IR control RGB

Note: The program provided in this course is only applicable to Yahboom exclusive IR controller.

1. Purpose

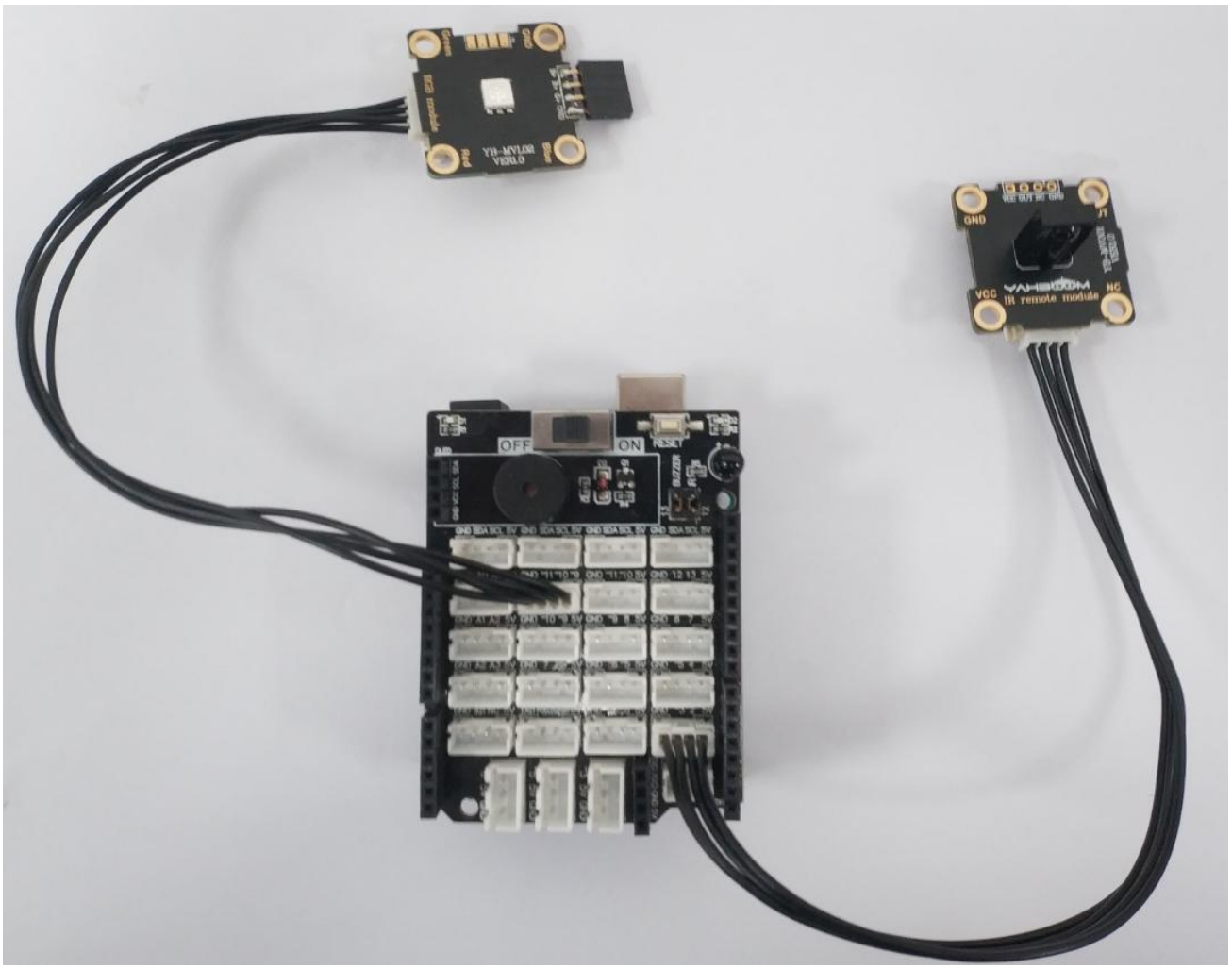
In this course, we mainly learn to use Arduino, Infrared receiver module and RGB light module to realize IR control RGB lights.

2. Preparation

Wiring diagram as shown below.

Infrared receiver module	Arduino
OUT	2
VCC	5V
GND	GND

Note: As shown in the figure below, we use the Uno sensor expansion board. If you don't have an expansion board, you can connect the Arduino board and the sensor module by DuPont lines.



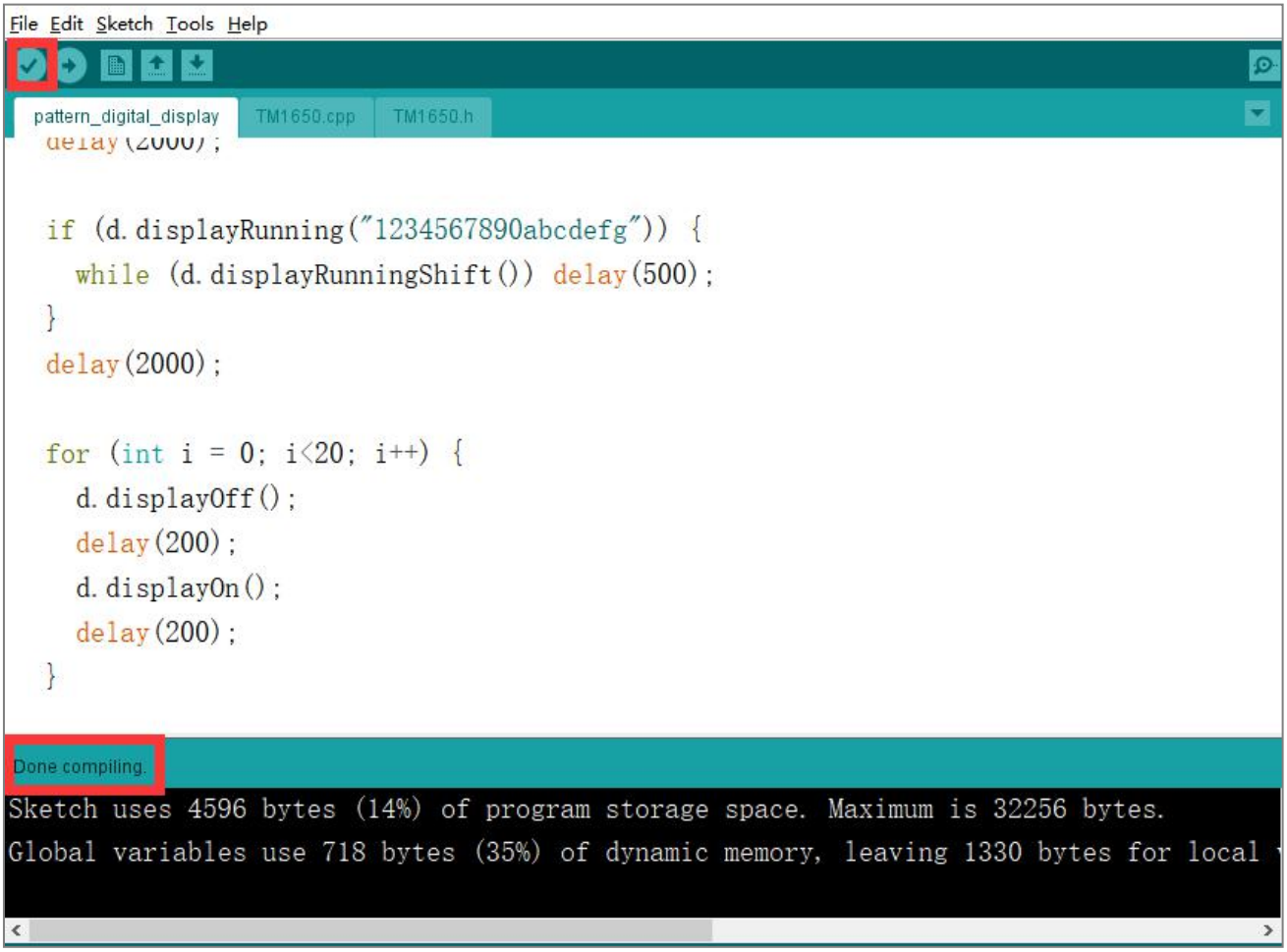
3. About code

Please check .ino file.

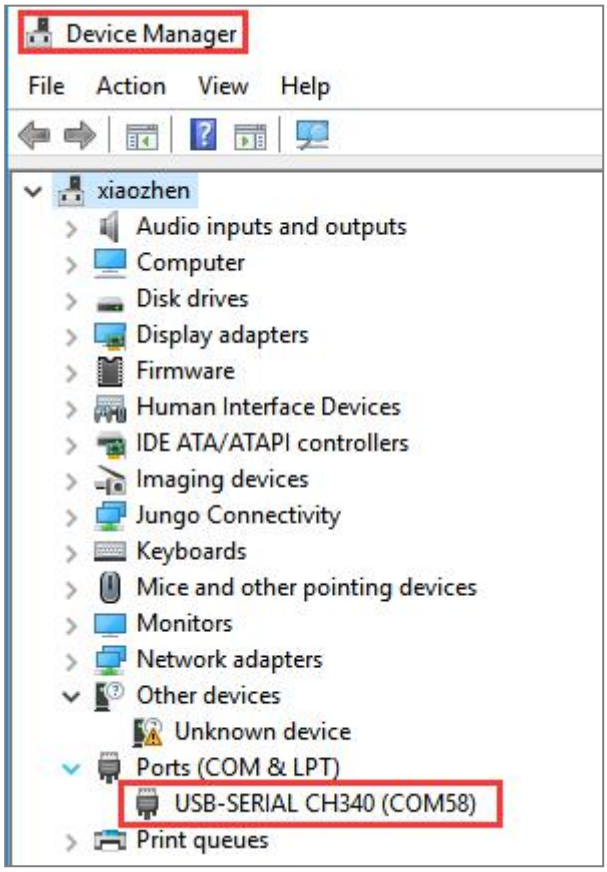
Each button of the infrared remote controller has a corresponding code value. In the main loop, we control the RGB light to the corresponding color by continuously detecting the obtain infrared code value.

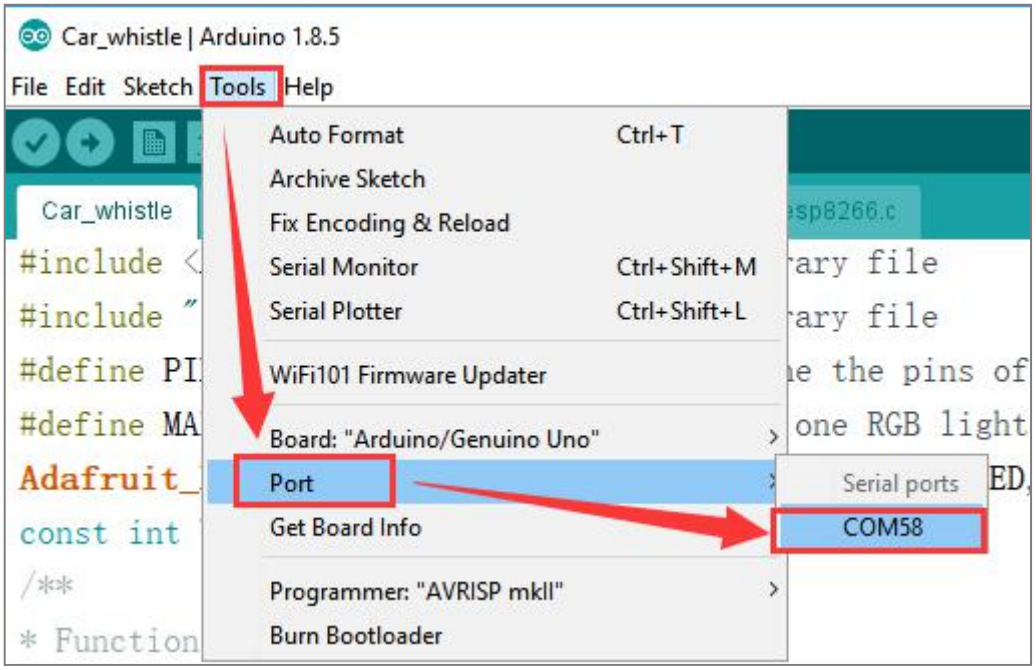
4. Compiling and downloading code

4.1 We need to open the **.ino** file by Arduino IDE software. Then click“√”under the menu bar to compile the code, and wait for the word "Done compiling " in the lower left corner, as shown in the figure below.

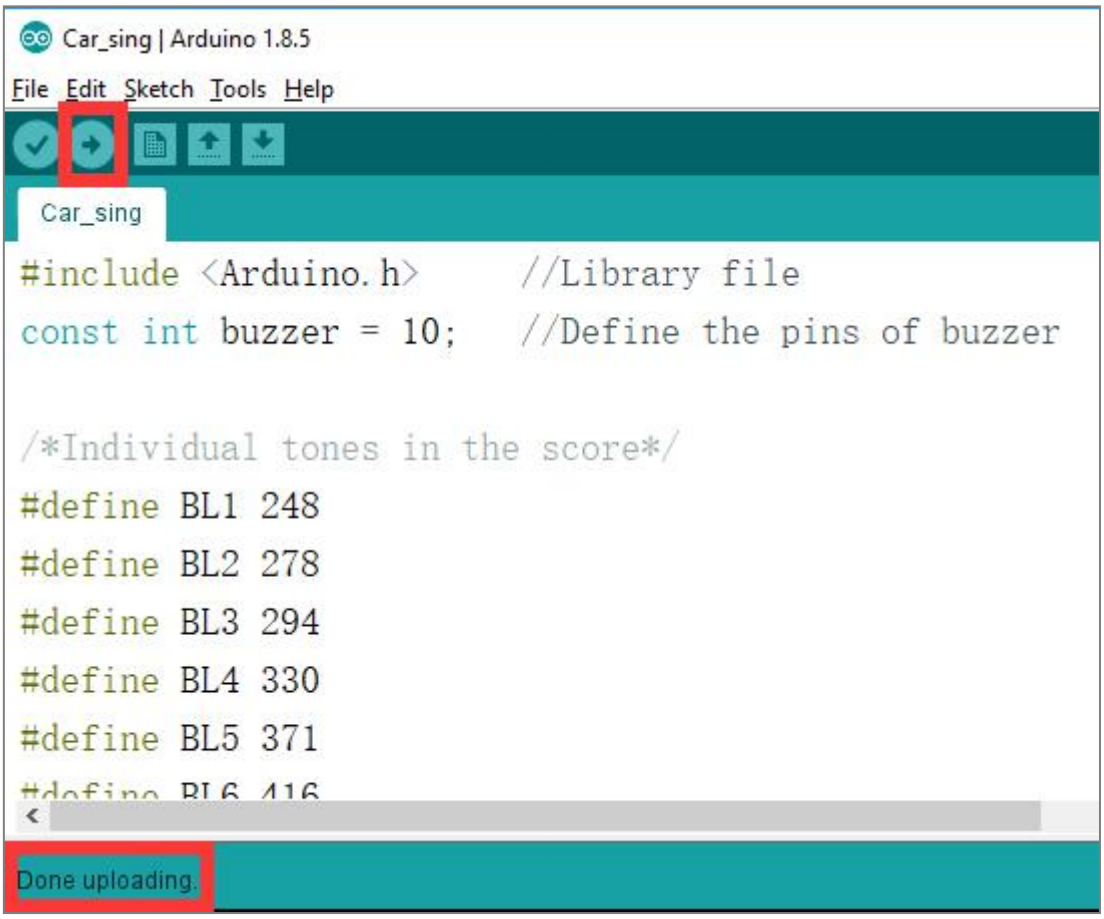


4.2 In the menu bar of Arduino IDE, we need to select 【Tools】---【Port】--- selecting the port that the serial number displayed by the device manager just now, as shown in the figure below.





4.3 After the selection is completed, you need to click "→"under the menu bar to upload the code to the UNO board. When the word "Done uploading" appears in the lower left corner, the code has been successfully uploaded to the UNO board, as shown in the figure below.



5. Phenomenon

After the program is downloaded successfully, we can control RGB light by IR controller.