

Software instructions - in english

Install Arduino IDE

<https://www.arduino.cc/en/software>

Choose your operating system

Downloads



Arduino IDE 2.3.2

The new major release of the Arduino IDE is faster and even more powerful! In addition to a more modern editor and a more responsive interface it features autocompletion, code navigation, and even a live debugger.

For more details, please refer to the [Arduino IDE 2.0 documentation](#).

Nightly builds with the latest bugfixes are available through the section below.

SOURCE CODE

The Arduino IDE 2.0 is open source and its source code is hosted on [GitHub](#).

DOWNLOAD OPTIONS

Windows Win 10 and newer, 64 bits
Windows MSI installer
Windows ZIP file
Linux AppImage 64 bits (X86-64)
Linux ZIP file 64 bits (X86-64)
macOS Intel, 10.15: "Catalina" or newer, 64 bits
macOS Apple Silicon, 11: "Big Sur" or newer, 64 bits
[Release Notes](#)

Choose "Just Download"

Download Arduino IDE & support its progress

Since the 1.x release in March 2015, the Arduino IDE has been downloaded **81 094 051** times — impressive! Help its development with a donation.

\$3

\$5

\$10

\$25

\$50

Other

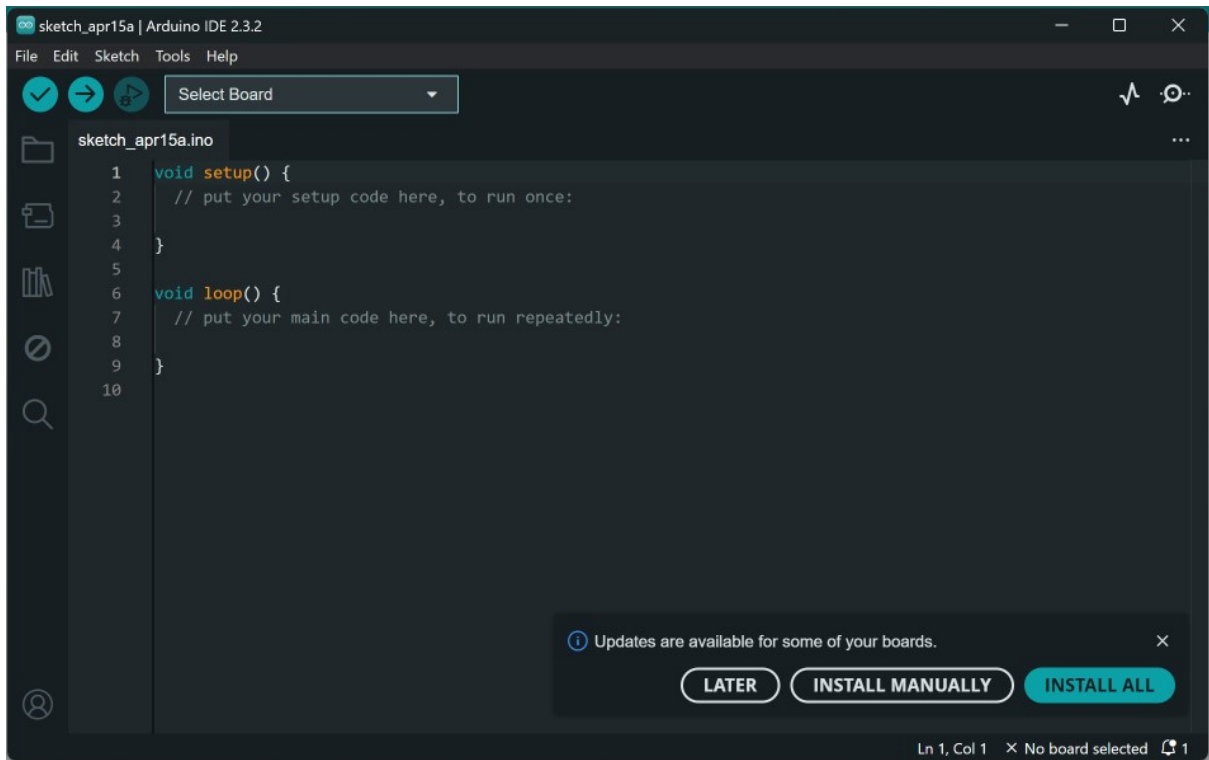
CONTRIBUTE AND DOWNLOAD

or

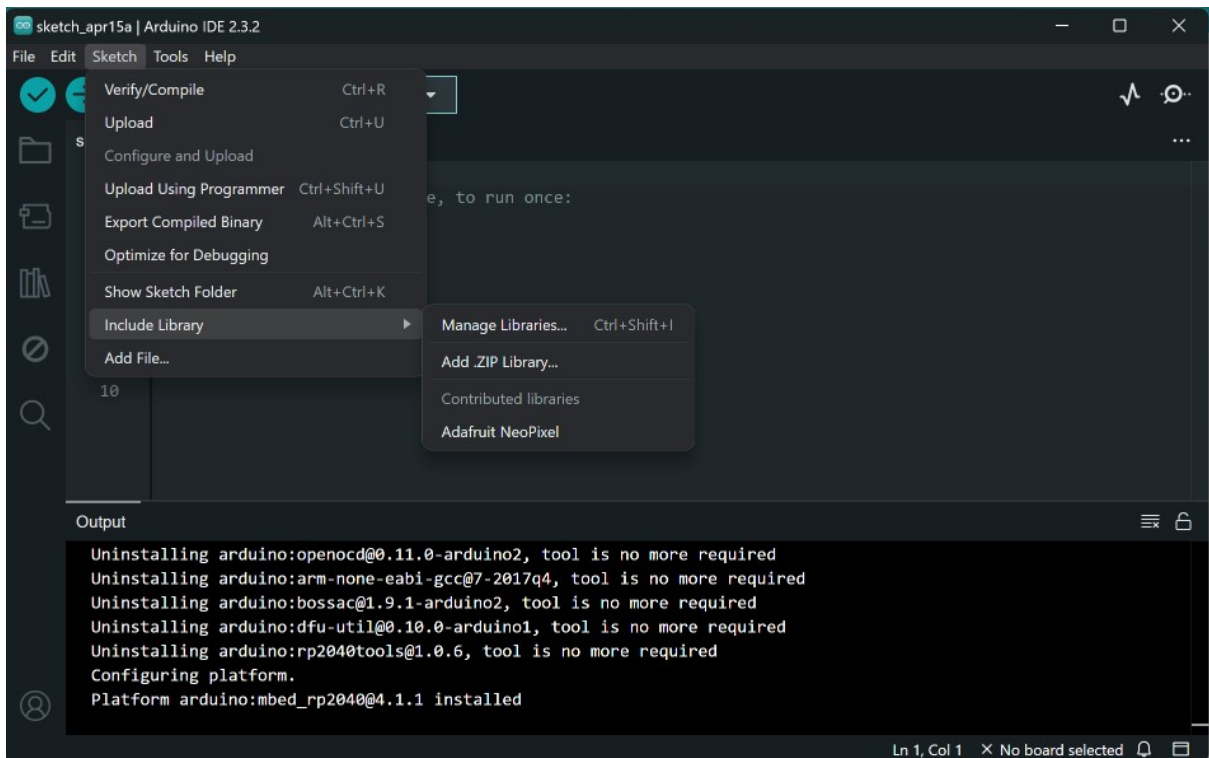
JUST DOWNLOAD

Start installation by clicking the downloaded file either in the file system or in the top right "downloads" view of your browser.

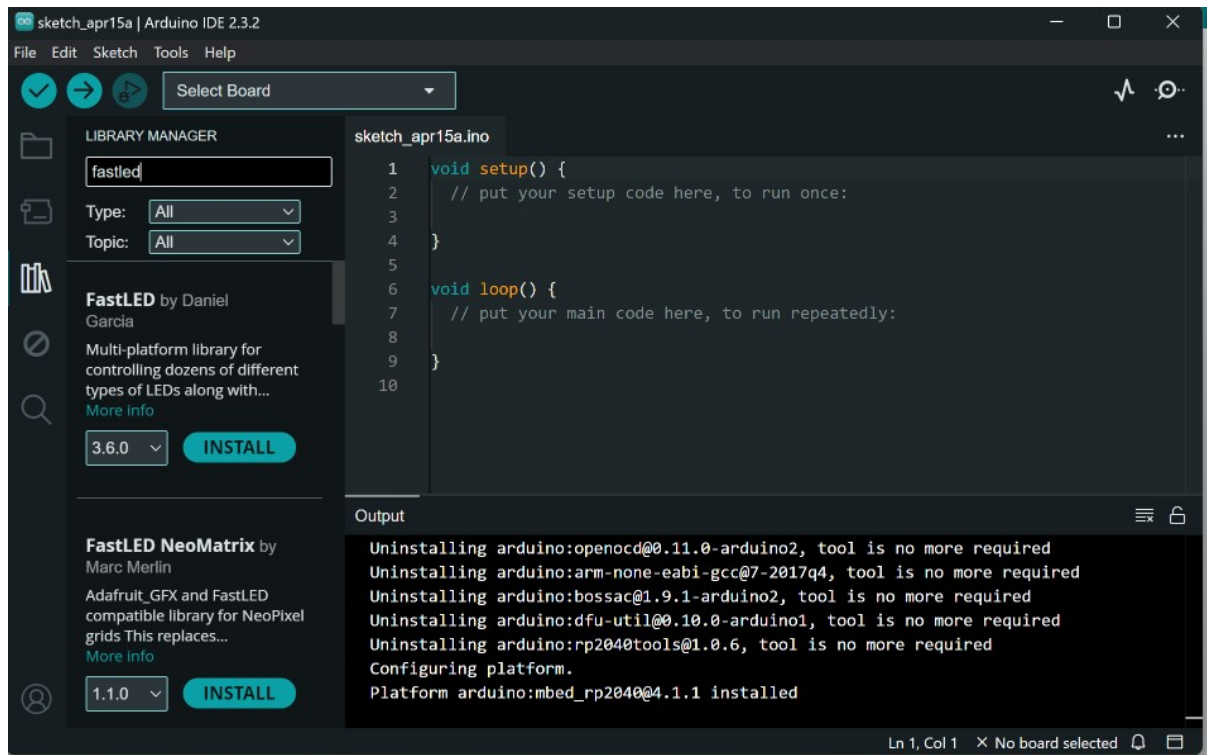
Installation will ask permission, installation path etc. you can go with defaults.



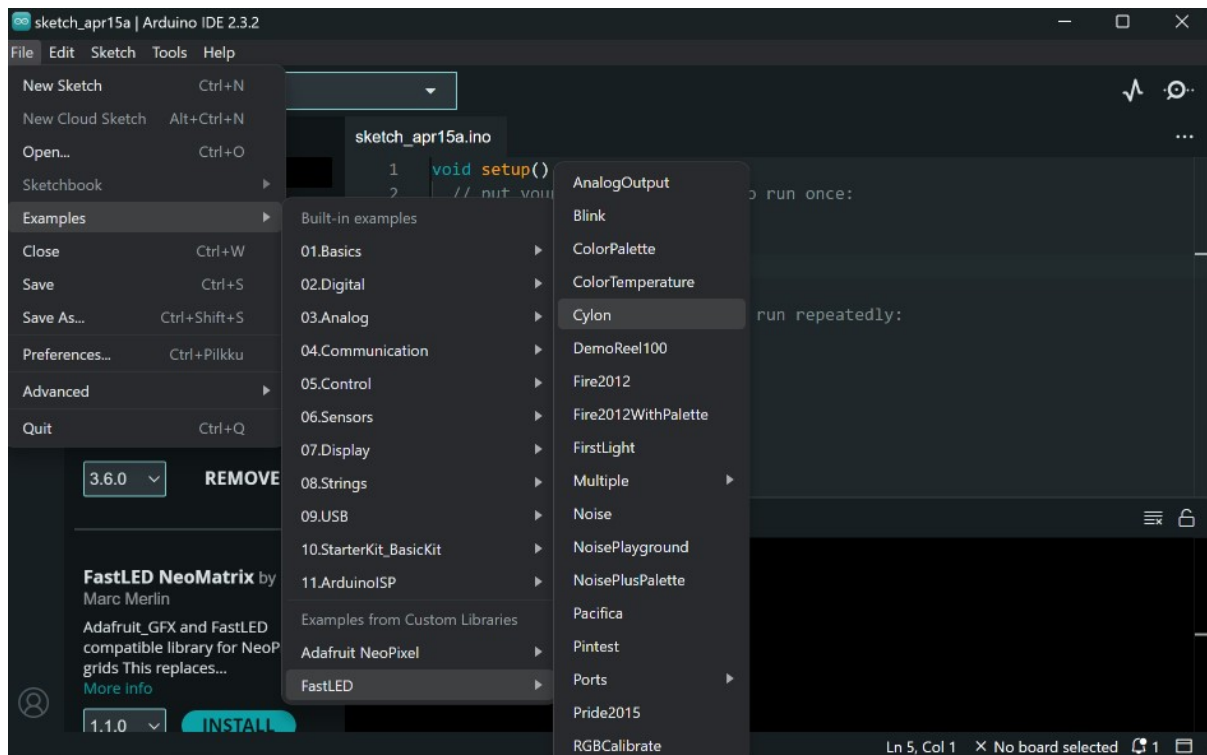
If you get a similar pop up on the bottom right corner, you should let the IDE do these updates..



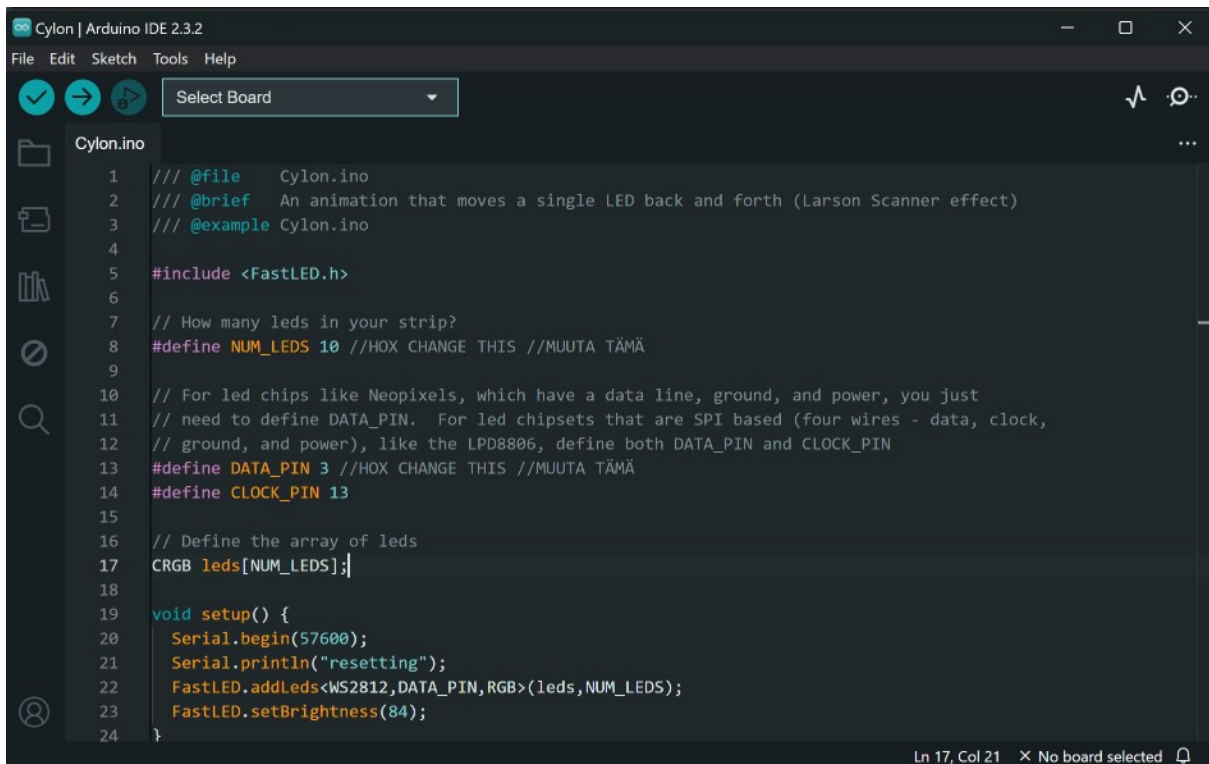
Choose Sketch->Include library->Manage Libraries



Search for Fastled library and install newest (default) version.

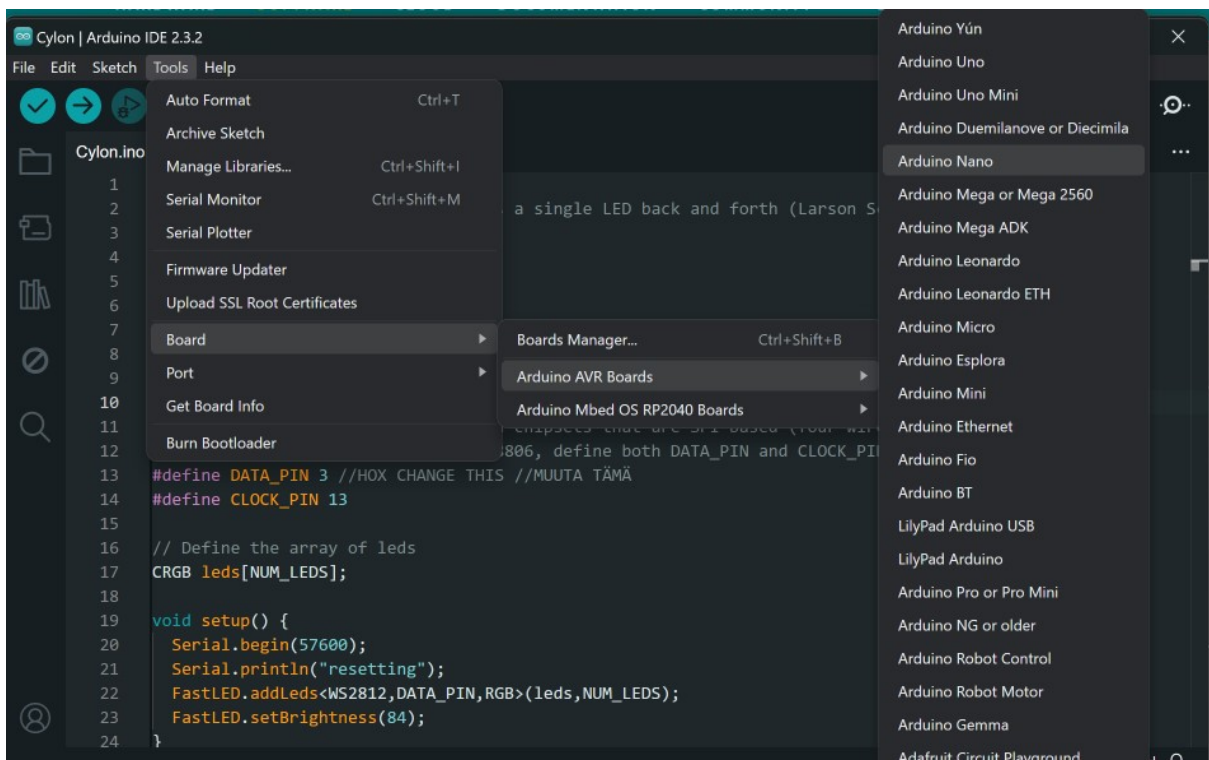


Choose: File-> Examples->FastLED->Cylon

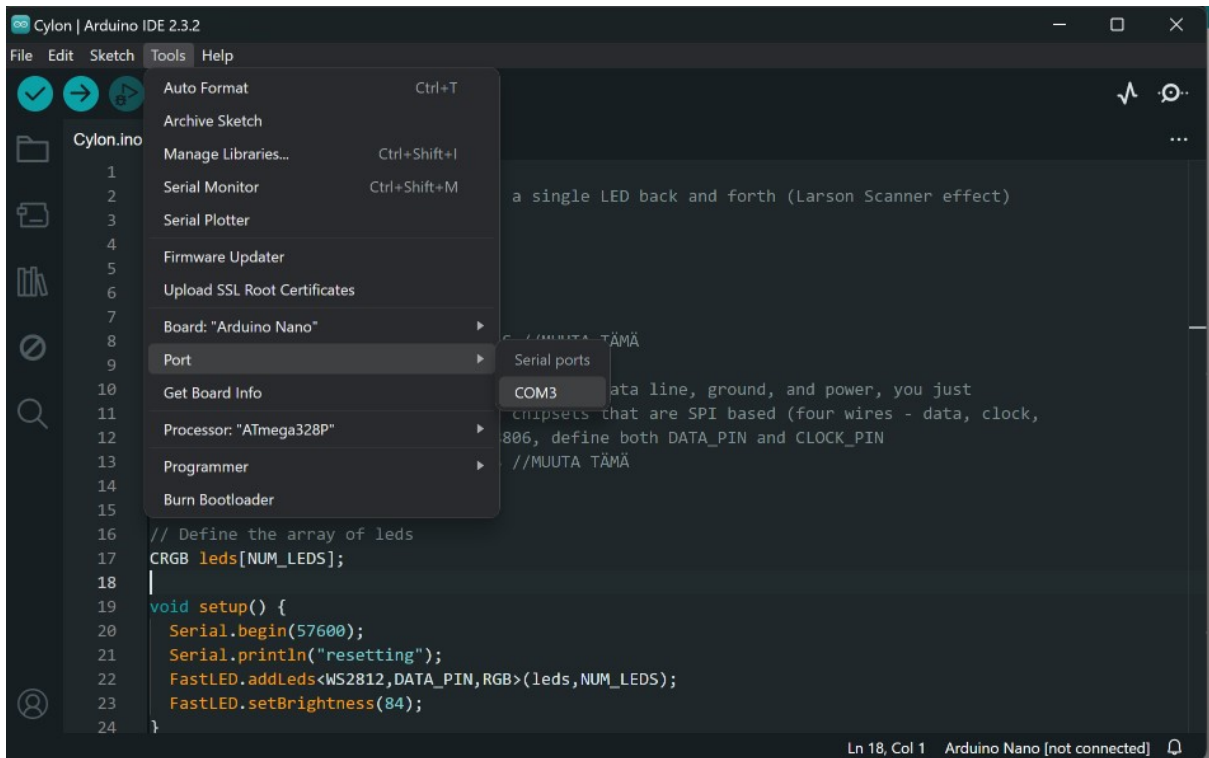


```
1  /// @file    Cylon.ino
2  /// @brief   An animation that moves a single LED back and forth (Larson Scanner effect)
3  /// @example Cylon.ino
4
5  #include <FastLED.h>
6
7  // How many leds in your strip?
8  #define NUM_LEDS 10 //HOX CHANGE THIS //MUUTA TÄMÄ
9
10 // For led chips like Neopixels, which have a data line, ground, and power, you just
11 // need to define DATA_PIN.  For led chipsets that are SPI based (four wires - data, clock,
12 // ground, and power), like the LPD8806, define both DATA_PIN and CLOCK_PIN
13 #define DATA_PIN 3 //HOX CHANGE THIS //MUUTA TÄMÄ
14 #define CLOCK_PIN 13
15
16 // Define the array of leds
17 CRGB leds[NUM_LEDS];
18
19 void setup() {
20   Serial.begin(57600);
21   Serial.println("resetting");
22   FastLED.addLeds<WS2812,DATA_PIN,RGB>(leds,NUM_LEDS);
23   FastLED.setBrightness(84);
24 }
```

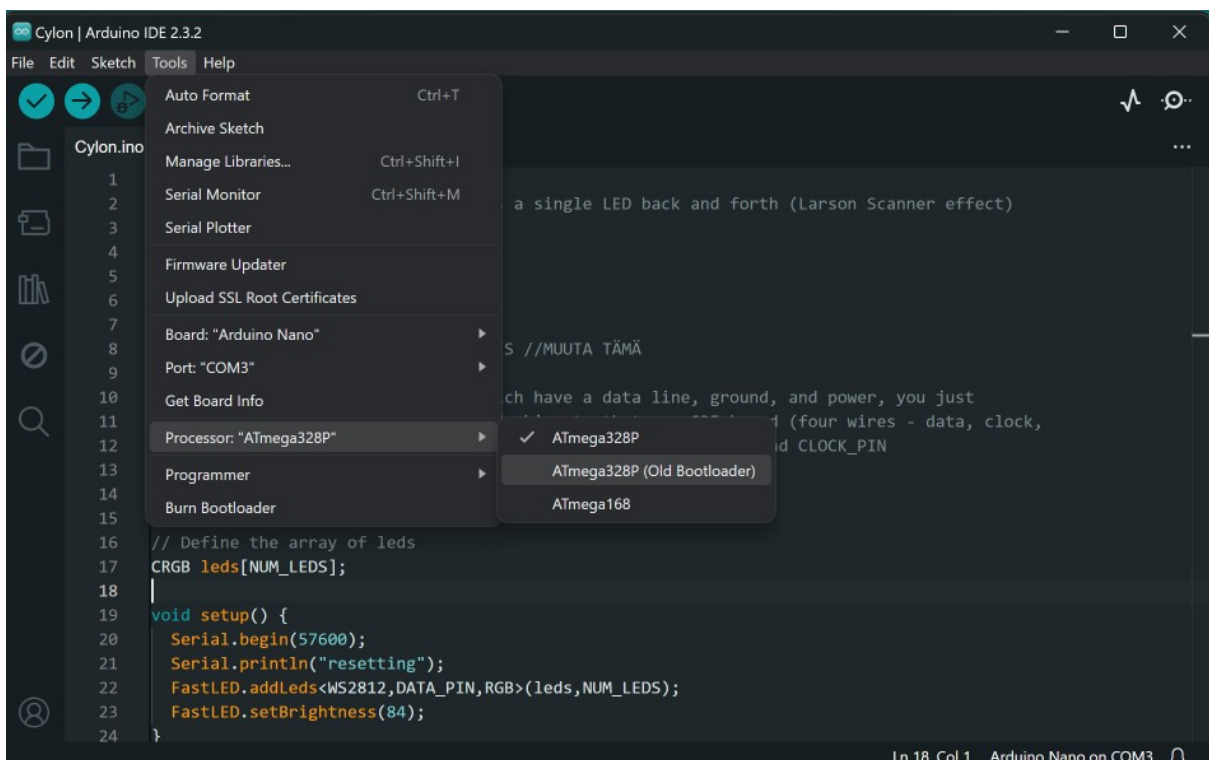
This code file should open. Change DATA_PIN on row 13 to be number 3 (since data line is soldered to pin 3) and NUM_LEDS on row 8 to number 10 (Or if you got different number of leds just enter that number here)



Connect the device to your computer with a USB cable. Choose according to picture:
Board->Arduino AVR Boards->Arduino Nano

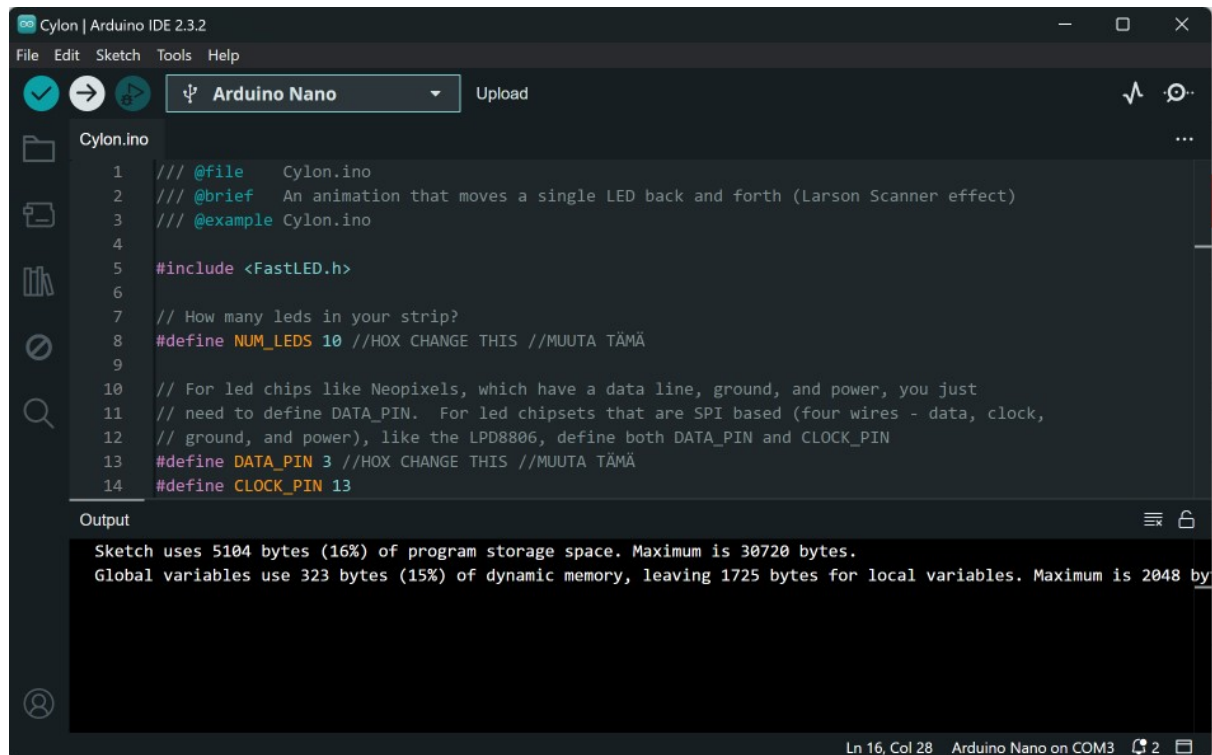


Then we choose the port: Tools->Port->COM"X" where "X" can be any random number.



We still have to change the bootloader:

Tools->Processor: "ATmega328P"->ATmega328P (Old Bootloader)



Then you can click the rightwards arrow on the top left corner. On the right bottom corner you should see a prompt that says something like loading success and the led strip should light up.

If programming/loading is successful but leds are not lighting up please check your solder joints.

If you get any error messages on the bottom right corner or on the OUTPUT field please try to click the arrow symbol again. If this does not help and you see a red error message on the OUTPUT field that says something about COM ports you have the wrong version of the USB driver. Move to the next paragraph.

If USB driver is causing gray hairs you can pick functioning driver from here:
[How to Install CH340 Drivers - SparkFun Learn](#)