Goals of this document:

- 1. Setting up the development environment for your Arduino board.
- 2. Verifying the setup works.

We will be using:

"Sparkfun Inventor's Kit for Arduino - V3.3 with New Simon says Circuit Experiment". It is a kit of hardware AND a book. The lessons will follow most of the book, and they will use the hardware.

- 1. On Amazon: https://www.amazon.com/Sparkfun-Inventors-Kit-Arduino-Experiment/dp/80008U2I12
- 2. On Sparkfun: www.sparkfun.com/sik

Sparkfun has good resources for their kit.

Kit tutorial: https://learn.sparkfun.com/tutorials/sik-experiment-guide-for-arduino---v33
You can read through the tutorial (recommended!).

Below are a few essentials parts:

- 1. Install the Arduino IDE: https://www.arduino.cc/en/Main/Software
- 2. Install FTDI -This can be a pain (depending on your computer), but it is a one-time pain: www.sparkfun.com/ftdi

In a nutshell: What is FTDI? It's an old fashioned UART communication over USB protocols. Hence the need for VCP (Virtual COM Port drivers).

- 3. Download the manual(you have it as hard copy in the kit, but this is in PDF): www.sparkfun.com/sikguide
- 4. Download SIK code: Will save you some writing: https://www.sparkfun.com/sikcode. Suggestion: Create a directory "Arduino" where you will keep your Arduino projects. Put the examples code there, under "sikcode" directory (or similar name).

Setup and testing

- 1. Open the IDE.
- 2. Connect the board.
- 3. Select the right port (tools->port)
- 4. Set the board (Arduino uno)
- 5. Load the sketch Circuit_01 (NO need to connect the breadboard or additional circuitry). This should be in your "sikcode" directory you had downloaded.
- 6. Run the program. If all works well, and the LED on board blinks, you made it!!

7. Just to verify this is indeed your code: change only ONE of the delays to 200 (from 1000). See the result is has changed.

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