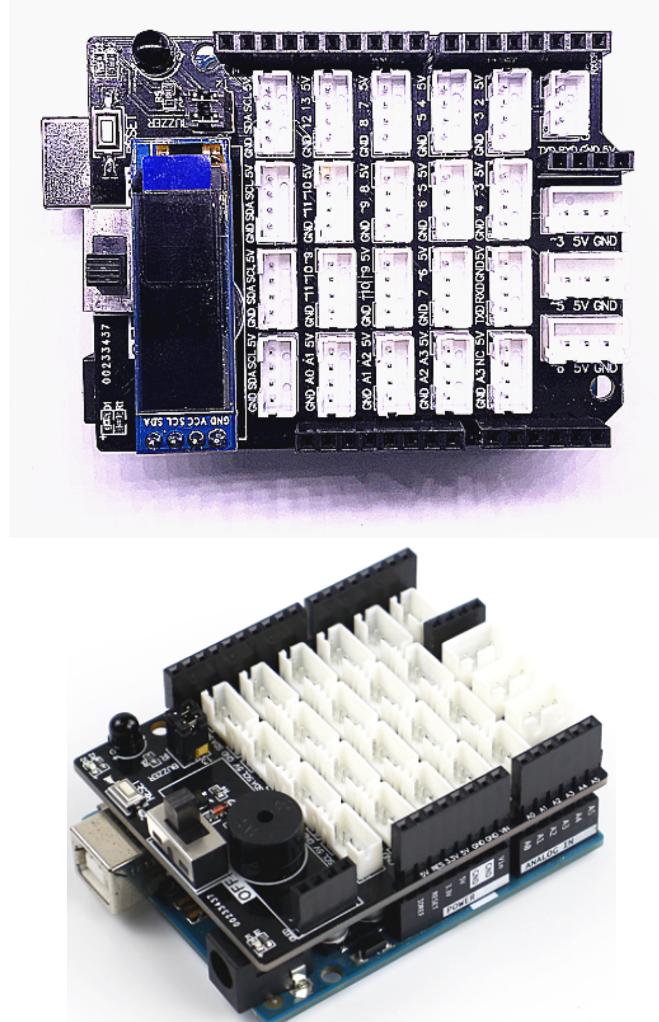


UNO sensor expansion board --- OLED display

1. About Hardware

In this experiment, we will learn how to control OLED. We need to insert OLED display on the expansion board. Please confirm that the OLED module pins are properly inserted.



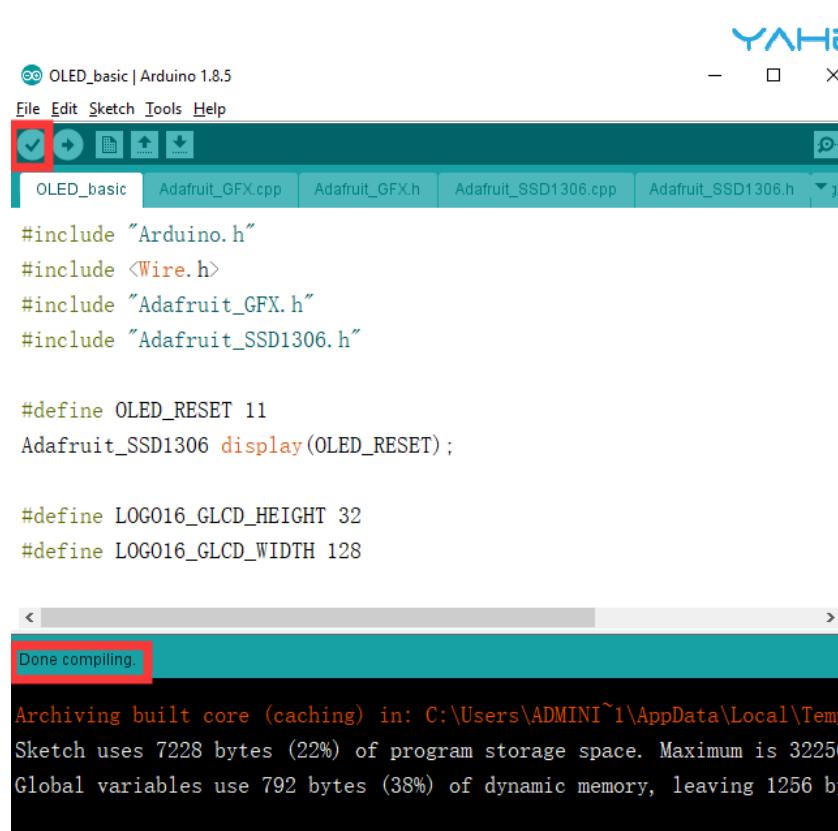
It adopt IIC communication.

2. About code

For the code of this course, please refer to Oled folder.

3. Compiling and downloading code

3.1 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 right corner, as shown below.



```
∞ OLED_basic | Arduino 1.8.5
File Edit Sketch Tools Help
OLED_basic Adafruit_GFX.cpp Adafruit_GFX.h Adafruit_SSD1306.cpp Adafruit_SSD1306.h
#include "Arduino.h"
#include <Wire.h>
#include "Adafruit_GFX.h"
#include "Adafruit_SSD1306.h"

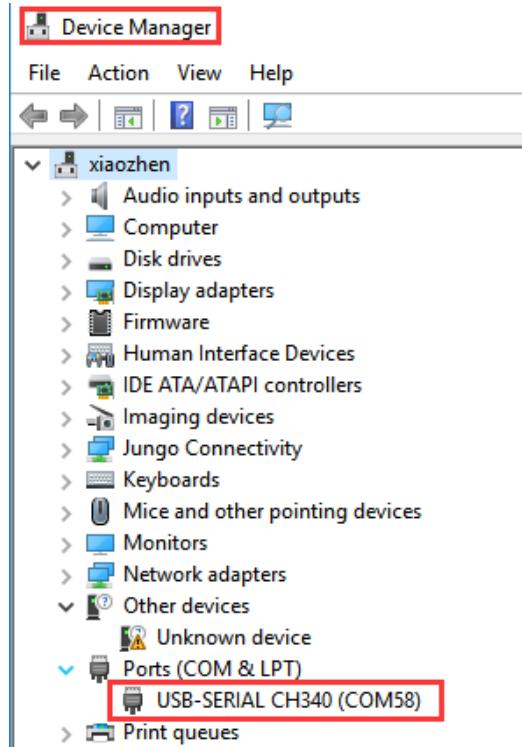
#define OLED_RESET 11
Adafruit_SSD1306 display(OLED_RESET);

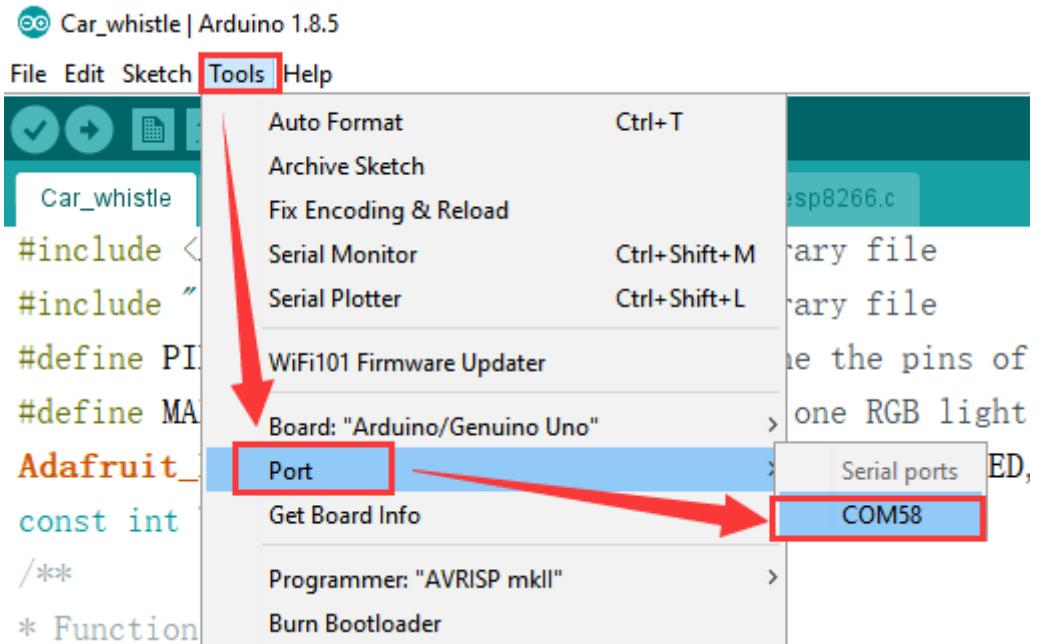
#define LOGO16_GLCD_HEIGHT 32
#define LOGO16_GLCD_WIDTH 128

Done compiling.

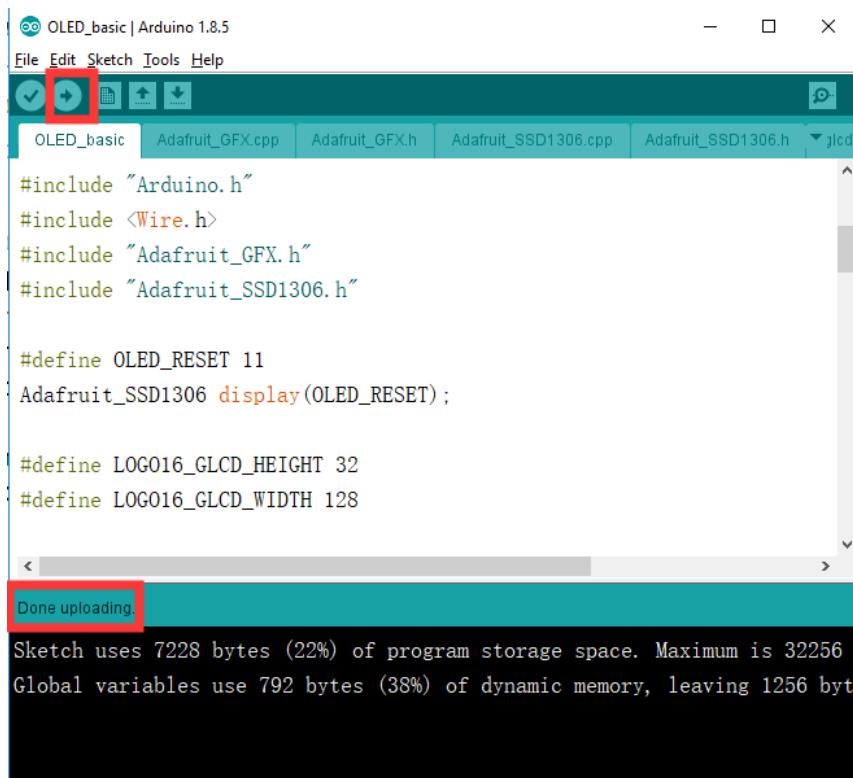
Archiving built core (caching) in: C:\Users\ADMINI~1\AppData\Local\Temp
Sketch uses 7228 bytes (22%) of program storage space. Maximum is 32256 bytes.
Global variables use 792 bytes (38%) of dynamic memory, leaving 1256 bytes free.
```

3.2 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 below.





3.3 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 below.



4.Experimental phenomena

After the program is downloaded, we will see that OLED display "Welcome!" "Hola, Maker".