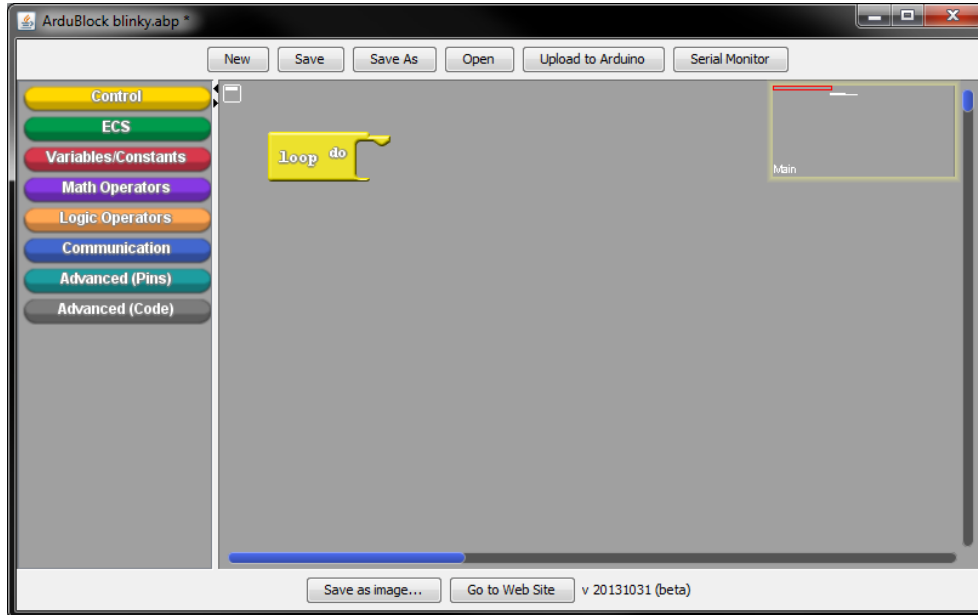
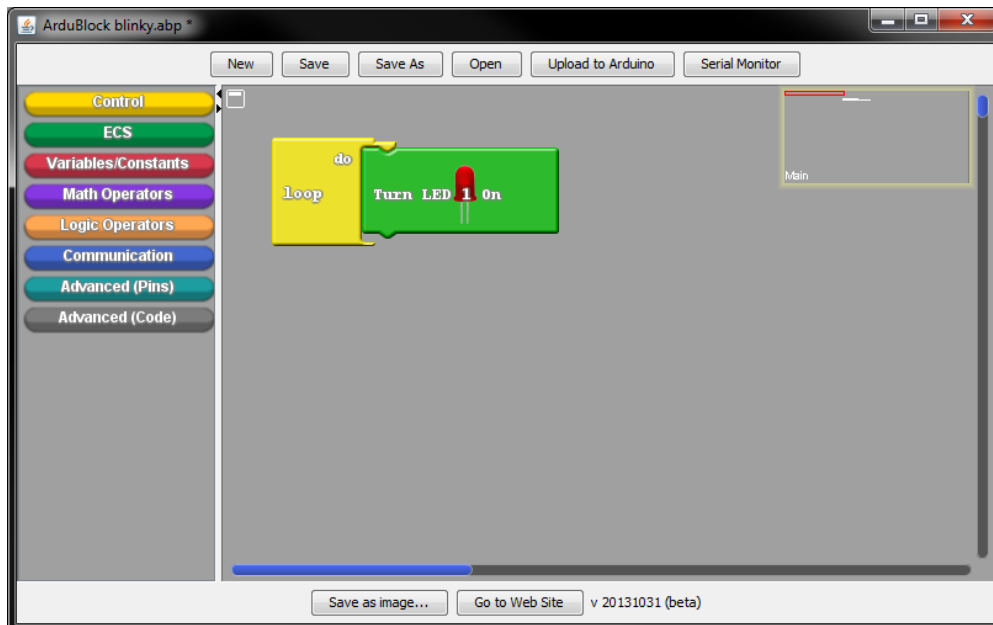


Using the Lights

1. Place a **loop** block, found in the **Control** drawer. We want our program to loop over and over again until we turn the power off in order to match the sample program we just saw.

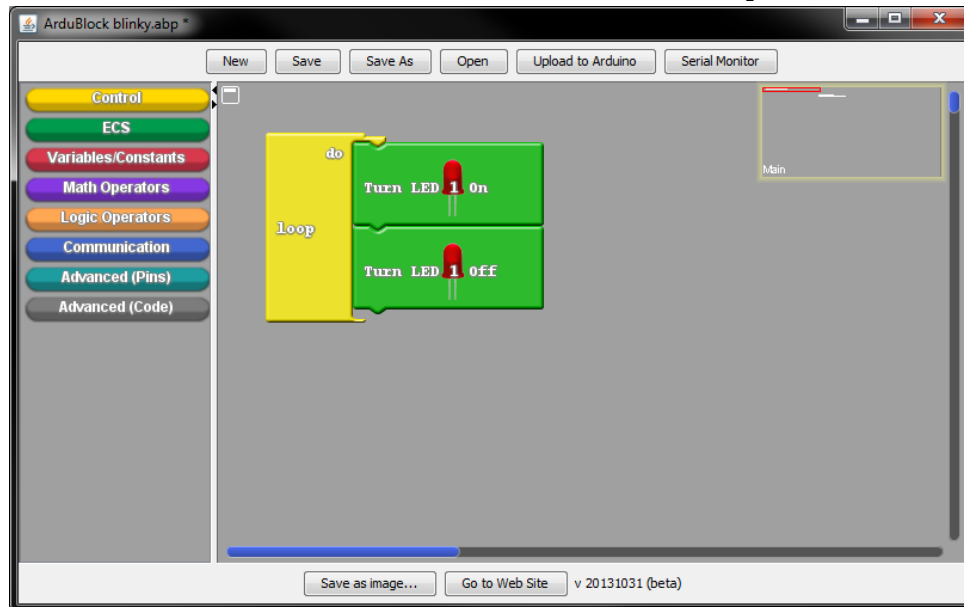


2. Place a block to **Turn LED 1 On** inside of the **loop** block. This can be found in the **ECS** block drawer, and will turn the LED on.

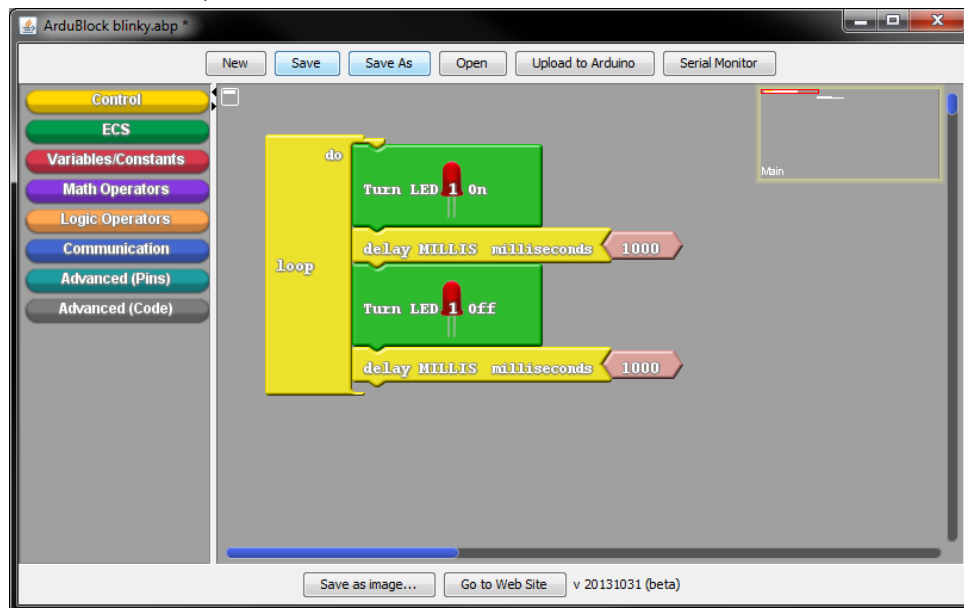


3. Click the *Upload to Arduino* button at the top of the program to load your program to the board. When you reset the board, you will see that the first (red) LED is turned on. This is a good start, but we want our LED to blink on and off, not just stay on.

4. In order to blink the LED, we need to turn it off after we turn it on. Place a **Turn LED 1 Off** block after the **Turn LED 1 On** block inside of the **loop**.



5. It may seem like this is the entire program. Let's give it a try and see how it runs. Just as before, click the *Upload to Arduino* button at the top of the program to load your program to the board.
6. Does the program behave the way you expected it to? What happened when you ran the code? Though it seems finished, our program will turn the LED on and then off so quickly that we won't be able to see what is happening. Place a **delay MILLIS** block (which can be found in the **ECS** drawer) after the **Turn LED 1 On** block. Place another after the **Turn LED 1 Off** block. These will make the program wait in between blocks, with the default wait time set to 1 second.



7. Run the program again to see how the delays have changed it. You will see that we now have a program which blinks the red LED on and off forever, until the power is turned off. Congratulations on completing your first Ardublock project! If there is still time left, explore the other LED blocks found in the **ECS** drawer and use them, along with changes to the delay pattern and lengths, to make your own variation on this project.