

2.4 Starting with Arduino IDE

The Arduino platform is based on the Atmel AVR microcontroller family, and the Arduino Uno is based on the ATmega328 microcontroller. The Arduino Integrated Development Environment (IDE) is a software application that provides a way to write and upload code to the microcontroller. The Arduino IDE is available for Windows, macOS, and Linux, and it is open source.

Happy programming!

2.4.1 Board setup

1. Connect the Arduino Uno to PC with proper USB cable.

[[Arduino Uno](#)]

2. Make shure that you will set the proper settings (see fig. 1). From the menu choose:

Tools-

1. **Board:** Arduino/Genuino Uno
2. **Port:** COM3

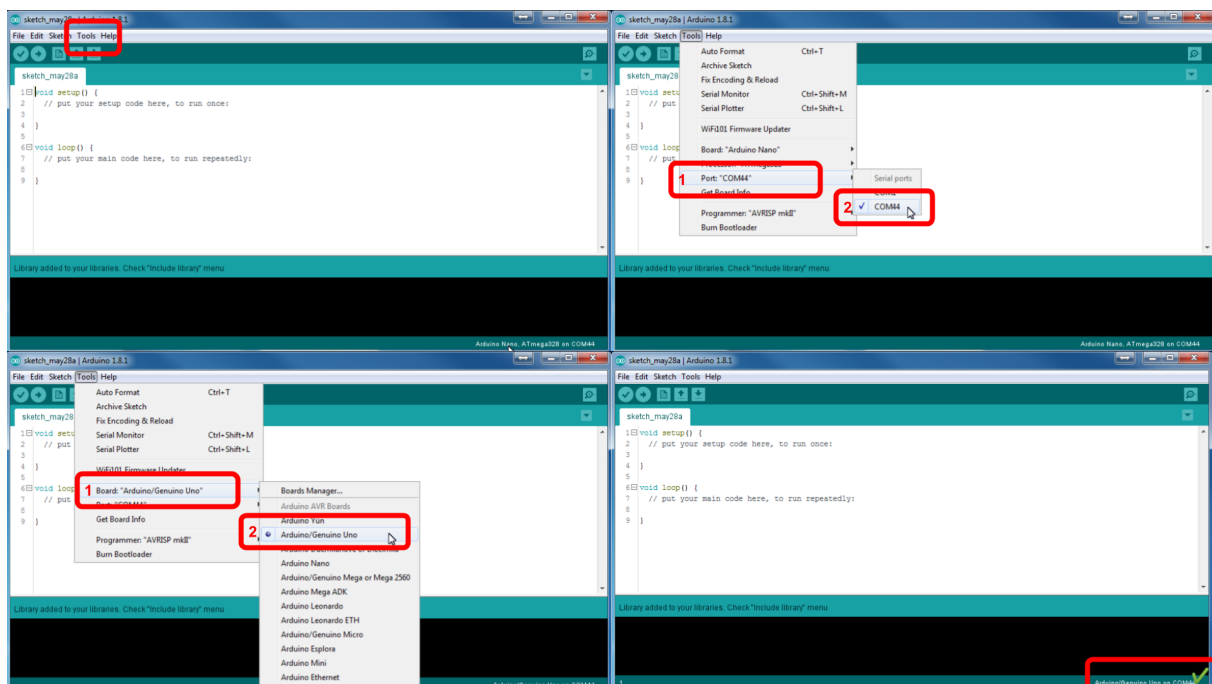


Figure 1: Arduino basic setup.

3. Open Arduino IDE program and open program with:
Files - Examples - 01. Basics - Blink.ino

4. To upload the code you can click the icon [Upload](#).

If the uploading was successful you will be prompted with the text like:

```
1 Done uploading.
2 Sketch uses 970 bytes (3%) of program storage space. Maximum
3 is 32256 bytes. Global variables use 9 bytes (0%) of dynamic
4 memory, leaving 2039 bytes for local variables. Maximum is
5 2048 bytes.
```

2.4.2 Issues

Figure 2: Error image.

2.4.2.1 LED_BUILTIN was not declared in this scope Compiler ne ve kaj naj bi bilo “LED_BUILTIN” ... na tem mesu naj bi bila številka priključka, ki ga želimo krmiliti. V tem primeru je to številka 13. Rešitvi sta lahko 2:

1. vse LED_BUILTIN zamenjaš s 13 ali
2. v vrstico pred “void setup()” dodaj **const int LED_BUILTIN = 13;**

Zadnja (druga) rešitev je boljša, ker pripomore k berljivosti programa... Spremenljivka LED_BUILTIN se imenuje “razlagalna spremenljivka” ker pomaga razlagati program. Tako postane tisti komentar “// turn the LED on (HIGH is the voltage level)” nepotreben, saj sama koda pove točno enako.