

# Pin output high and low levels

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1. Driver library
2. LED

For controlling the Raspberry Pi GPIO pins, our tutorial uses the GPIO Zero library.

## 1. Driver library

If users have used the RPi.GPIO library and wiringPi library before, they will find that the GPIO Zero library and the RPi.GPIO library/wiringPi library handle pins differently:

Driver library	Control pin mode
GPIO Zero Library	Device Class: LED (Output)
RPi.GPIO library/wiringPi library	Output status

The GPIO Zero library has more control methods associated with the device, while the RPi.GPIO library and wiringPi library control pins directly.

## 2. LED

In the GPIO Zero library, we can use the LED interface to control the output high and low levels of the pins.

- Control BCM pin number 17 high and low levels: high and low level output interval 1s

```
from gpiozero import LED
from time import sleep

led = LED(17)

while True:
    led.on()
    sleep(1)
    led.off()
    sleep(1)
```

- Control BCM pin number 17 high and low levels: high and low level output interval 1s (reversed)

```
from gpiozero import LED
from time import sleep

led = LED(17)

while True:
    led.toggle()
    sleep(1)
```

Note: If you connect an LED light to the Raspberry Pi, be sure to connect a resistor in series.