

# Arduino

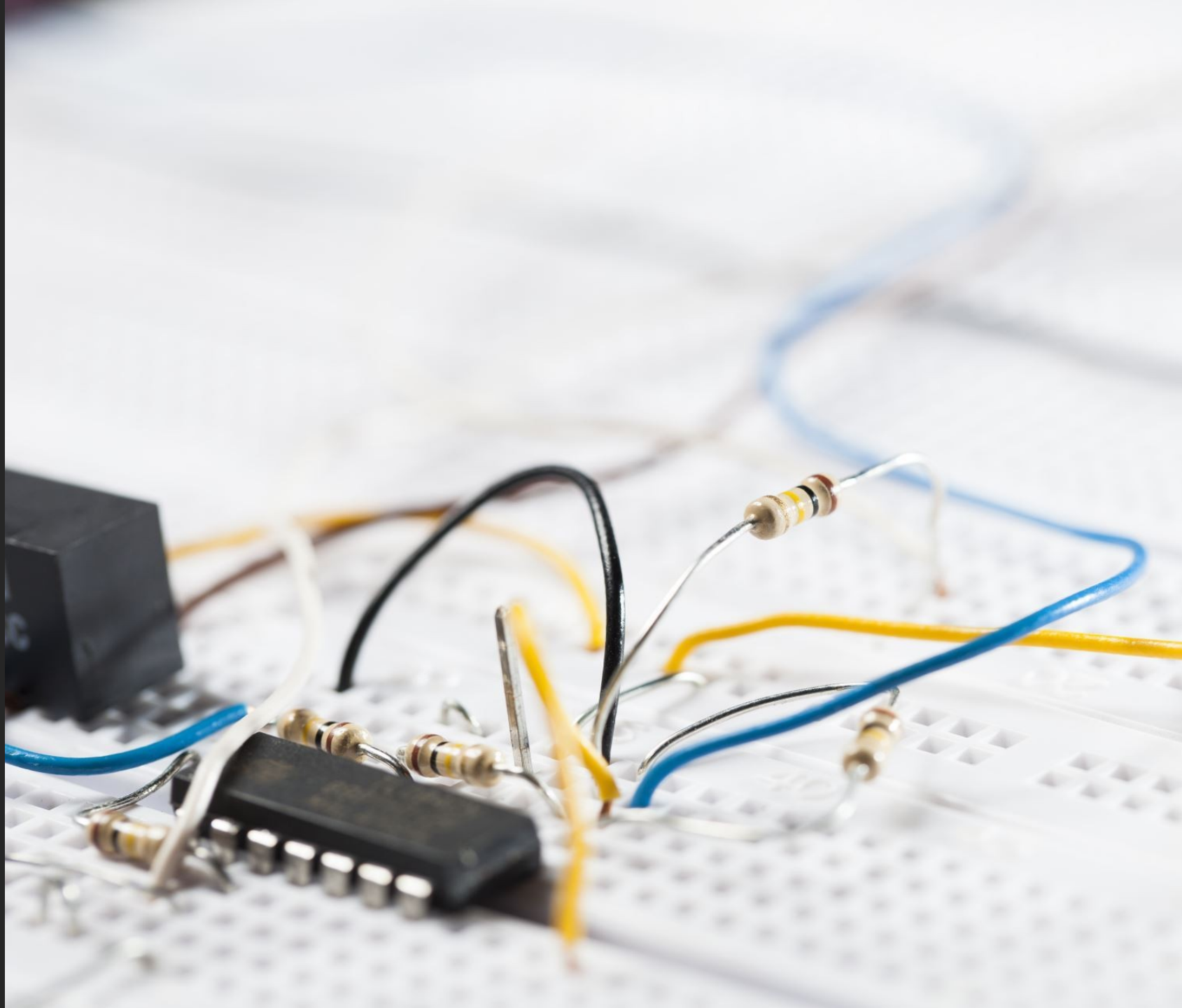
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MICROCONTROLLER

R

PROGRAMMING

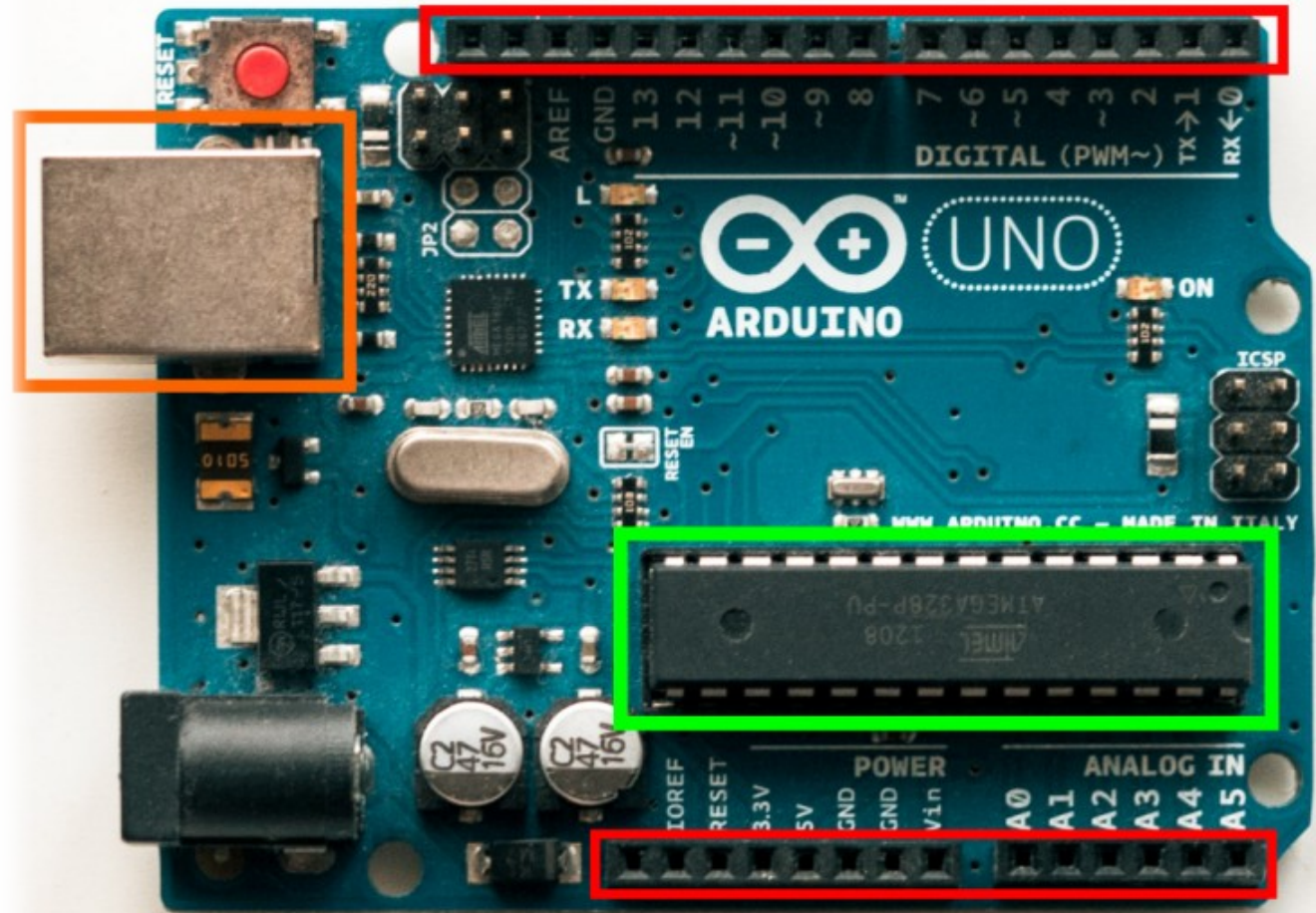
PLATFORM



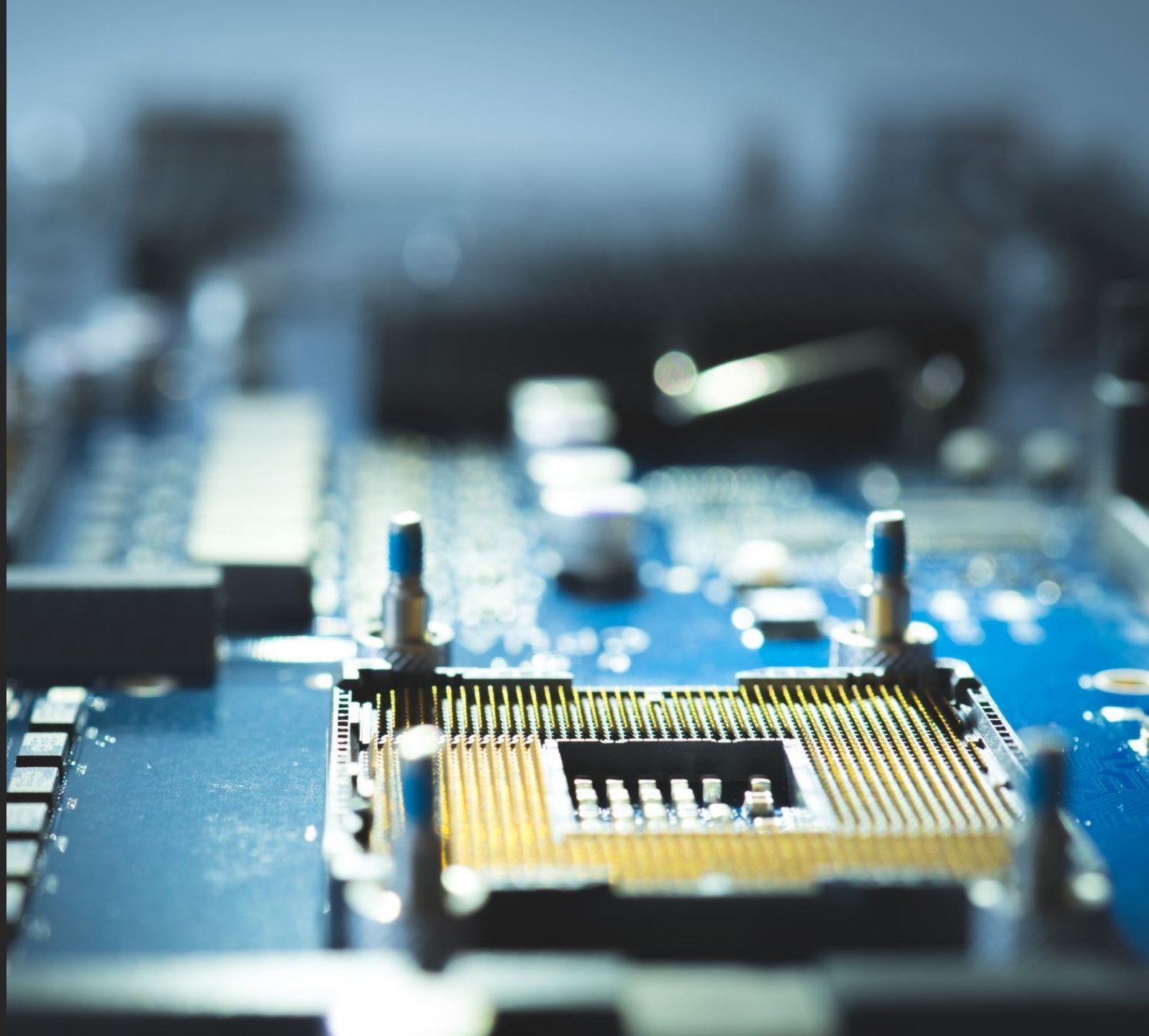
# What is Arduino?

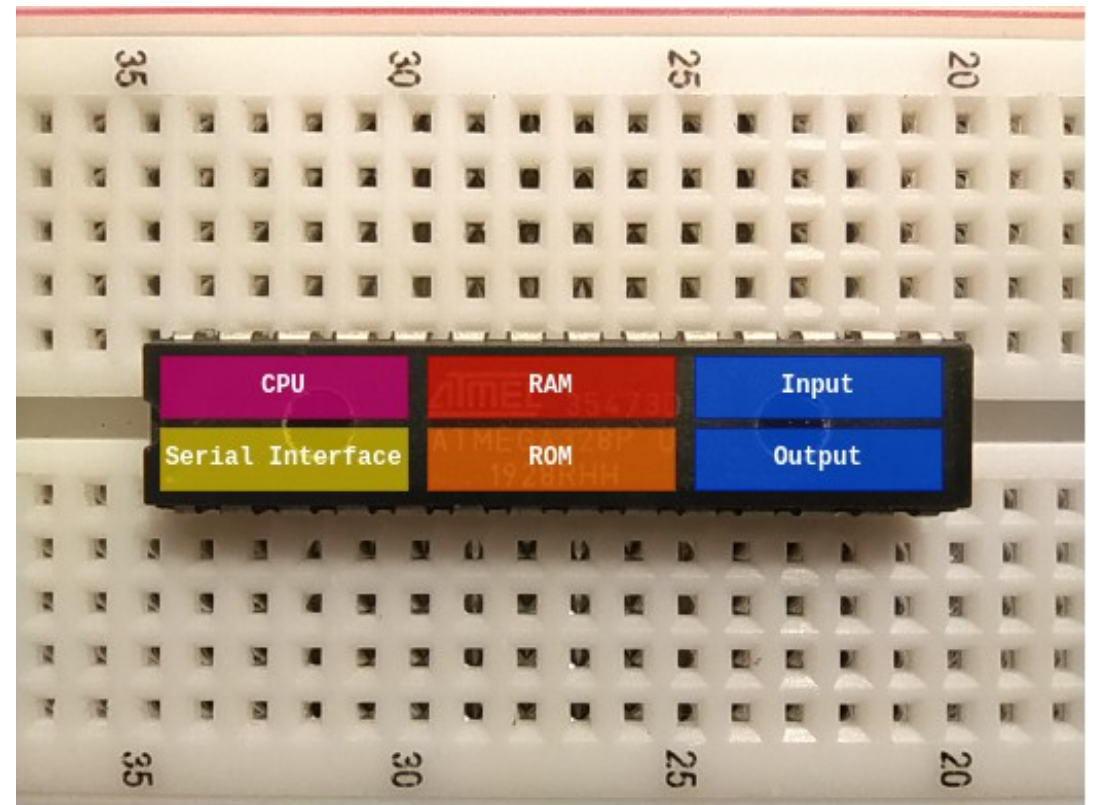
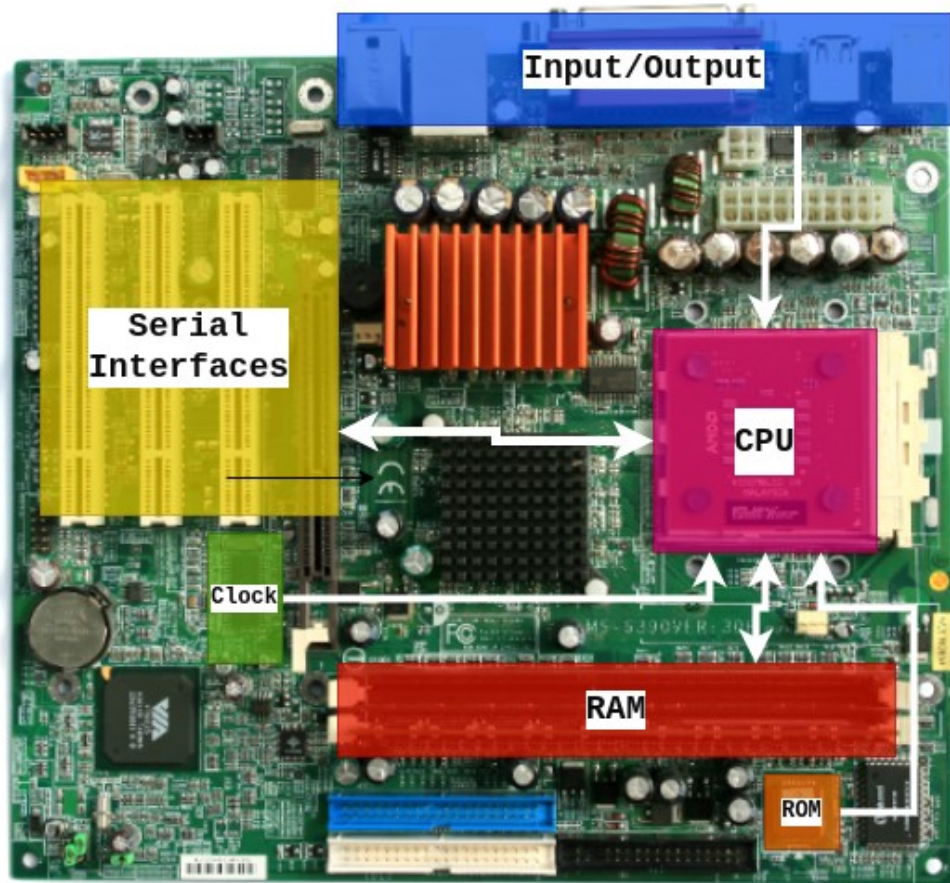
Arduino UNO - one of the most popular Arduino board.

**USB-B Port**  
**Pins**  
**Microcontroller**



General  
difference  
between  
**Microcontroller**  
and  
**Microprocesso  
r**





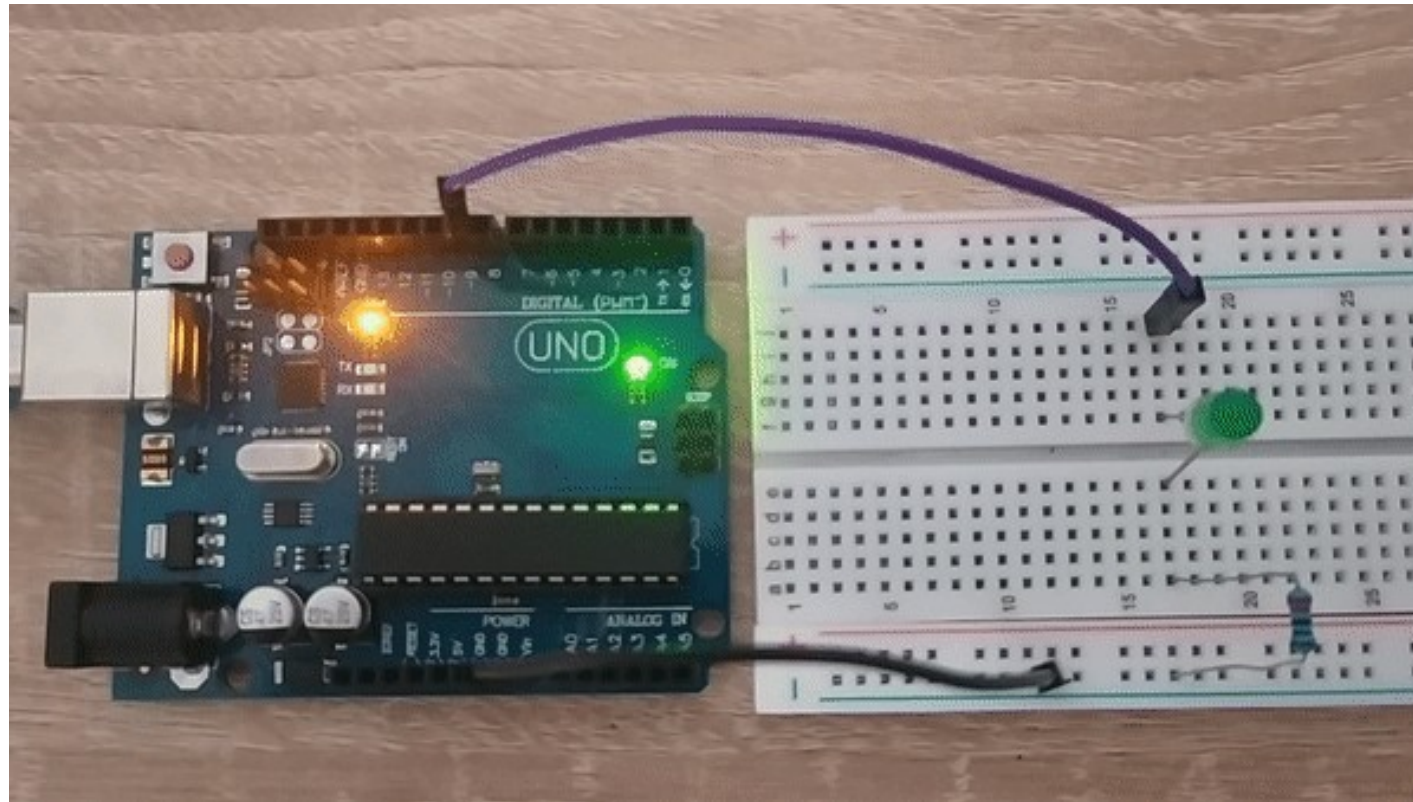
```
sketch_mar22a | Arduino IDE 2.0.4
File Edit Sketch Tools Help
Arduino Uno
sketch_mar22a.ino
1 // Setup function where we can tell our board,
2 // which pins are going to be used and in which mode.
3 void setup() {
4     pinMode(9, OUTPUT); // Setting pin 9 to OUTPUT mode.
5     // It means that we can send HIGH(1) or LOW(0) signal to given pin.
6     // Sending LOW signal means we set voltage at given pin to 0V
7     // Sending HIGH signal means we set voltage at given pin to 5V
8     // LOW - off
9     // HIGH - on
10 }
11
12 // Loop function which runs indefinitely;
13 void loop() {
14     digitalWrite(9, LOW); // Sending LOW signal to pin 9 which turns LED off.
15     delay(1000); // Stops our program for 1000ms (1 second)
16     digitalWrite(9, HIGH); // Sending HIGH signal to pin 9 which turns LED on.
17     delay(1000);
18 }
Output
Ln 9, Col 15  Arduino Uno [not connected]
```

# Arduino IDE

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# Code in action

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## Pr os

- Beginner friendly
- Inexpensive
- Big community
- Well documented
- Lots of projects to learn from
- Uses C/C++ :)

## Co ns

- Low processing power
- Low memory
- Poor performance (at cost of being beginner friendly)
- Uses C/C++ :(

# Pros and Cons

Thank you for your attention :)

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