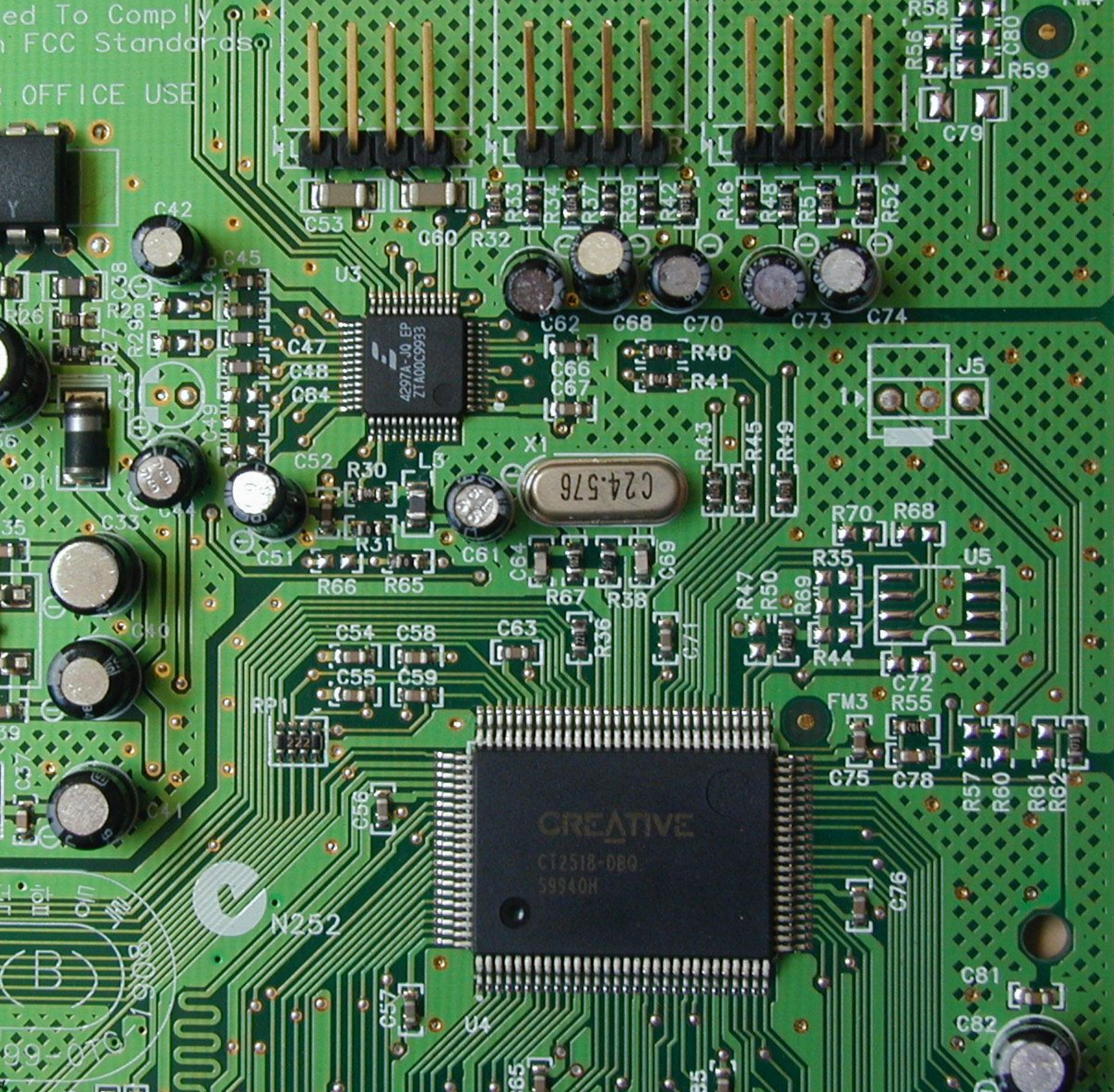


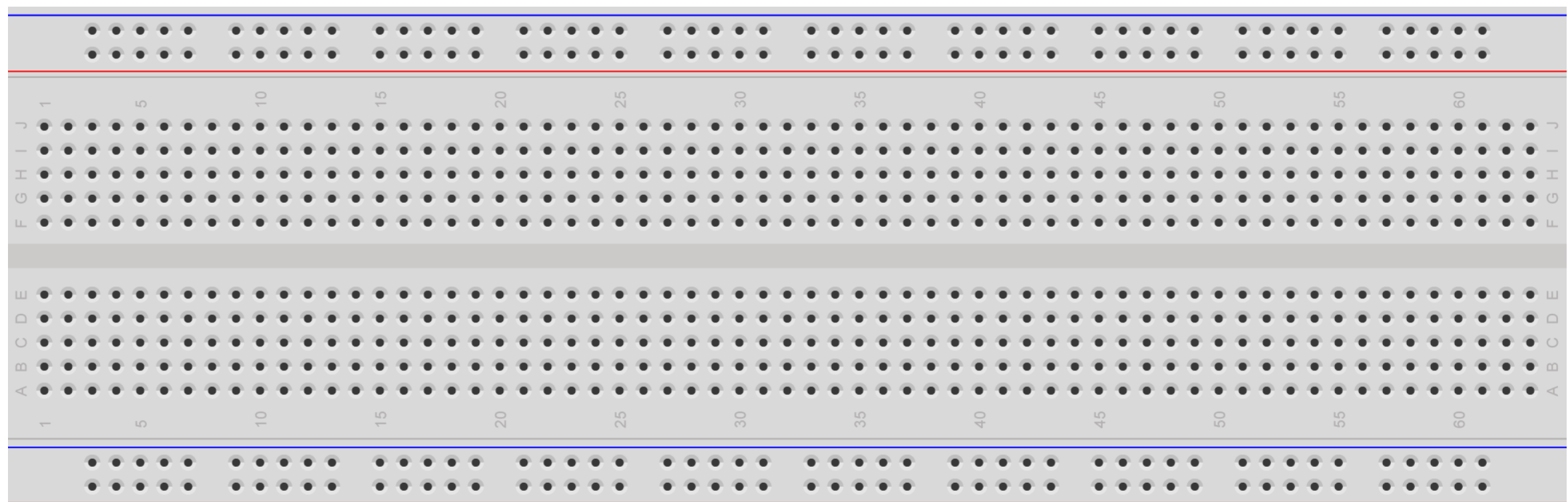
Week 1

Howard Ke

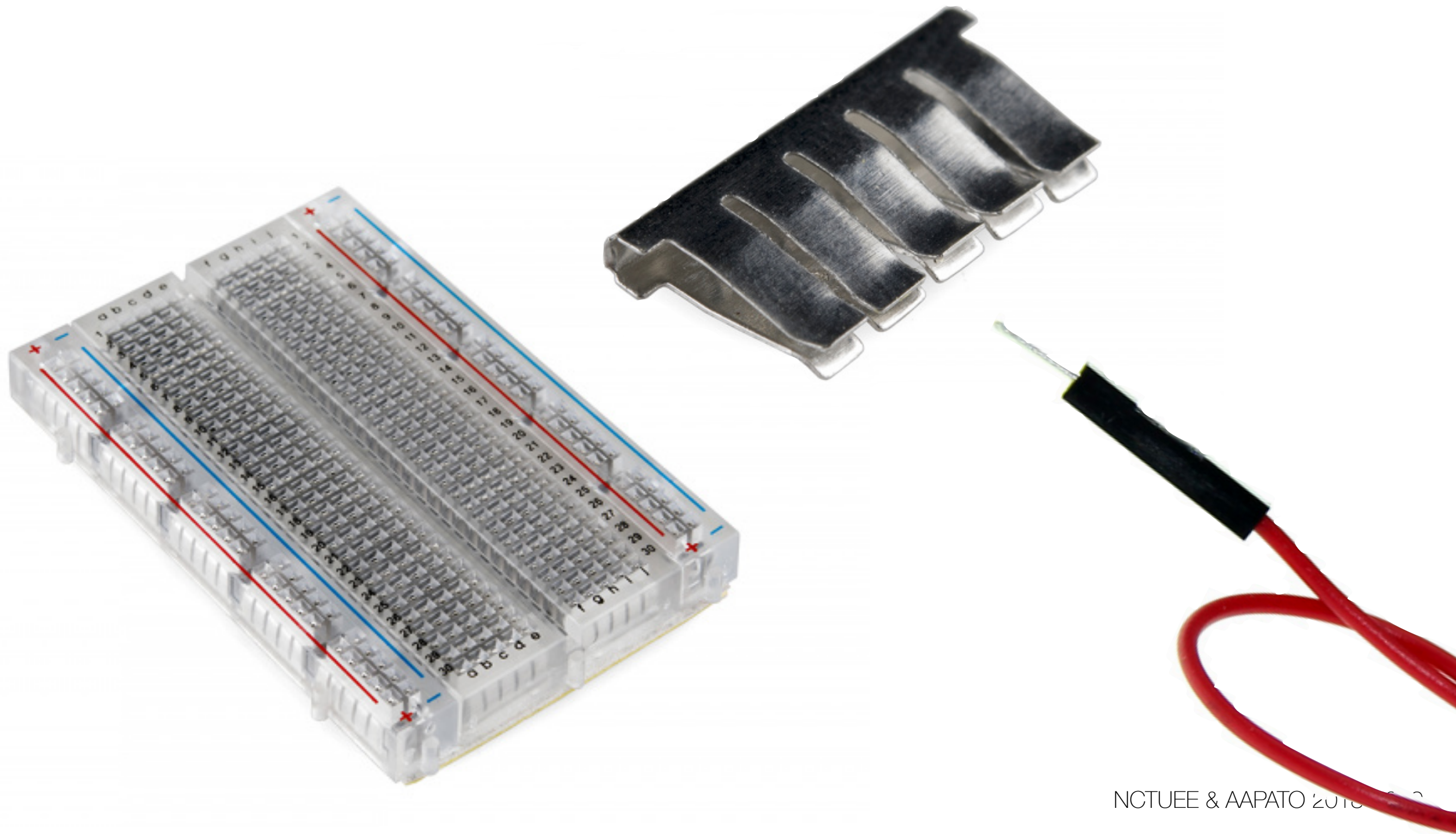


電路？

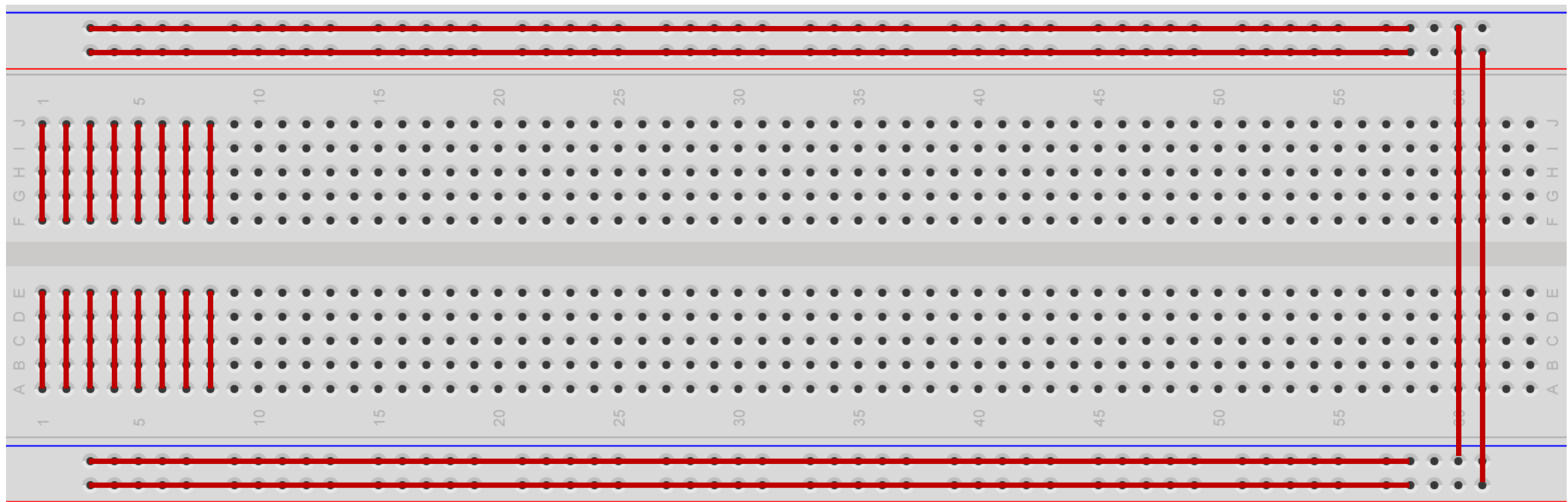
麵包板



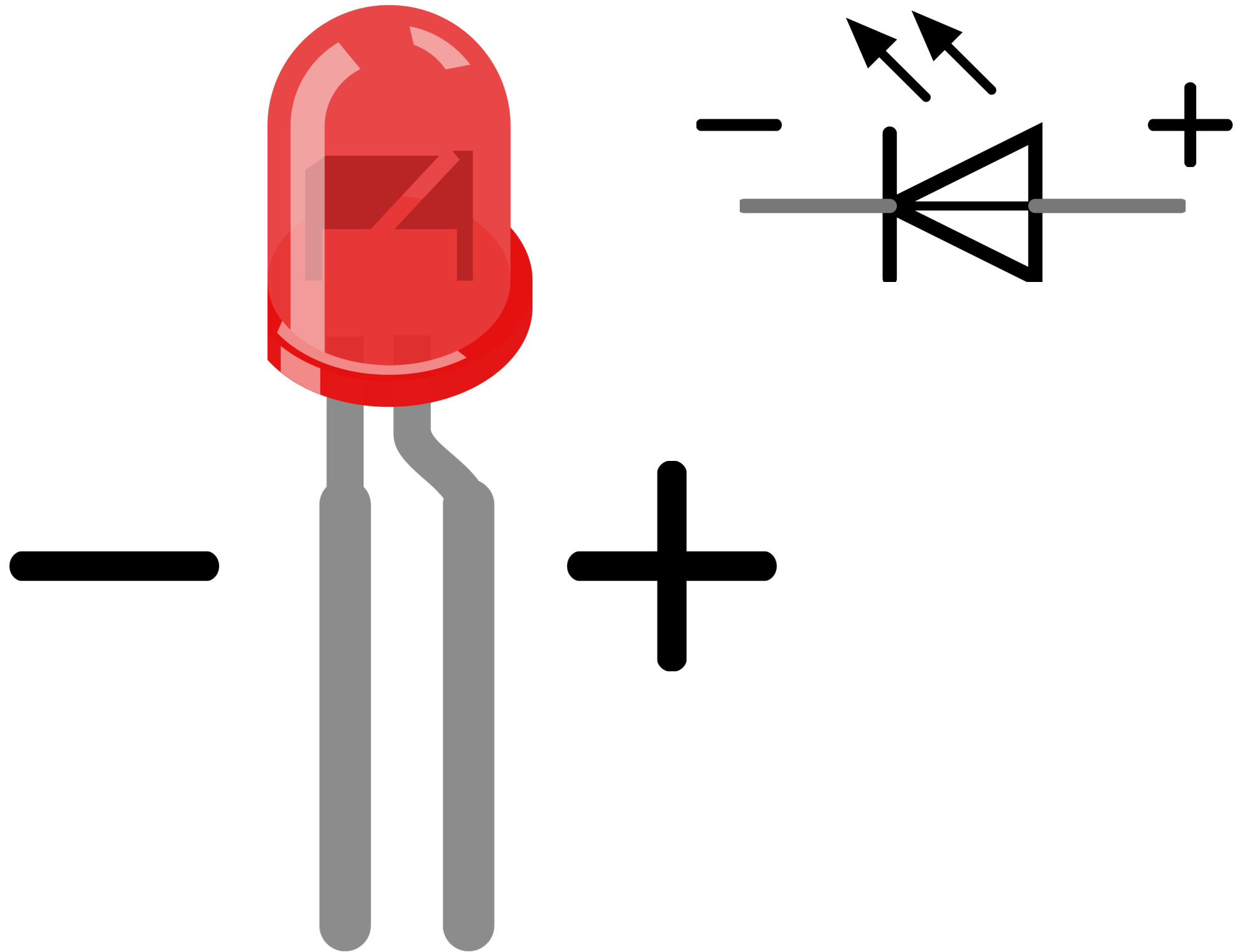
麵包板



麵包板



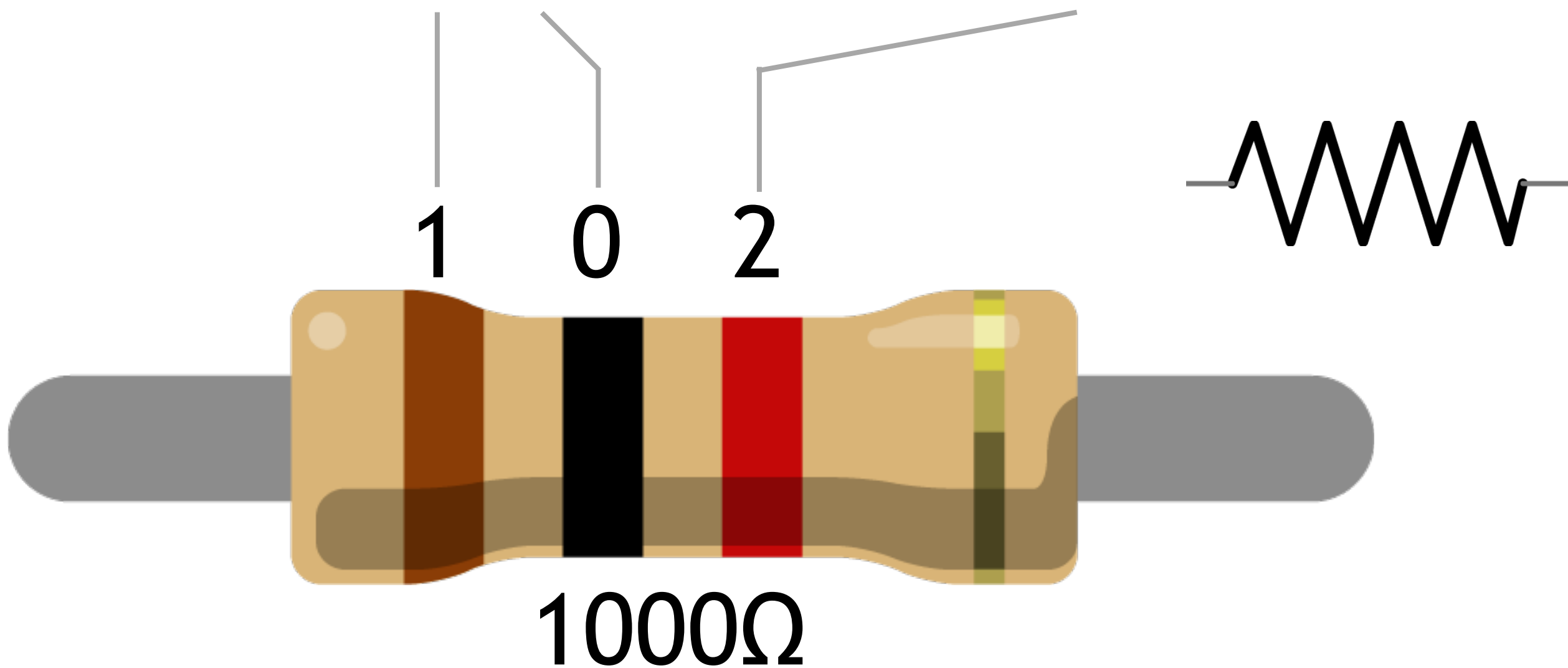
LED(發光二極體)



電阻

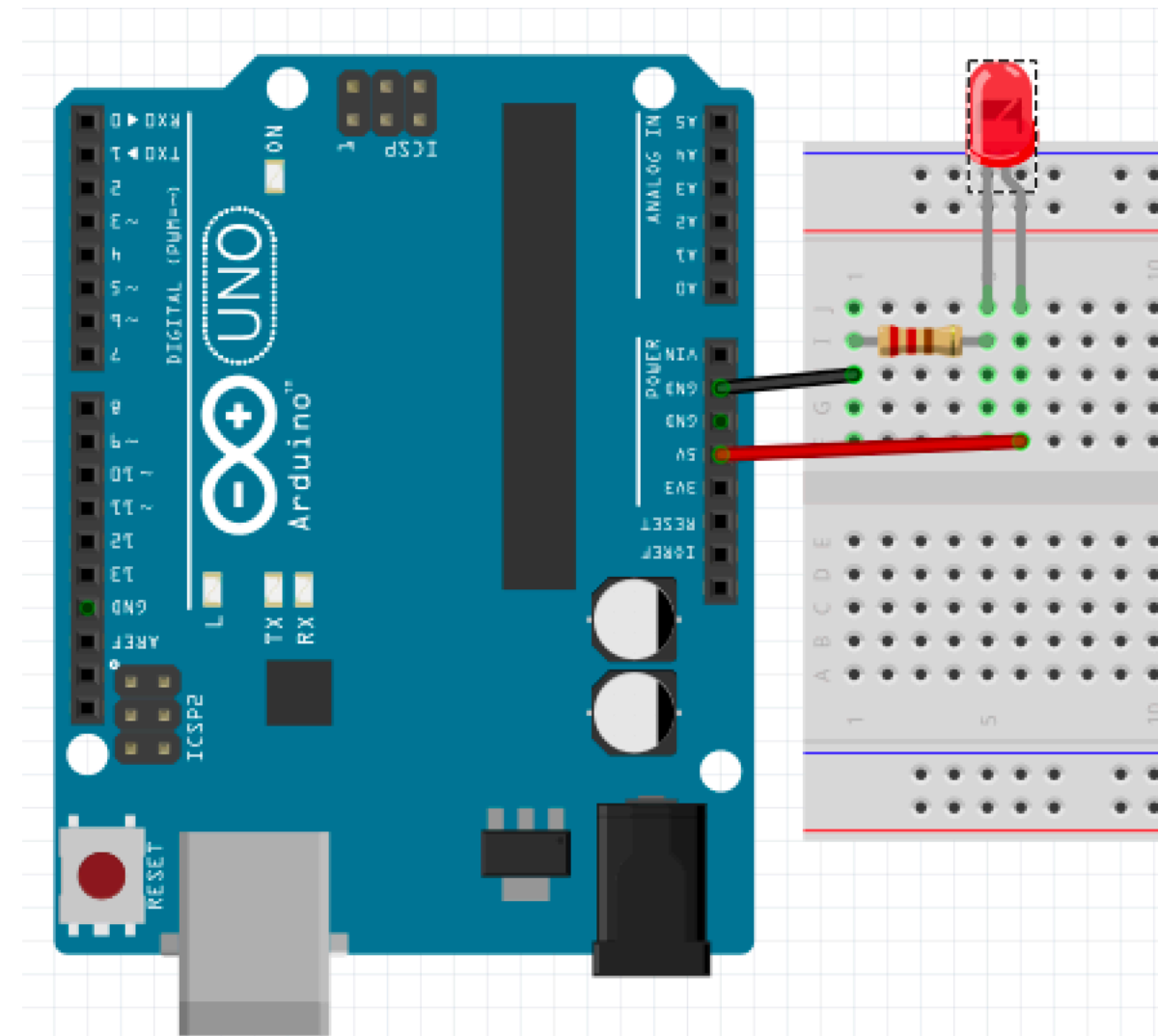


$$R = AB \times 10^C \Omega$$



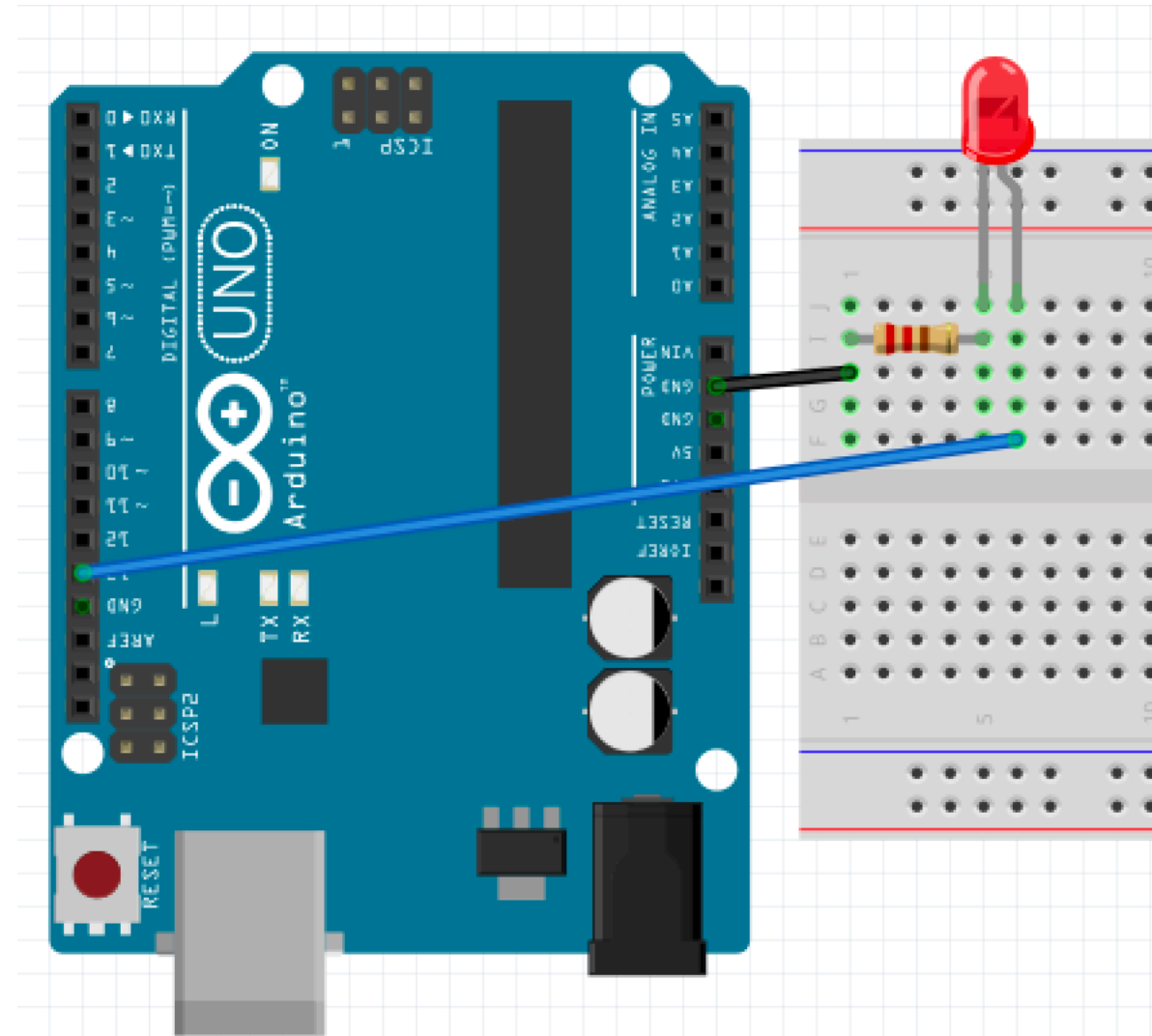
Lab 01

Goal: 讓LED亮



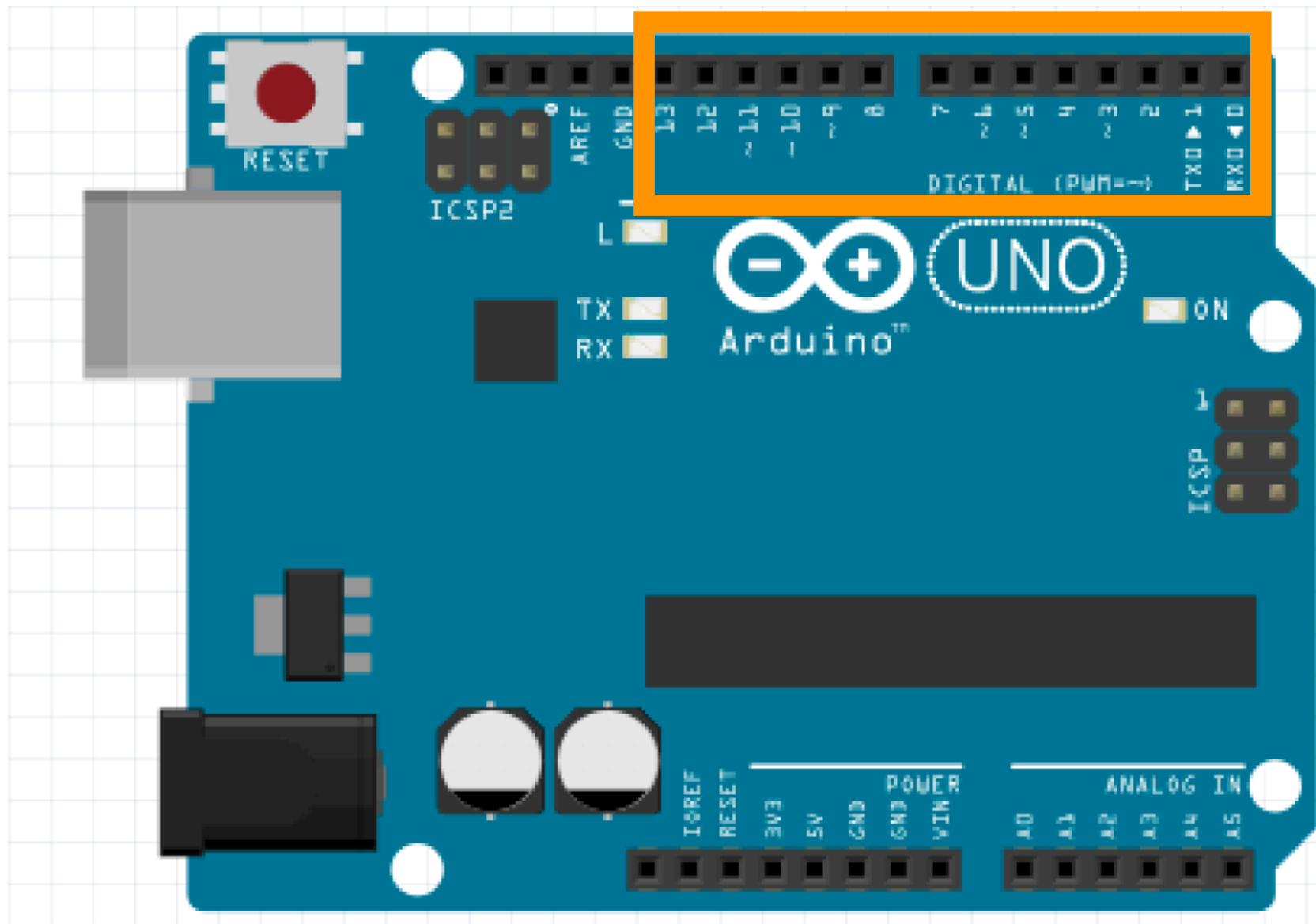
Lab 02

Goal: 讓LED閃



數位輸出

- 輸出 HIGH(5V) 或是 LOW(0V)
- D0 – D13



Code

```
void setup() {  
    // 先被執行，只執行一次  
    // 初始化設定  
}  
  
void loop() {  
    // setup之後執行  
    // 不斷重複  
}
```


Code

```
void setup() {  
    pinMode(13, OUTPUT); //設定腳位13為輸出  
}  
  
void loop() {  
    digitalWrite(13, HIGH); //腳位13輸出5V, LED亮  
    delay(1000);           //等1000毫秒  
  
    digitalWrite(13, LOW); //腳位13輸出0V, LED暗  
    delay(1000);           //等1000毫秒  
}
```

Try

Goal: 讓LED長亮、長亮、短亮

Goal: 讓兩顆LED交替亮

Goal: 讓兩顆LED亮暗模式不同

Lab 03

Goal: 霹靂燈

燈會由左到右再由右到左一顆一顆亮

