

► Hello World!

A "Hello World!" in the Arduino sphere is a blinking LED.

You just need an Arduino and a USB cable.

Open a new file in the IDE. The lines of code below are already written. They form the basis of every program. More about that later.

```
void setup() {  
    // put your setup code here, to run once:  
  
}  
  
void loop() {  
    // put your main code here, to run repeatedly:  
  
}
```

Name and save it.

Then type the following text into the Arduino sketch editor but you can skip the lines starting with a `//` as they are comments.

You will see that you also don't need to type the `void setup(){}` and `void loop(){}` parts.

```
// LED connected to digital pin 13  
const int ledPin = 13;  
  
// the setup function runs once when you press reset  
// or power the board  
void setup() {  
    // initialize digital pin 13 as an output.  
    pinMode(ledPin, OUTPUT);  
  
}  
  
// the loop function runs over and over  
void loop() {  
    // turn the LED on (HIGH is the voltage level)  
    digitalWrite(ledPin, HIGH);  
    // wait for 1000 milliseconds or 1 second  
    delay(1000);  
    // turn the LED off by making the voltage LOW  
    digitalWrite(ledPin, LOW);  
    // wait for another second  
    delay(1000);  
}
```

Press the **Verify** button to check if your code is correct. If everything is fine, you'll see the message **"Done compiling"** appear at the bottom of the Arduino IDE.

Now you can upload it into the board. Press the **Upload** to I/O Board button.

When it went fine you'll see the message **"Done uploading"** appear to let you know the process has completed correctly.

You can adjust the values of the 2 delay times to see changes in blinking rhythm. Don't forget to compile and upload the code after you made changes.