    pinMode(D, OUTPUT);  
    pinMode(E, OUTPUT);  
    pinMode(F, OUTPUT);  
    pinMode(G, OUTPUT);  
    pinMode(DP, OUTPUT);  
}
```

```
void zero(void) {  
    digitalWrite(A, HIGH);  
    digitalWrite(B, HIGH);  
    digitalWrite(C, HIGH);  
    digitalWrite(D, HIGH);  
    digitalWrite(E, HIGH);  
    digitalWrite(F, HIGH);  
    digitalWrite(G, LOW);  
    digitalWrite(DP, LOW);  
}
```

```
void loop(void)  
{  
    zero();  
}
```



Counting from 0 to 9
