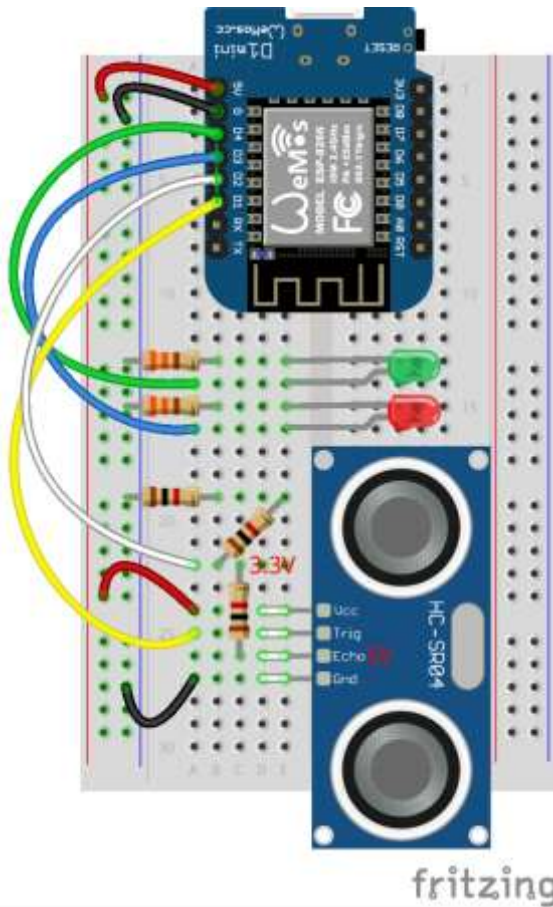




parking radar



```
1  from machine import Pin
2  from time import sleep_ms
3
4  from board_manager import *
5  from sensor_manager import Sensor_HCSR04
6
7  green = Pin( D4, Pin.OUT, value=0 )
8  red = Pin( D3, Pin.OUT, value=0 )
9
10 sensor = Sensor_HCSR04( trigger=D1, echo=D2 )
11
12 ALERT_DISTANCE = 10
13 loops = 10000//50
14 while loops:
15     sensor.read()
16     obstacle = sensor.distance_cm < ALERT_DISTANCE
17     green.value( not obstacle )
18     red.value( obstacle )
19     sleep_ms( 50 )
20     loops = loops - 1 # comment this line to run forever
21
22
23
24
25
26
```

WEMOS D1 MINI – PINOUT

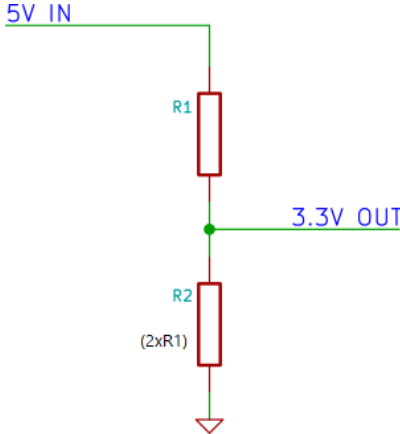
The diagram shows the Wemos D1 Mini board with its pin headers. The top header (GPIO pins) includes: /GPIO1 (pin 22), GPIO3 (pin 21), GPIO5 (pin 20), GPIO4 (pin 19), GPIO0 (pin 18), GPIO2 (pin 17), GND (pin 15), and 5V (pin 16). The bottom header includes: /RST (pin 1), ADC0 (pin 2), GPIO16 (pin 4), GPIO14 (pin 5), GPIO12 (pin 6), GPIO13 (pin 7), GPIO15 (pin 16), and 3.3V (pin 8). The board also features a USB port, a RESET button, and an antenna.

Legend for pin modes:

- SPI (Blue diamond)
- I2C (Pink diamond)
- Analog (Green oval)
- Control (Yellow oval)
- ESP pin (Grey rectangle)
- Power (Red oval)

GPIO15	GPIO0	GPIO2	Mode	Description
L	L	H	UART	Download code from UART
L	H	H	Flash	Boot from SPI Flash
H	x	x	SDIO	Boot from SD-card

Voltage divider



Ultrasonic Distance Sensor (HC-SR04)

The HC-SR04 module has four pins: VCC, Trig, Echo, and Gnd. The VCC pin is connected to 5V, and the Gnd pin is connected to Ground. The Trig pin is labeled as the Trigger input, which can be connected to 3.3V or 5V. The Echo pin is labeled as the Echo output, which is 5V.