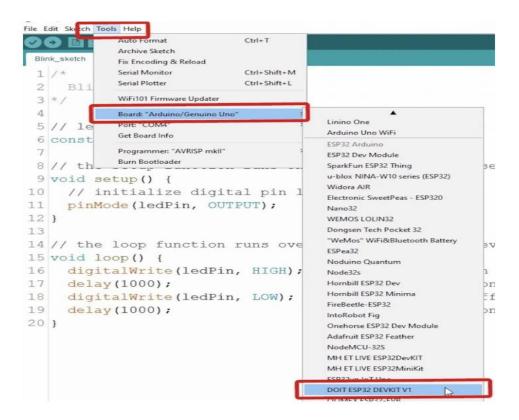
we program the ESP32 mainly with Arduino IDE

There's an add-on for the Arduino IDE allows you to program the ESP32 using the Arduino IDE and its programming language.

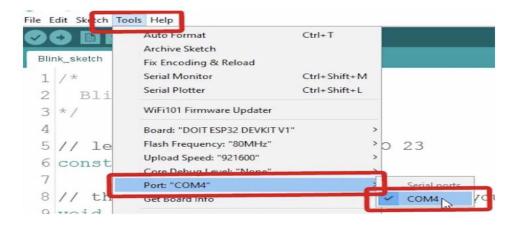
## 1- Upload Code to the ESP32 using Arduino IDE

```
Blink
*/
// ledPin refers to ESP32 GPIO 23
const int ledPin = 23;
// the setup function runs once when you press reset or power the board
void setup() {
// initialize digital pin ledPin as an output.
pinMode(ledPin, OUTPUT);
}
// the loop function runs over and over again forever
void loop() {
 digitalWrite(ledPin, HIGH); // turn the LED on (HIGH is the voltage level)
                      // wait for a second
 delay(1000);
 digitalWrite(ledPin, LOW); // turn the LED off by making the voltage LOW
                     // wait for a second
 delay(1000);
}
```

2- Plug your ESP32 development board to your computer and follow these next instructions:



- 3- Go to **Tools** > **Board**, scroll down to the ESP32 section and select the name of your ESP32 board. In my case, it's the DOIT ESP32 DEVKIT V1 board.
- 2) Go to **Tools** > **Port** and select a COM port available.



## 4- Press the upload button



## That's it!

**Note:** If you get the following error when trying to upload code, it means that your ESP32 is not in flashing/uploading mode.