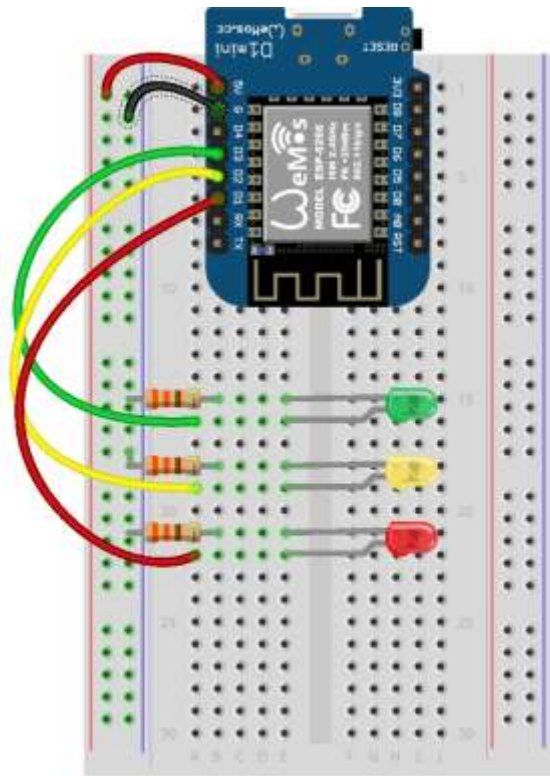


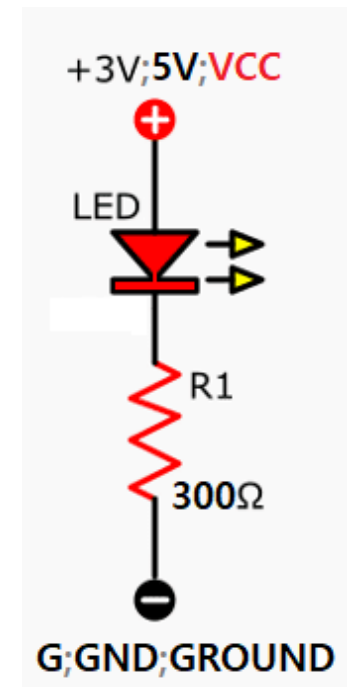


lights

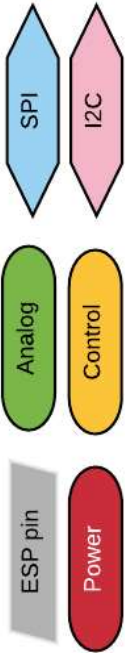
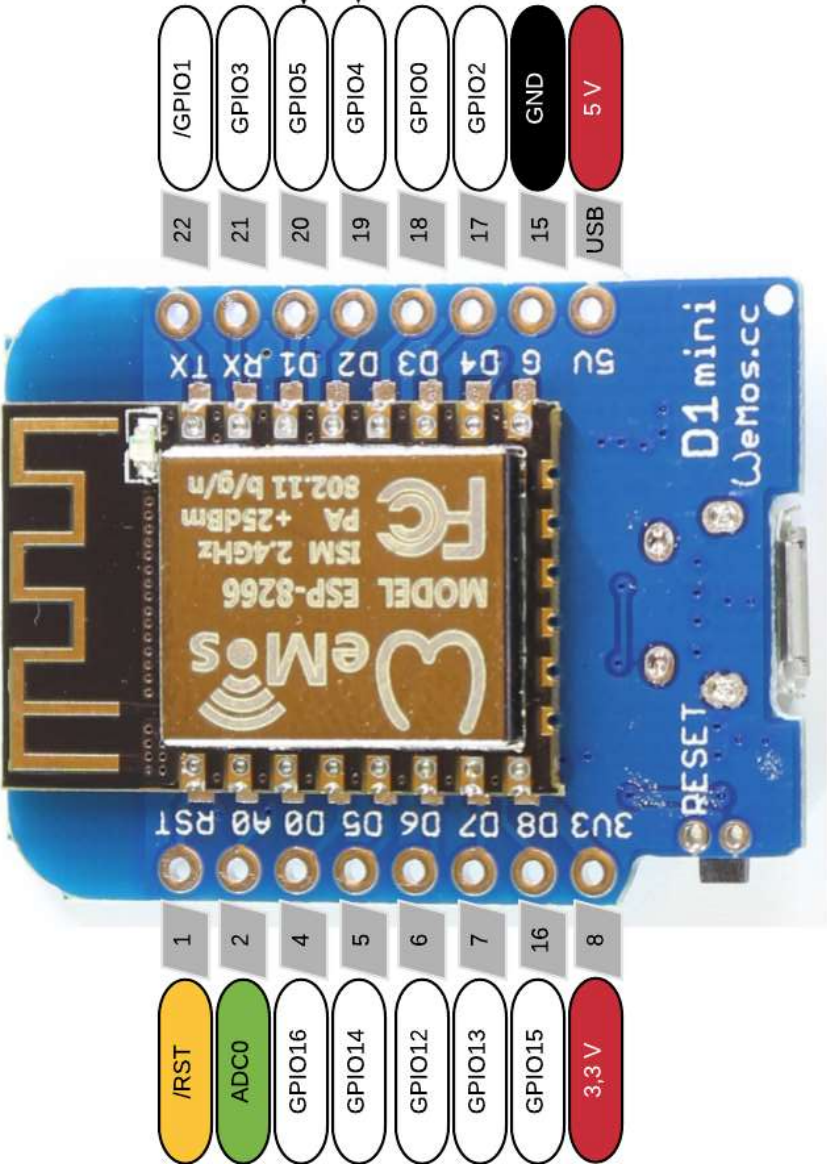


fritzing

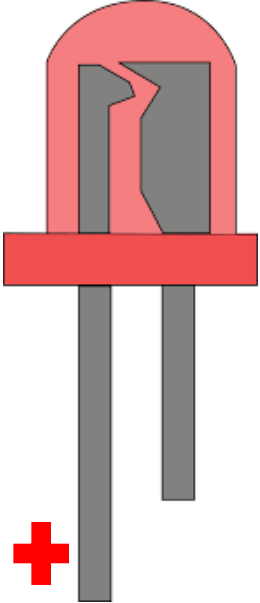
```
1
2  int R = 0; // Red led on D3 = GPIO 0
3  int Y = 4; // Yellow led on D2 = GPIO 4
4  int G = 5; // Green led on D1 = GPIO 5
5
6  void setup() {
7      pinMode( R , OUTPUT );
8      pinMode( Y , OUTPUT );
9      pinMode( G , OUTPUT );
10 }
11
12 void loop(){
13     digitalWrite( R , LOW);
14     digitalWrite( G , HIGH);
15     delay(1000);
16
17     digitalWrite( G , LOW);
18     digitalWrite( Y , HIGH);
19     delay( 1000 );
20
21     digitalWrite( Y , LOW);
22     digitalWrite( R , HIGH);
23     delay( 1000 );
24 }
25
```



WEMOS D1 MINI – PINOUT



LED



RESISTOR



How to Read Resistor Color Codes

Diagram illustrating how to read resistor color codes. It shows a 6-band resistor with the value $274 \Omega \pm 2\%, 250 \text{ ppm/K}$. The bands are labeled: 1st Digit, 2nd Digit, 3rd Digit, Multiplier, Tolerance, and Temperature Coefficient.

Color	1st Digit	2nd Digit	3rd Digit	Multiplier	Tolerance	Temperature Coefficient
Black	0	0	0	1 Ω		250 ppm/K
Brown	1	1	1	10 Ω	$\pm 1\%$	100 ppm/K
Red	2	2	2	100 Ω	$\pm 2\%$	50 ppm/K
Orange	3	3	3	1k Ω		15 ppm/K
Yellow	4	4	4	10k Ω		25 ppm/K
Green	5	5	5	100k Ω	$\pm 0.5\%$	20 ppm/K
Blue	6	6	6	1M Ω	$\pm 0.25\%$	10 ppm/K
Violet	7	7	7		$\pm 0.1\%$	5 ppm/K
Grey	8	8	8			1 ppm/K
White	9	9	9			
Gold				0.1 Ω	$\pm 5\%$	
Silver				0.01 Ω	$\pm 10\%$	

Examples of 4-Band and 5-Band resistors:

- 4-Band: $12 \times 10^4 \pm 5\% = 1,200 \text{ k}\Omega \pm 5\%$
- 5-Band: $100 \times 10^2 \pm 1\% = 10,000 \Omega \pm 1\%$