

Blinking and Beyond

Now it's time for an activity! You've already set up your Arduino board and the uploaded the basic, introductory **Blink** sketch. This sketch is considered the "Hello World" of Arduino.

Fun challenge: Look up the origin of the phrase "Hello World" and tell one of the program staff!

Base Activity:

Make an LED blink! This is the first activity for nearly everyone who works with an Arduino.

Supplies:

This activity is pretty straight forward. Here's the supplies that you need:

- Uno board & USB cable
- 1 jumper wire
- LED pack
 - No need for a resistor...yet!

Steps:

1. Connect the Uno board to your computer and make sure that the port and board are selected in the *Tools* menu.
2. Open the basic *Blink* sketch and copy the code.
3. Create a new sketch:
 - i. *File -> New*

- ii. Name your sketch something like "My First Blink" and click *Save*
4. You're ready to start exploring! Check the next section for some suggestions on what you parts of the code you can experiment with.
 - Don't worry about permanently 'breaking' anything with code changes. Worst case is that you re-copy the original *Blink* code.

Blinking and Beyond: Experimenter Challenges

Several of the projects that you'll be working with throughout this camp will have additional challenges that you can do *after* completing the basic project steps. These are designed to test (and push) the skills that you developed during the lesson and project. This is the first of these challenges!

Overview:

After you've successfully uploaded the basic *Blink* sketch and your LED is blinking, you can now move into the additional *Experimenter Challenges*!

Feel free to integrate one (or all) of these:

- Change the pin that the LED is in. Remember the tips and considerations for this!
- Experiment with the delay rate.
- Experiment with adding 1 or 2 more LEDs.
- Combine everything and make a multi-LED blinking pattern with different delay patterns.

Have fun experimenting. Your Arduino journey has now officially started!



ARDUINO AT THEART