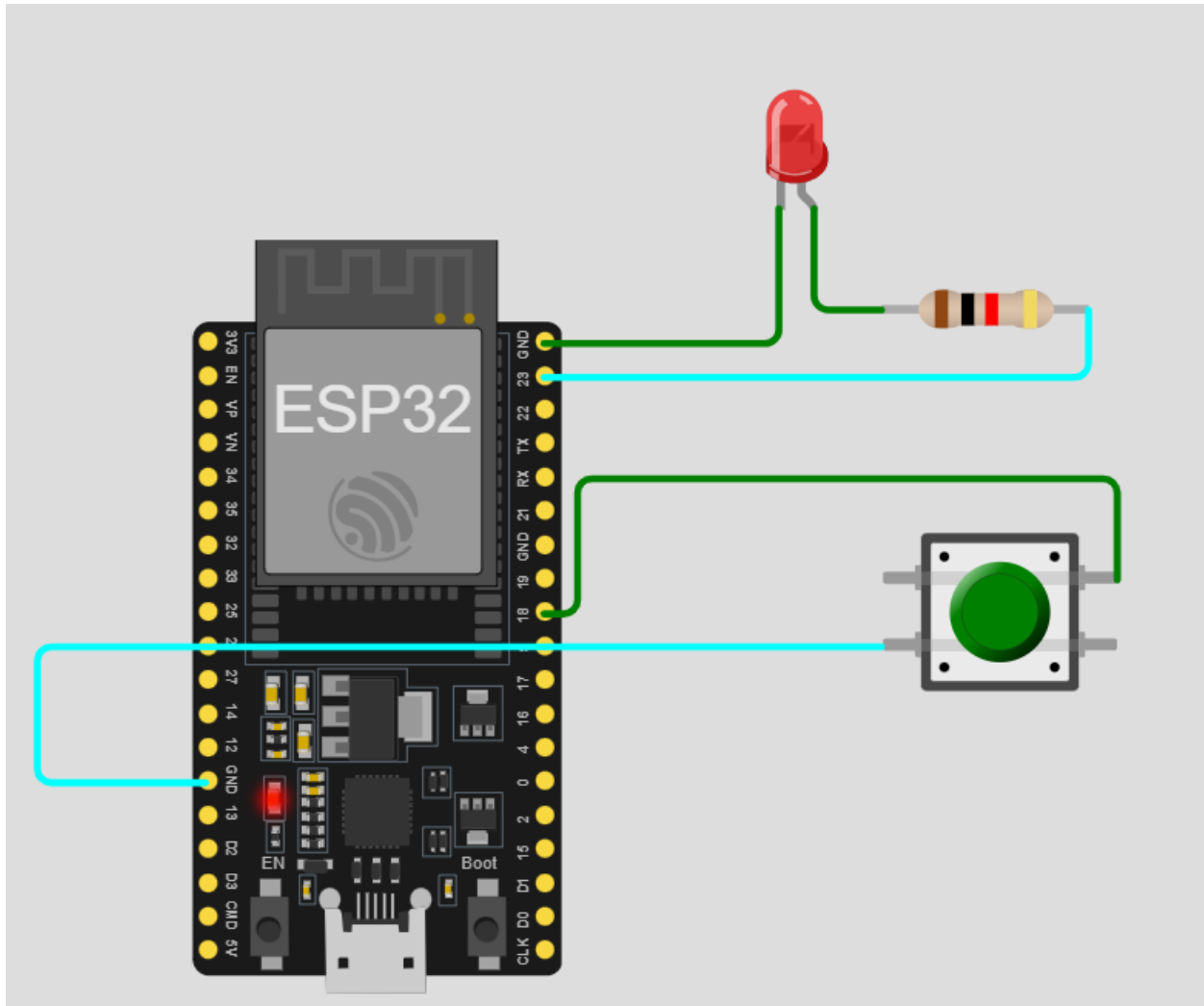


Perfect! Here's a clean Wokwi setup for your ESP32 toggle button + LED project.

GO to <https://wokwi.com/>



□ Components on Breadboard

- ESP32 DevKit V1
- LED
- 220Ω resistor (for LED)
- Push button
- Jumper wires

☐ Connections

LED Circuit

GPIO23 — 220Ω Resistor —> LED Anode (long leg)
LED Cathode (short leg) — GND

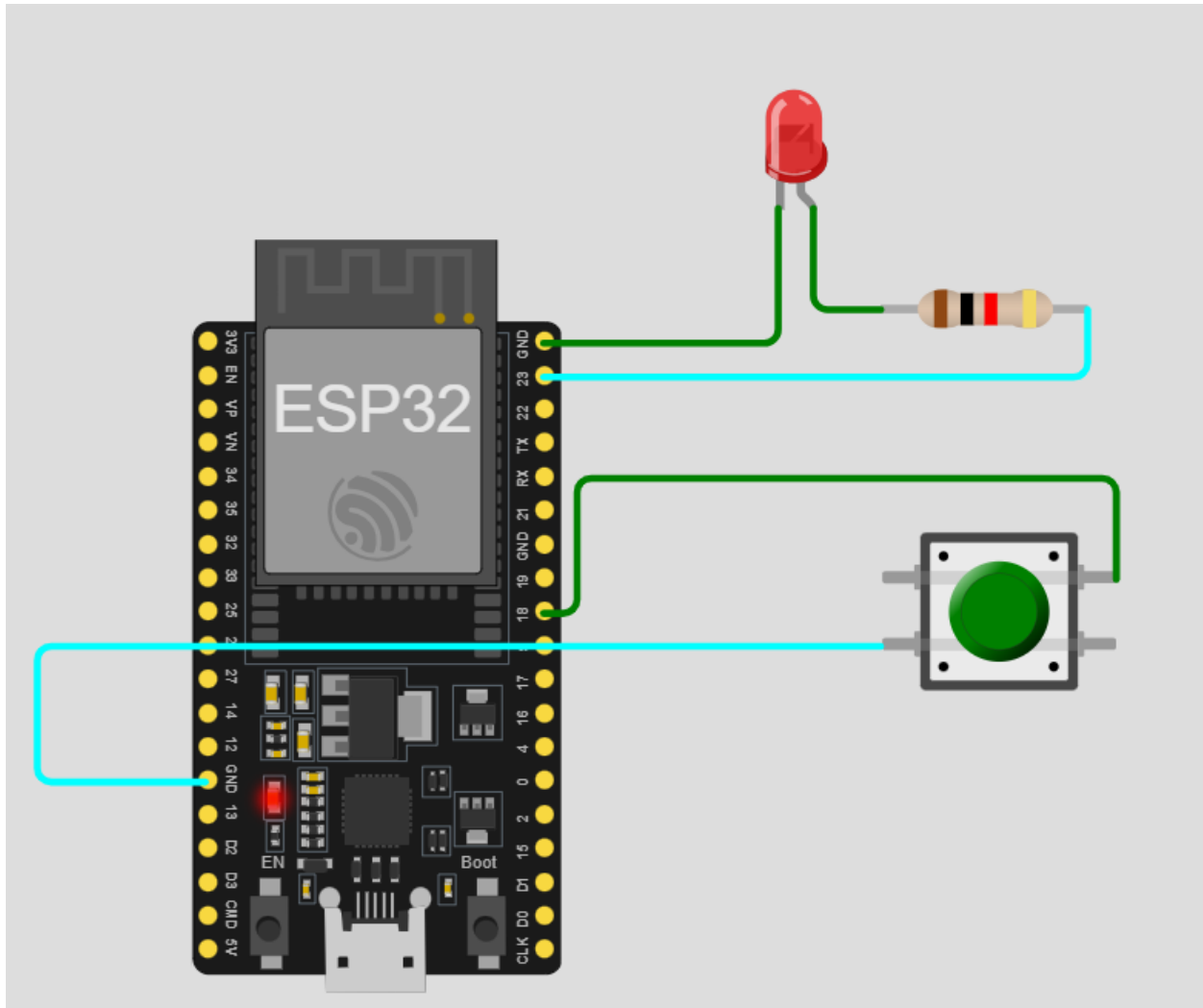
- GPIO23 controls LED
- Resistor protects the LED

Push Button Circuit (Toggle)

GPIO18 — Push Button — GND

- GPIO18 reads button state
- Internal pull-up (`INPUT_PULLUP`) keeps pin HIGH when button **not pressed**
- Pin reads LOW when button **pressed**

☐ No external resistor needed. No 3.3V connection.



sketch.ino file code:-

```
int buttonPin = 18;
int ledPin = 23;

int buttonState = 0;
int lastButtonState = 0;
bool ledState = false;

void setup() {
  pinMode(buttonPin, INPUT_PULLUP);
  pinMode(ledPin, OUTPUT);
}
```

```
}  
  
void loop() {  
  
    buttonState = digitalRead(buttonPin);  
  
    // Detect button press  
    if (buttonState == LOW && lastButtonState == HIGH) {  
        ledState = !ledState;    // Toggle LED state  
        digitalWrite(ledPin, ledState);  
        delay(200); // debounce delay  
    }  
  
    lastButtonState = buttonState;  
}
```

<https://wokwi.com/projects/458383108246016001>