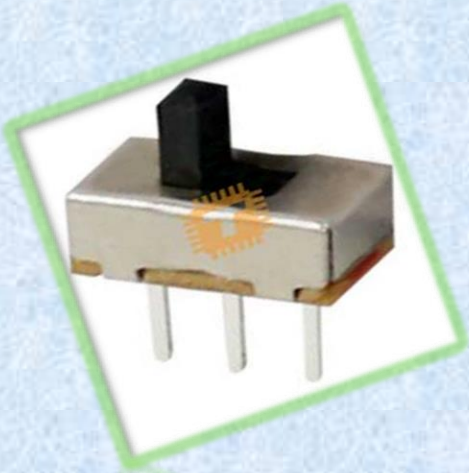
TANSAM

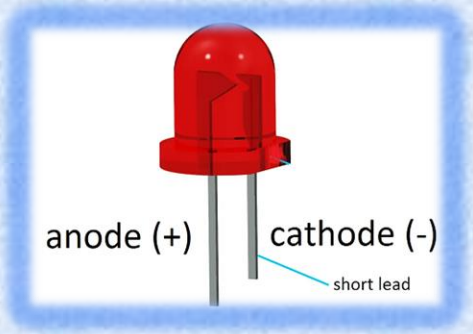
Powered by SIEMENS

Empower Your Interaction with Button Press Detection

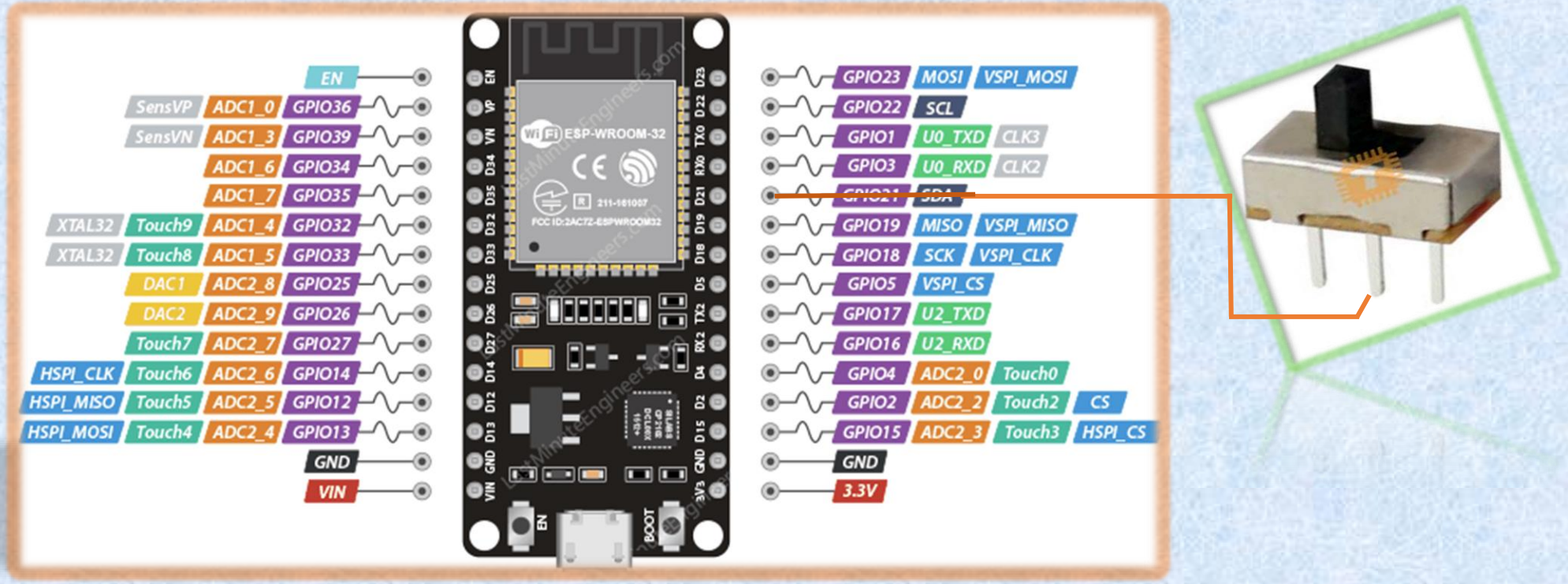
LIST OF COMPONENTS:

1. ESP32 MICROCONTROLLER
2. LED
3. JUMPER WIRES
4. BREAD BOARD
5. SWITCH



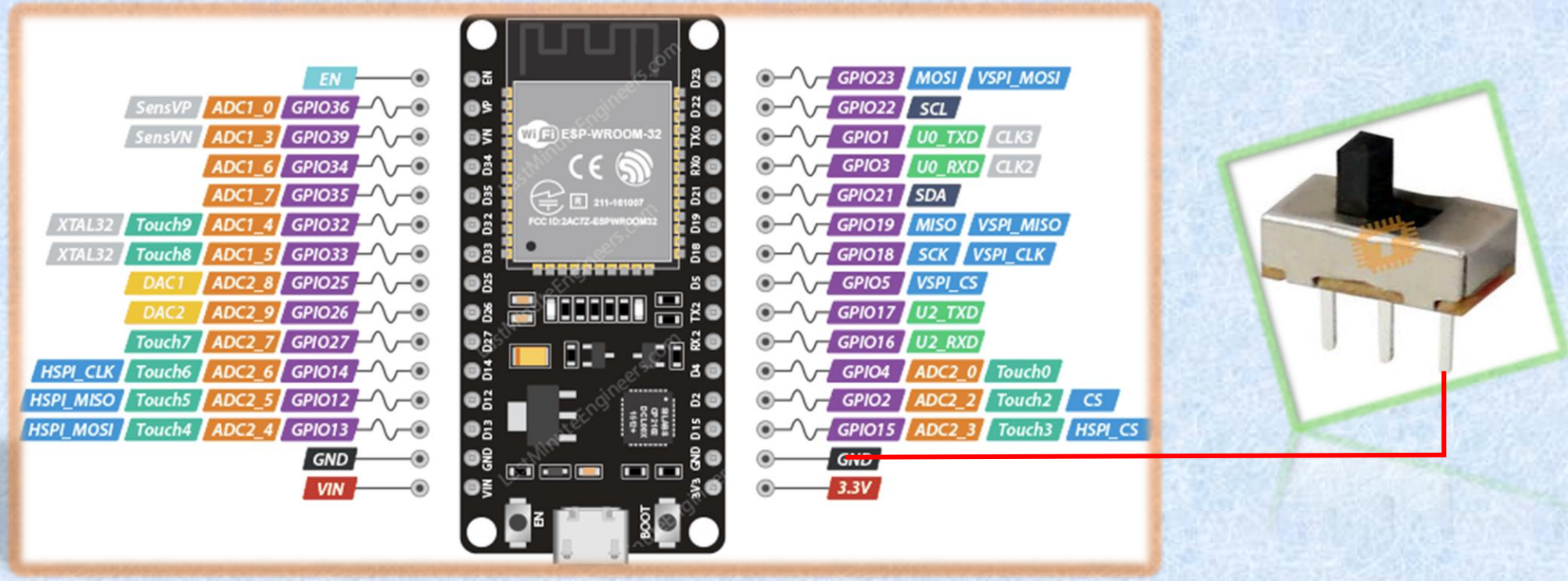


CIRCUIT DIAGRAM

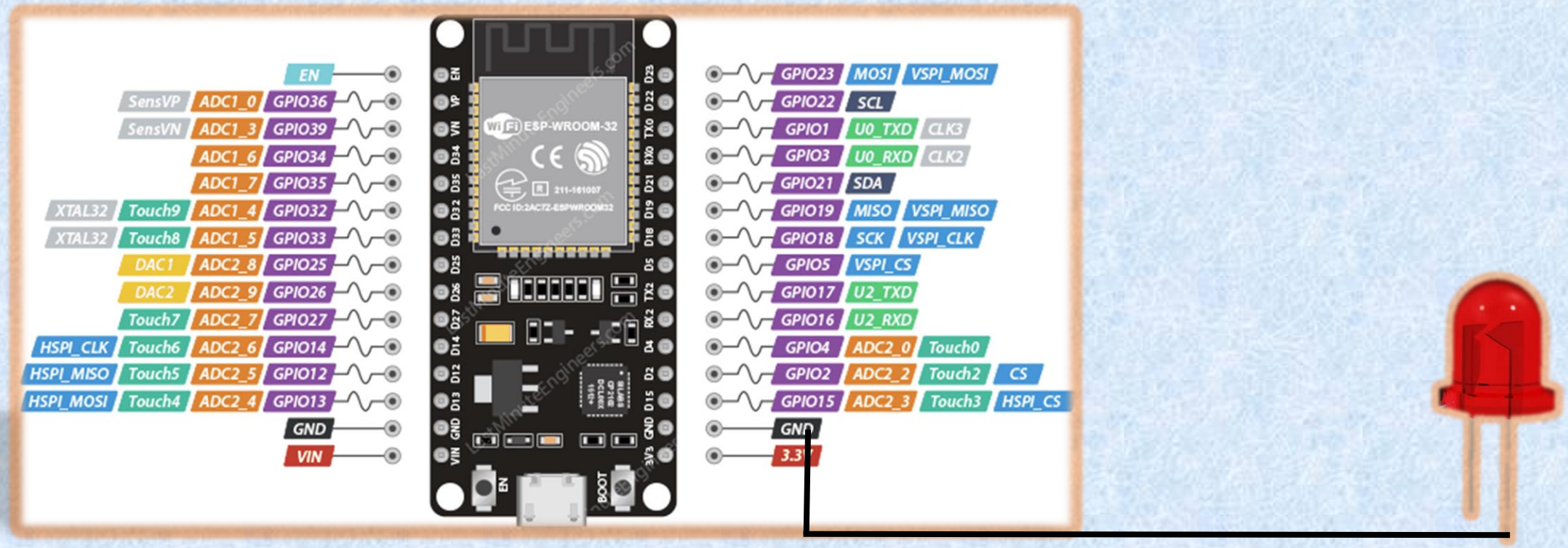


Connect Center Pin - D21

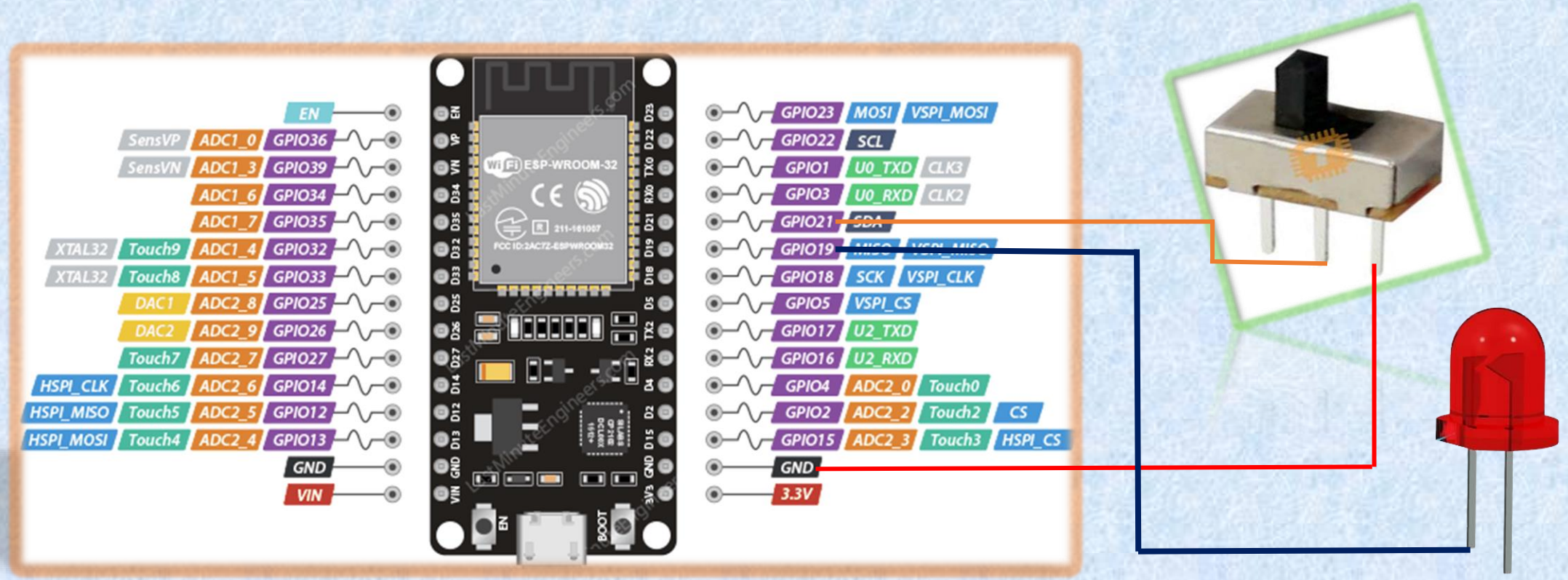
CIRCUIT DIAGRAM



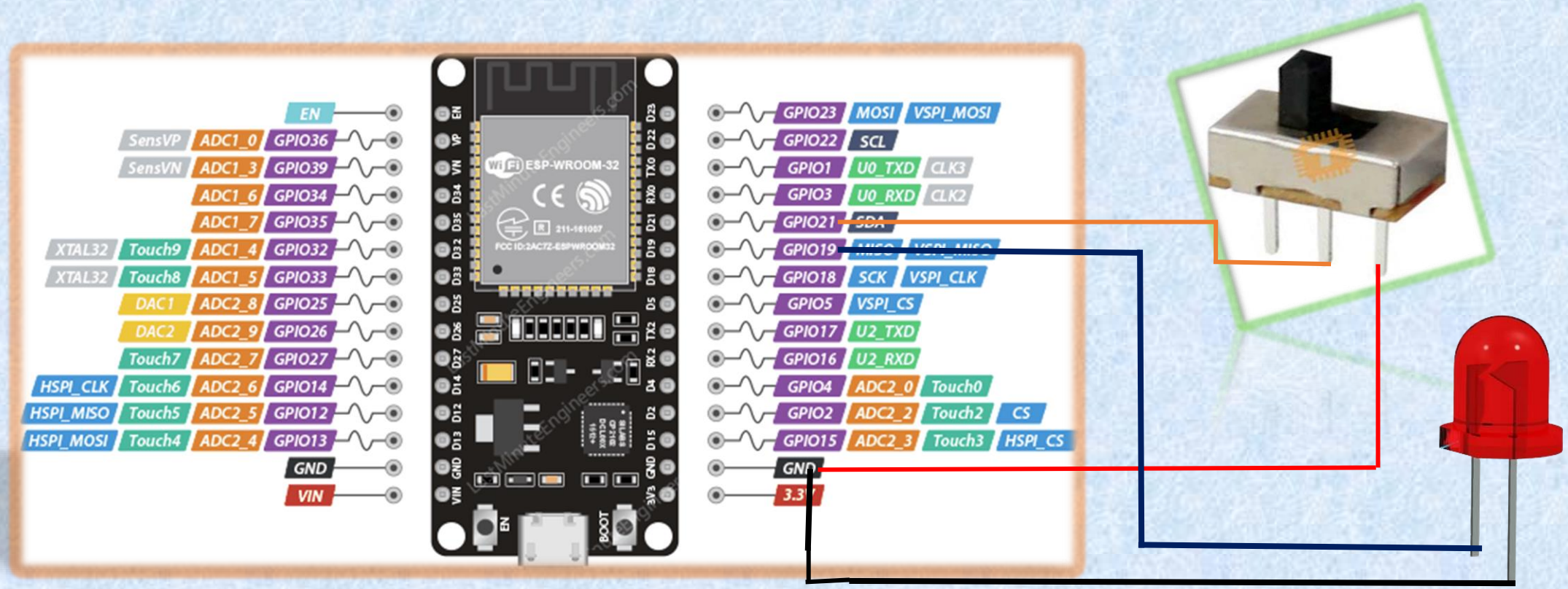
connect 3rd pin-GND



CONNECT CENTER PIN-D21
3rd PIN-GND
ANODE-D19
CATHODE-GND



CONNECT CENTER PIN-D21
3rd PIN-GND
ANODE-D19
CATHODE-GND



CONNECT CENTER PIN-D21
3rd PIN-GND
ANODE-D19
CATHODE-GND

CODE :-

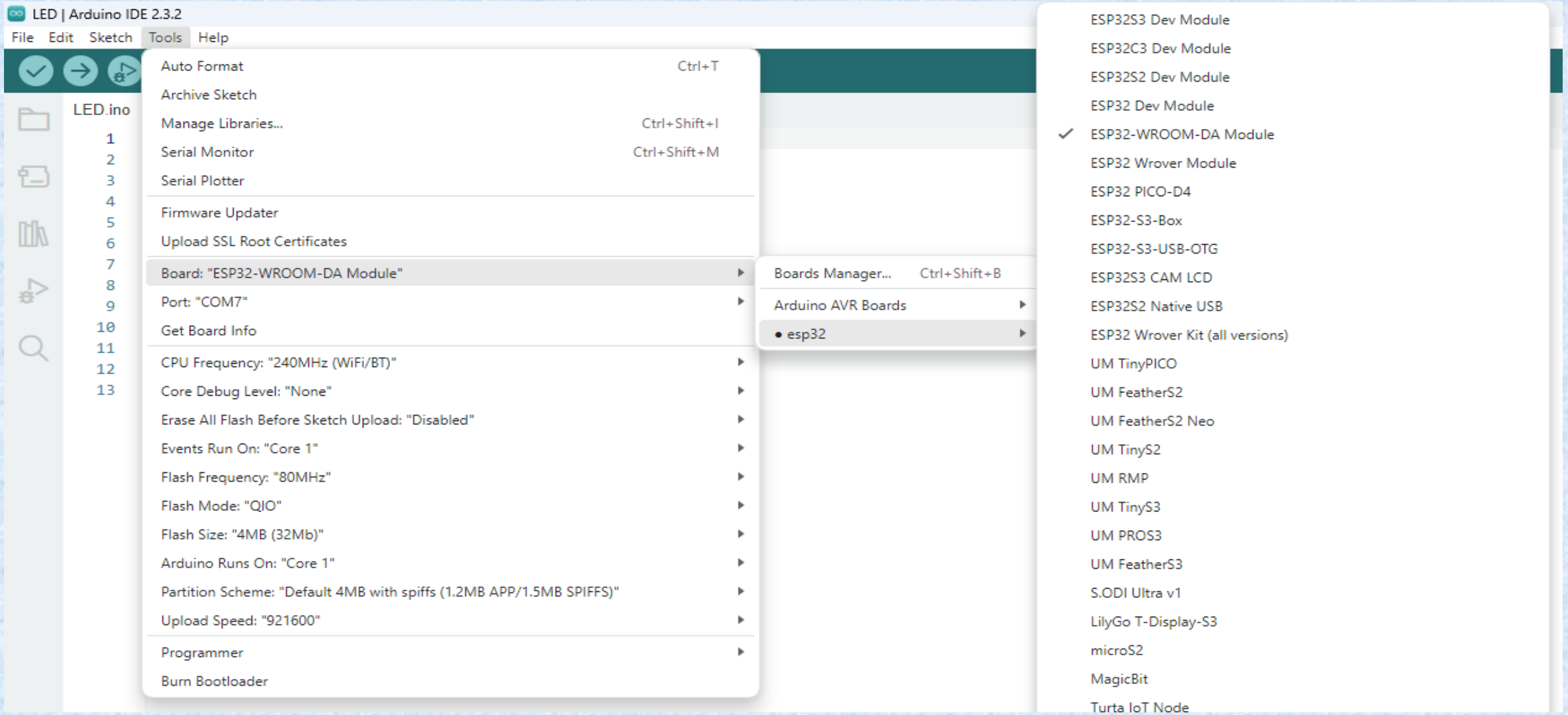
```
const int switchPin = 21;
const int ledPin = 19;
void setup() {
  pinMode(switchPin, INPUT_PULLUP);
  pinMode(ledPin, OUTPUT);
  digitalWrite(ledPin, LOW);
  Serial.begin(115200);
}
void loop() {
  int switchState = digitalRead(switchPin);
  if (switchState == LOW) {
    digitalWrite(ledPin, HIGH);
    Serial.println("Switch is ON, LED is ON");
  }
else {
    digitalWrite(ledPin, LOW);
    Serial.println("Switch is OFF, LED is OFF");
  }
  delay(3000);
}
lastButtonState =buttonState;
}
```

STEP 1:

Copy code paste in Arduino new Sketch

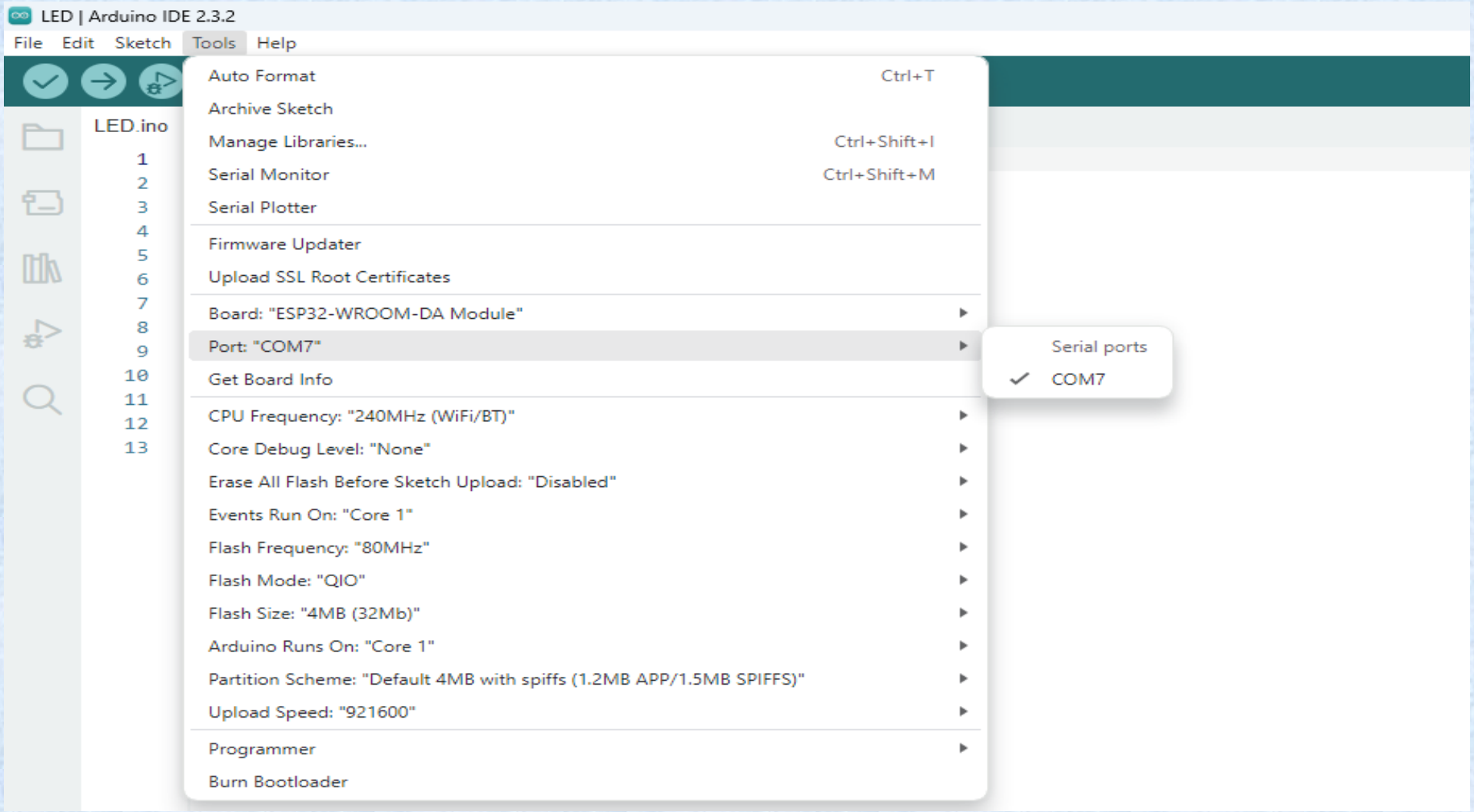
STEP 2 :

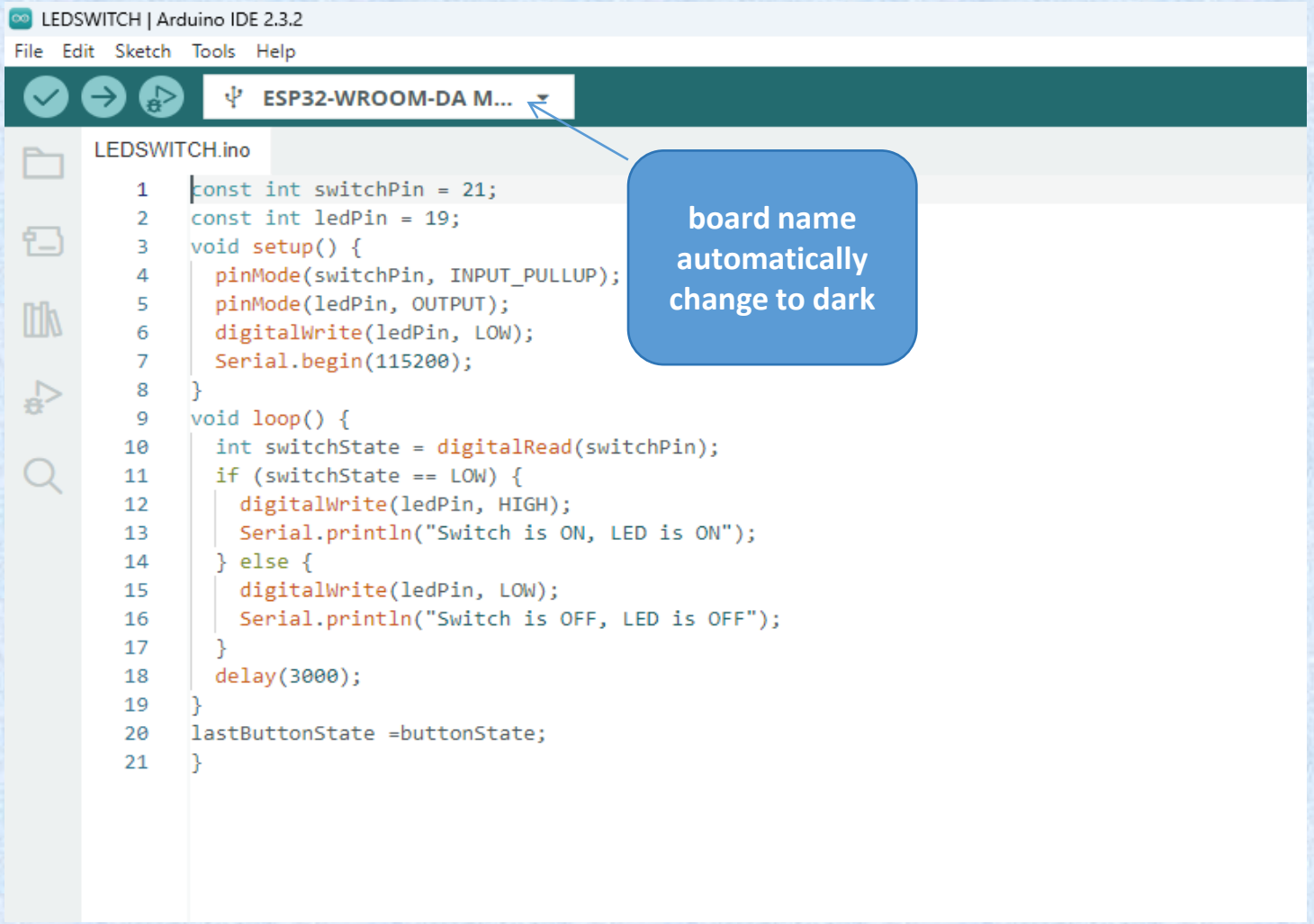
Board---->esp32---->esp32-wroom-DA module

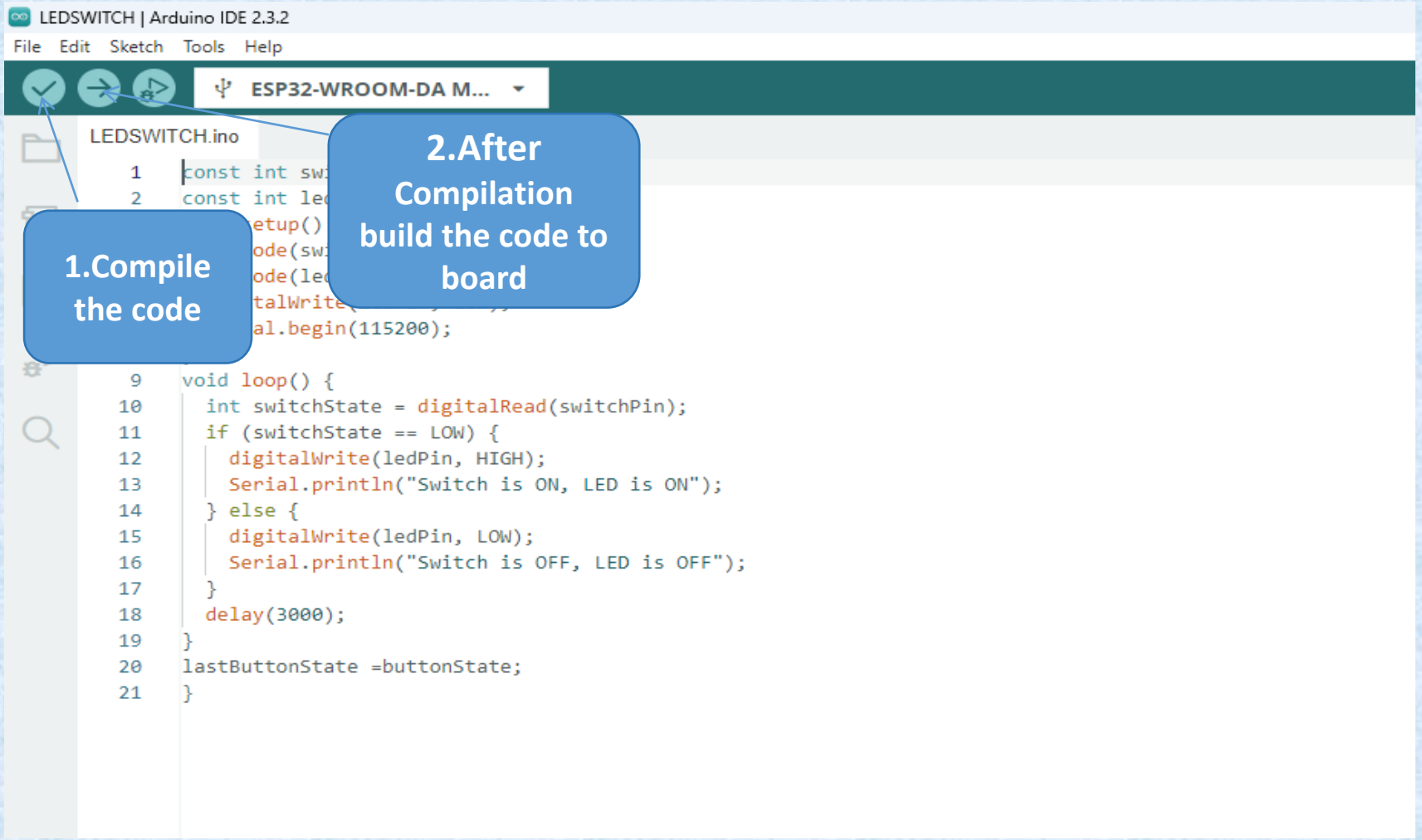


STEP 3:

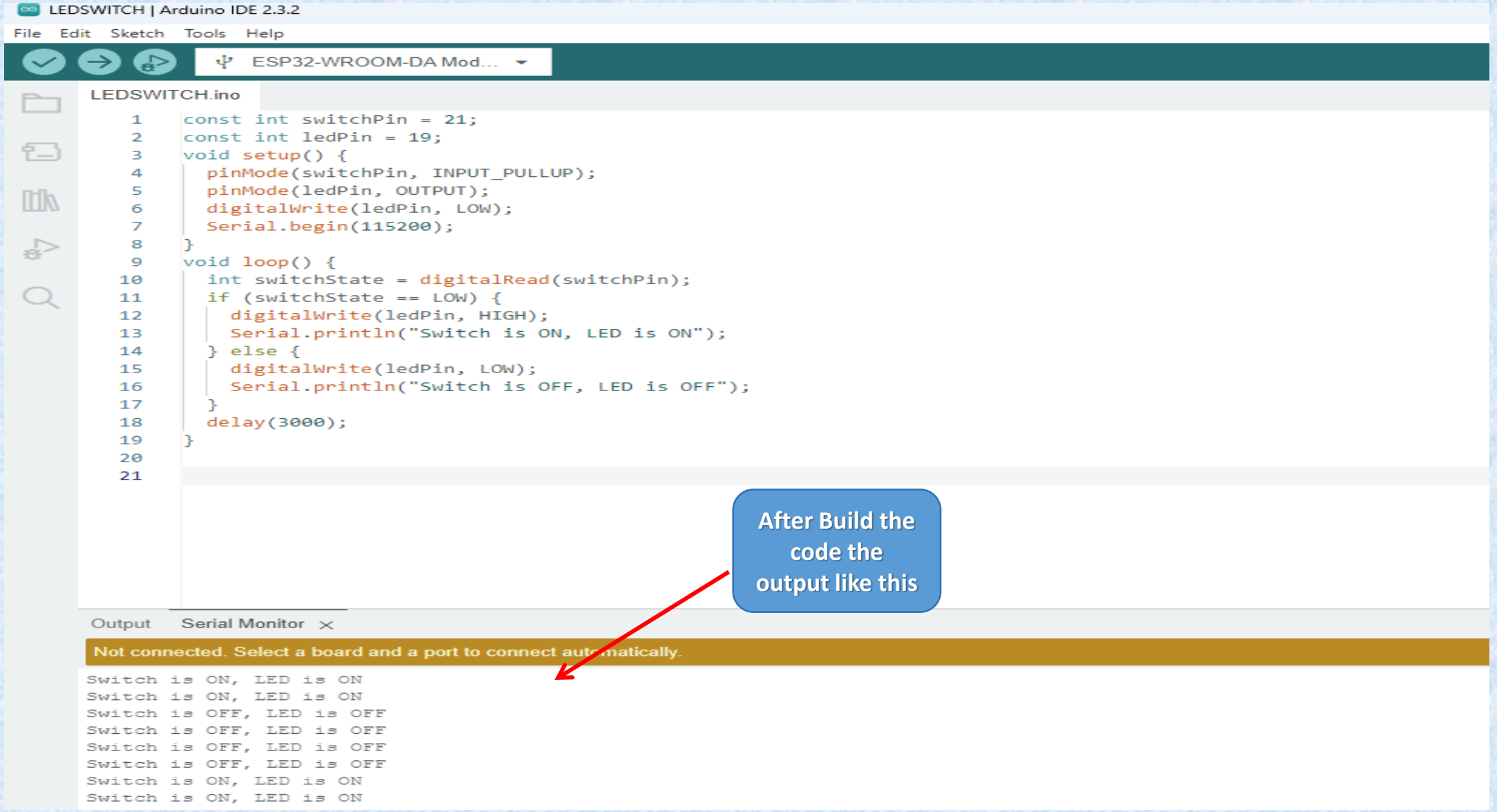
Tools---->port---->select your com




LEDSWITCH | Arduino IDE 2.3.2
File Edit Sketch Tools Help
ESP32-WROOM-DA M...
LEDSWITCH.ino
board name automatically change to dark
1 const int switchPin = 21;
2 const int ledPin = 19;
3 void setup() {
4 pinMode(switchPin, INPUT_PULLUP);
5 pinMode(ledPin, OUTPUT);
6 digitalWrite(ledPin, LOW);
7 Serial.begin(115200);
8 }
9 void loop() {
10 int switchState = digitalRead(switchPin);
11 if (switchState == LOW) {
12 digitalWrite(ledPin, HIGH);
13 Serial.println("Switch is ON, LED is ON");
14 } else {
15 digitalWrite(ledPin, LOW);
16 Serial.println("Switch is OFF, LED is OFF");
17 }
18 delay(3000);
19 }
20 lastButtonState =buttonState;
21 }


LEDSWITCH | Arduino IDE 2.3.2
File Edit Sketch Tools Help
ESP32-WROOM-DA M...
LEDSWITCH.ino
1.Compile the code
2.After Compilation build the code to board
const int sw
const int le
etup()
ode(sw
ode(le
talWrite
al.begin(115200);
void loop() {
int switchState = digitalRead(switchPin);
if (switchState == LOW) {
digitalWrite(ledPin, HIGH);
Serial.println("Switch is ON, LED is ON");
} else {
digitalWrite(ledPin, LOW);
Serial.println("Switch is OFF, LED is OFF");
}
delay(3000);
}
lastButtonState =buttonState;
}

OUTPUT :


LEDSWITCH | Arduino IDE 2.3.2
File Edit Sketch Tools Help
ESP32-WROOM-DA Mod...
LEDSWITCH.ino
1 const int switchPin = 21;
2 const int ledPin = 19;
3 void setup() {
4 pinMode(switchPin, INPUT_PULLUP);
5 pinMode(ledPin, OUTPUT);
6 digitalWrite(ledPin, LOW);
7 Serial.begin(115200);
8 }
9 void loop() {
10 int switchState = digitalRead(switchPin);
11 if (switchState == LOW) {
12 digitalWrite(ledPin, HIGH);
13 Serial.println("Switch is ON, LED is ON");
14 } else {
15 digitalWrite(ledPin, LOW);
16 Serial.println("Switch is OFF, LED is OFF");
17 }
18 delay(3000);
19 }
20
21
After Build the code the output like this
Output Serial Monitor
Not connected. Select a board and a port to connect automatically.
Switch is ON, LED is ON
Switch is ON, LED is ON
Switch is OFF, LED is OFF
Switch is OFF, LED is OFF
Switch is OFF, LED is OFF
Switch is OFF, LED is OFF
Switch is ON, LED is ON
Switch is ON, LED is ON