

#### **UNIVERSITY OF SCIENCE - VNUHCM**

Faculty of Information Technology

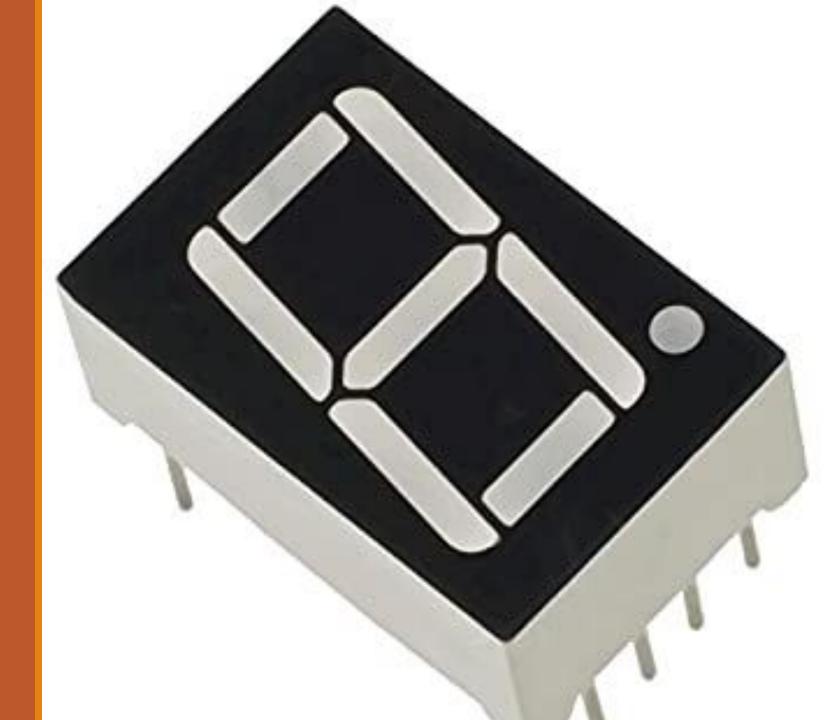
### INTERNET OF THINGS

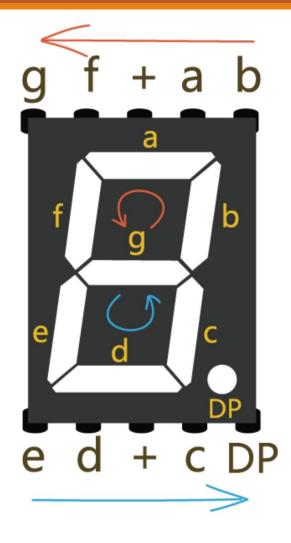
1.13

### 7-SEGMENT DISPLAY

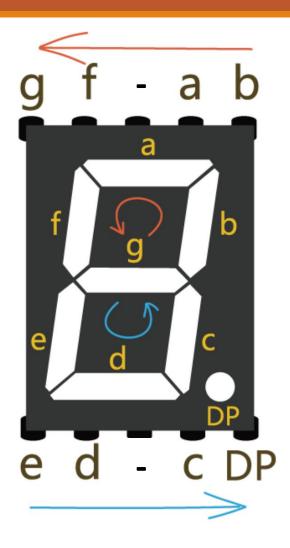


## 7-Segment Display

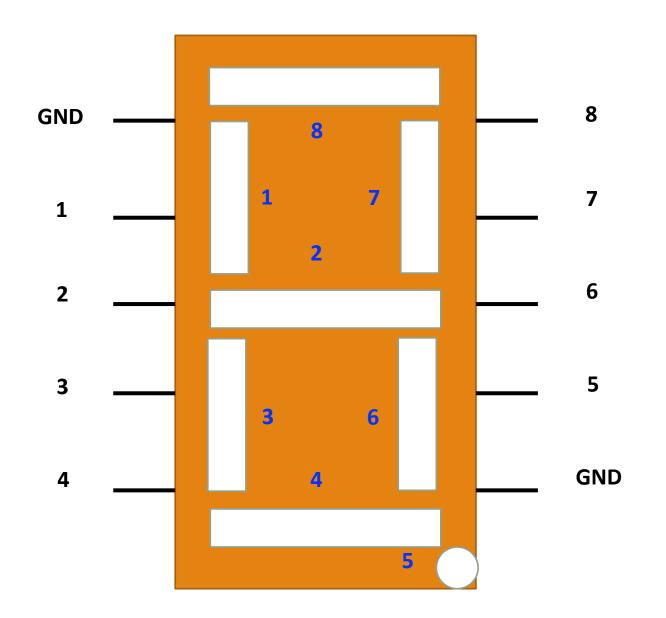




7-Segment Display common Anode

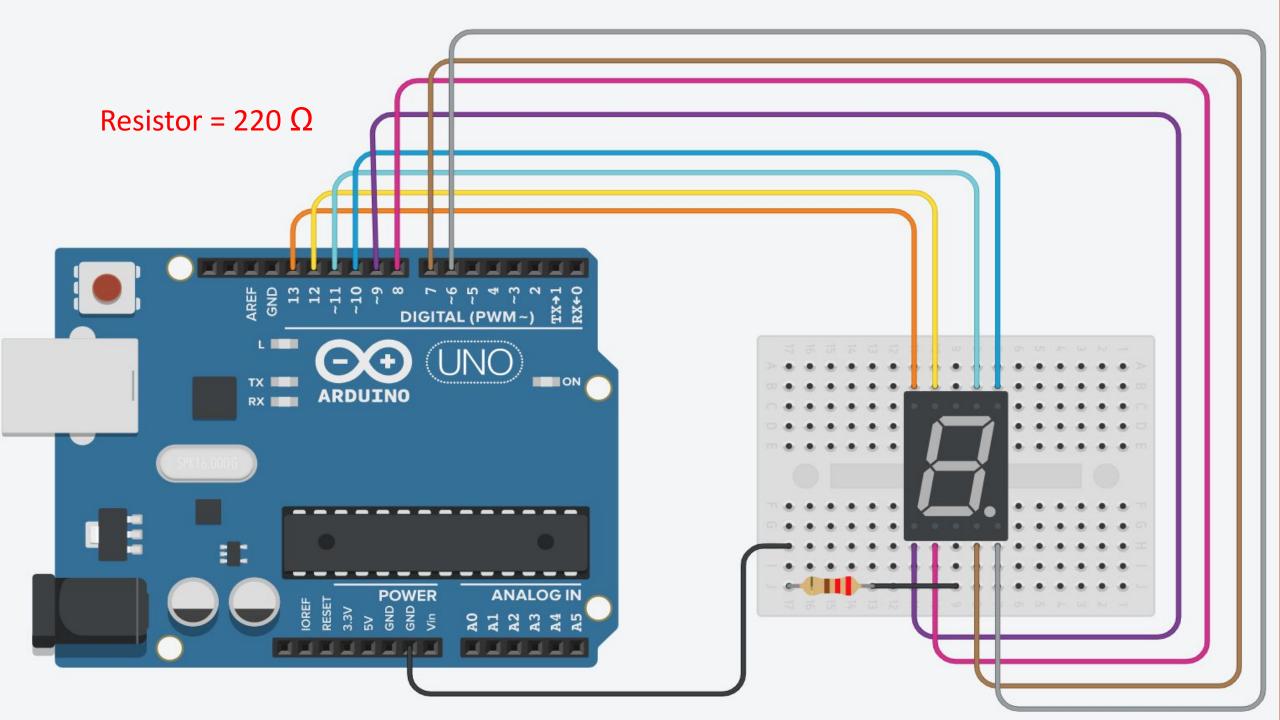


7-Segment Display common Cathode



### 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]);
```



```
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();
```



# Couting from 0 to 9