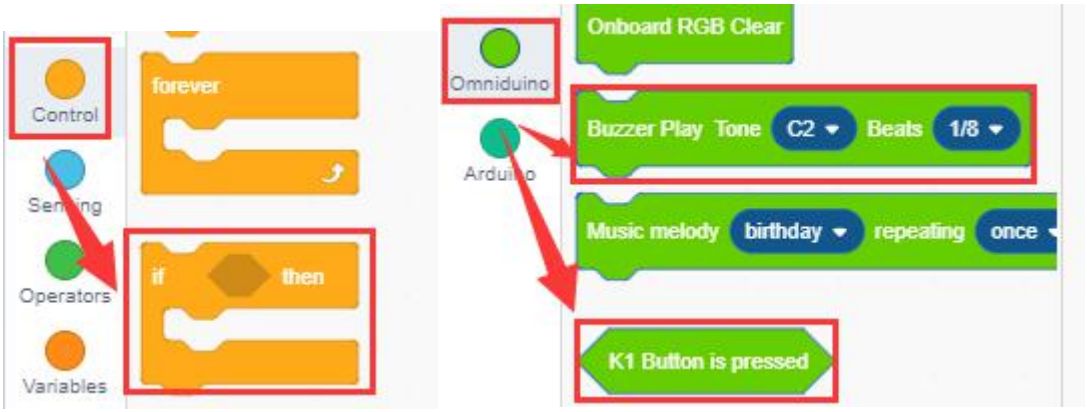
Button start RGB

1. Learning goal

In this lesson, we will learn how to use button start up RGB lights by graphical programming.

2. Looking for building blocks

The following is the location of the building blocks required for this programming.



1) The content in the Omniduino setup block will only run once when the Omniduino is turned on or the reset button is pressed.

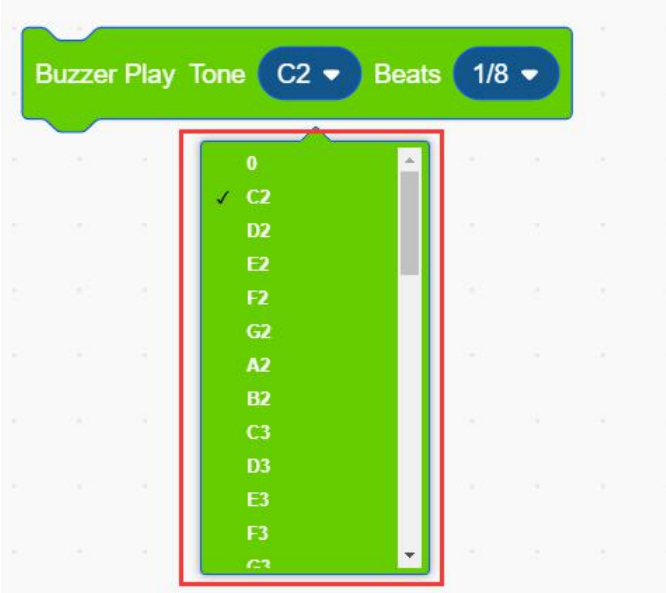
We can write into the initialization and other content in this block.

The content in the loop is the main loop function of the Omniduino car, most of the data processing and logic processing are completed in this function.

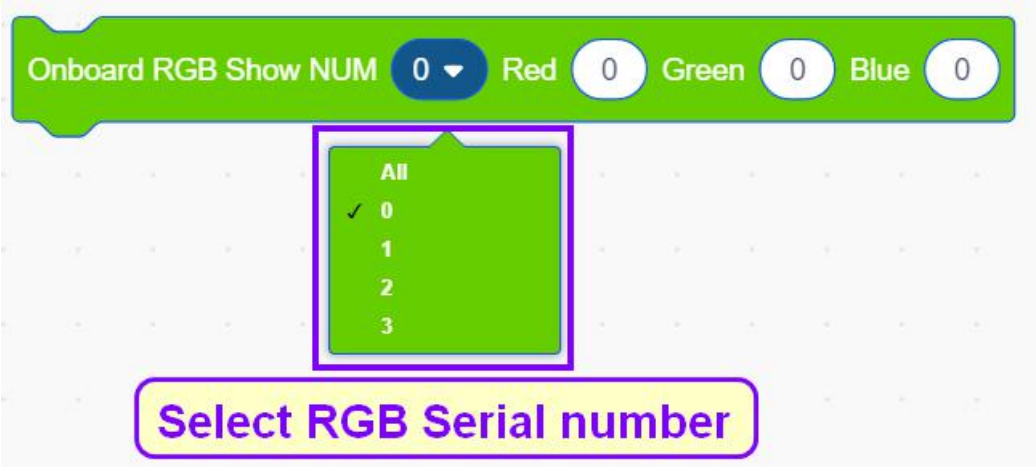
2) If...then..; building block is used to determine the condition.

3) Button

4) Buzzer Play Tone block, you can choose Tone and Beats.



5) On board RGB Show NUM block, can be used to control all the RGB lights on the car.
You can choose which number of RGB lights to control individually by select serial number. The value range of red, green and blue is 0~255.

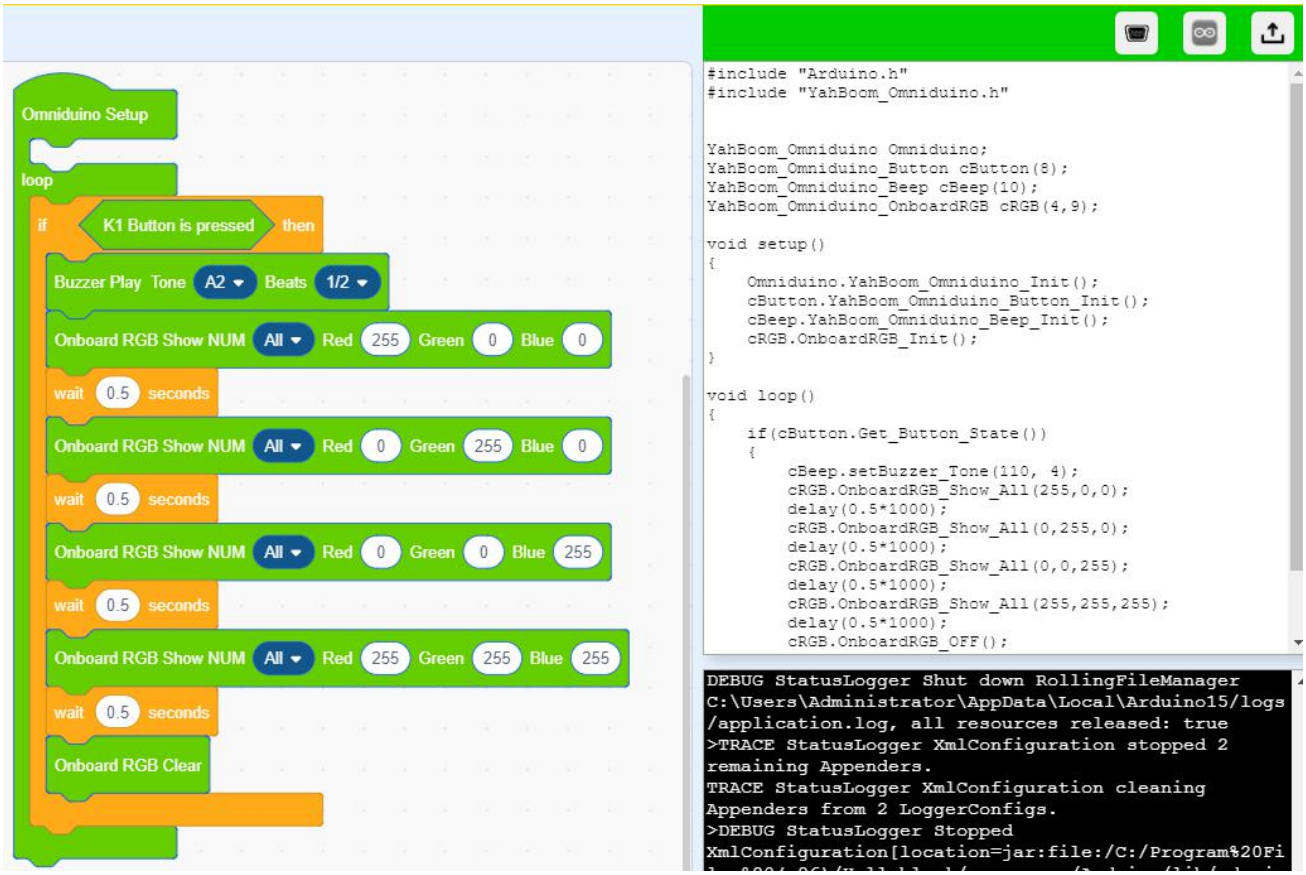


6) Onboard RGB Clear block, which be used to clear all RGB lights

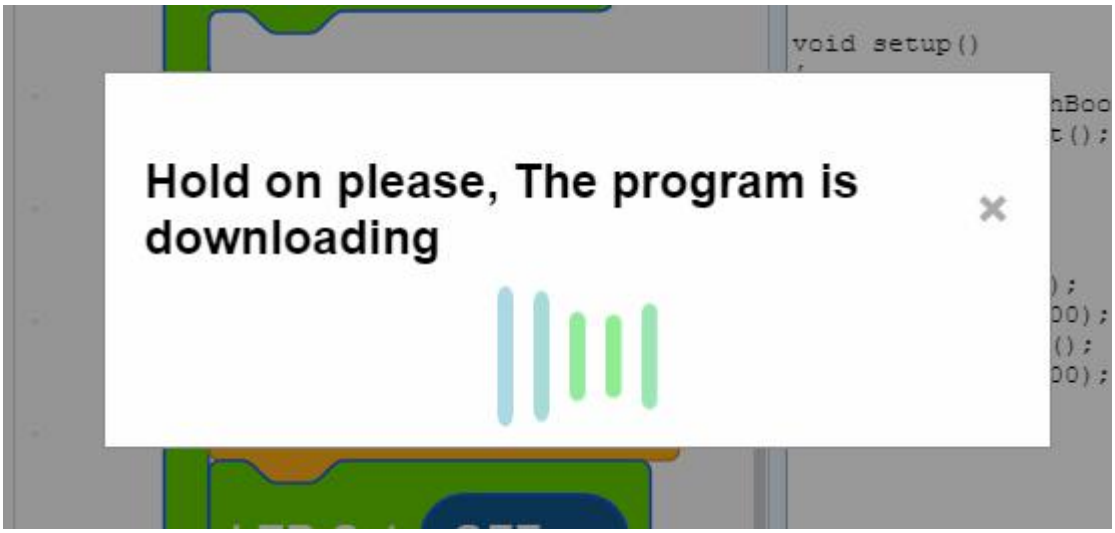
Combine blocks

3. Compiling and uploading the program

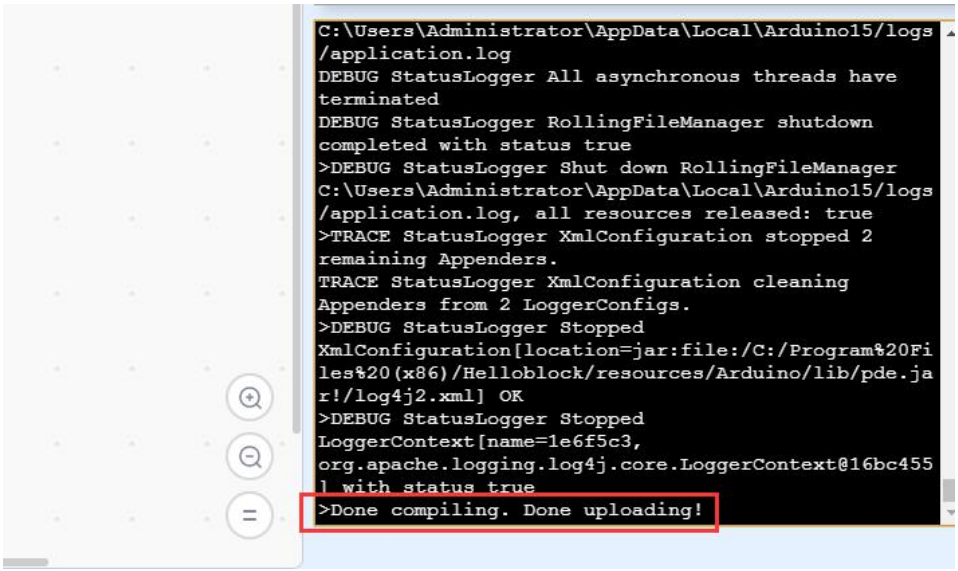
3.1 After building the blocks, click the **[code mode]** in the upper right corner of the Helloblock programming interface. We can see the corresponding Arduino code.



3.2 Then, you need to connect Omniduino car to your computer. Select the CH340 port number identified in the previous step in the upper right corner. Then, click the up arrow to start compiling and uploading the program.



3.3 When the words **"Done compiling Done uploading"** appear in the lower right corner of the programming interface, which means the program has been uploaded.



4. Experimental phenomenon

After the program is downloaded. When we press button every time, buzzer will make a sound. Then, the four RGB lights at the bottom of car will turn on red, green, blue, and white every 0.5 seconds, and then go out.