Hello Arduino !

Introduce to Arduino

A programmer loves calligraphy years after retirement, one day, he is suddenly in aesthetic mood after a meal, so prepares "the Four Treasures of Study",writing brush, ink stick, ink slab and paper, grinds ink, spreads paper and lights a good sandal, quite a Wang Xizhi demeanor and Yan Zhenqing manner. Composed for a moment, then he splashed ink, Earnestly writes down the words: "hello world!". Why programmers are so keen on this a few words? The inception of "Hello world" dates back to 1972, Bell Laboratory's famous researcher Brian Kernighan firstly used it(program) when he was writing "B Language tutorials and guidance (Tutorial the Introduction to the Language B)" , this is the earliest known record at present when "hello" and "word" are used together in a computer work . Then, in 1978, he used this sentence pattern "hello, world" again in C Language bible "The C Programming Language" co-authored with Dennis Ritchie, as the first program in the opening. In this program, the output of the "hello, world" are all lowercase, without an exclamation point, a comma followed by a space. Although the initial form almost failed to survive after that, from then on, "hello, world" became a tradition of the program world to greet the outside. "Hello Arduino!", without exception, also became the first program in the tutorial.

Hardware Connection

There is a Atmega16u2 USB serial port on Arduino uno board , so the first program doesn't need to connect other equipment, only requires Arduino UNO to connect PC with a USB line directly.

Code

```
void setup() {
   // put your setup code here, to run once:
   Serial.begin(9600);
}
void loop() {
   // put your main code here, to run repeatedly:
   Serial.println("Hello Arduino !");
   delay(1000);
}
```

Run the program and observe the experimental results

Connect Arduino UNO to the computer through USB;

Open the Arduino IDE, and click "file -- open -- select helloarduino.ino -- open", as shown in figure 3.1.1.

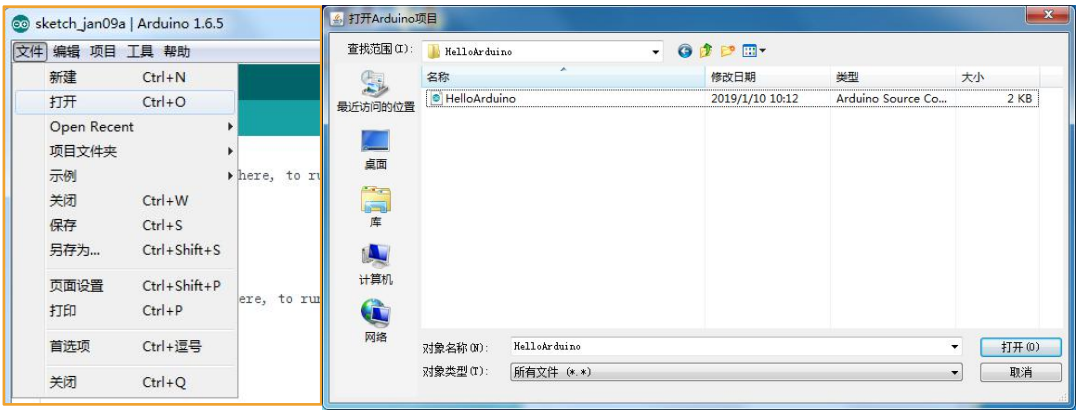


Figure 3.1.1 select file diagram

1) open the Arduino IDE software and click "tools -- port -- COM19(different board port Numbers are different)", as shown in figure 3.1.1

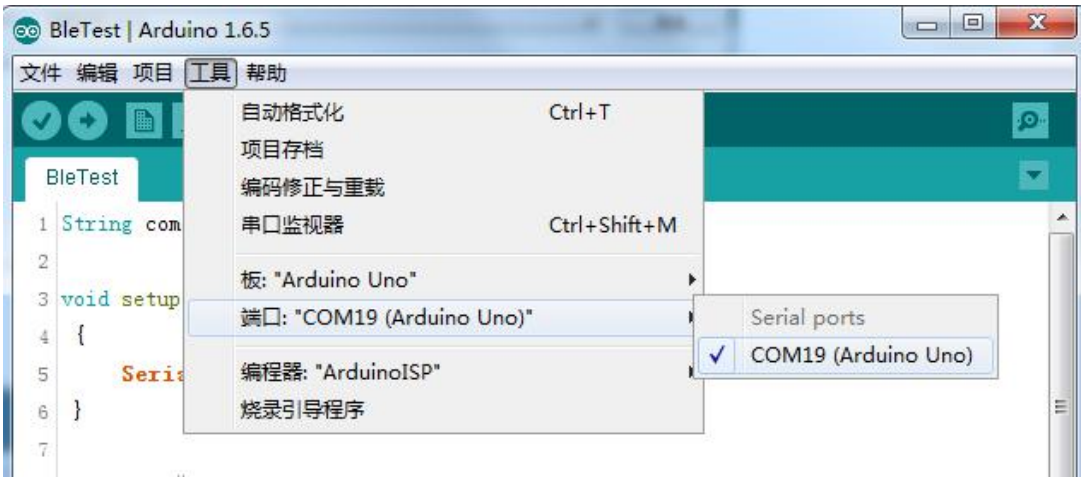


Figure 3.1.2 port selection

2) click on "tools -- programming --ArduinoISP"

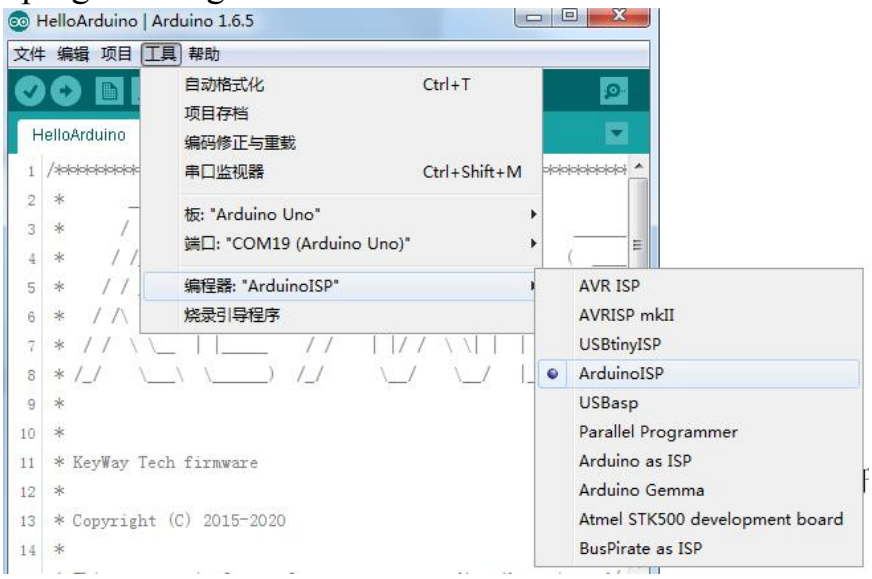


Figure 3.1.3 programmer selection

3) click "upload button" to start the upload program

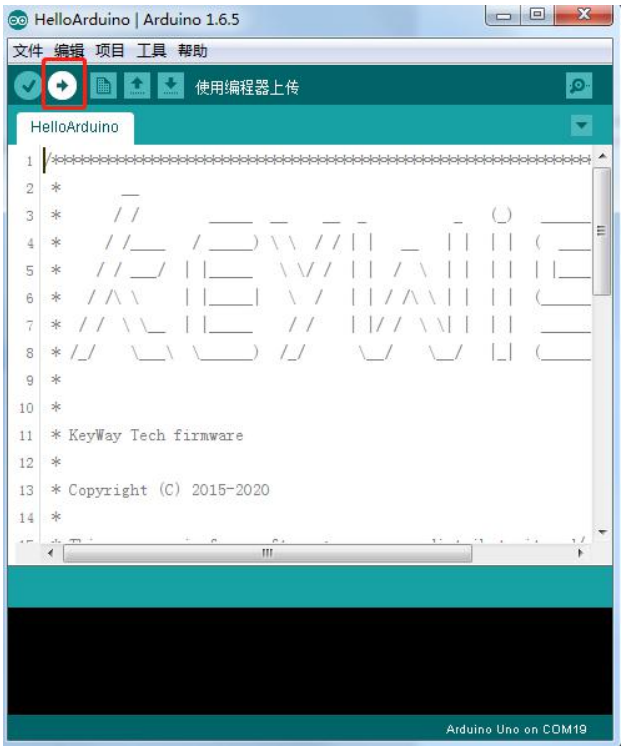


Figure 3.1.4 upload program

4) start uploading the program, wait for a while, and there will be a prompt of "successful uploading" in the lower left corner, proving that the program has been successfully recorded.See figure 3.1.6.

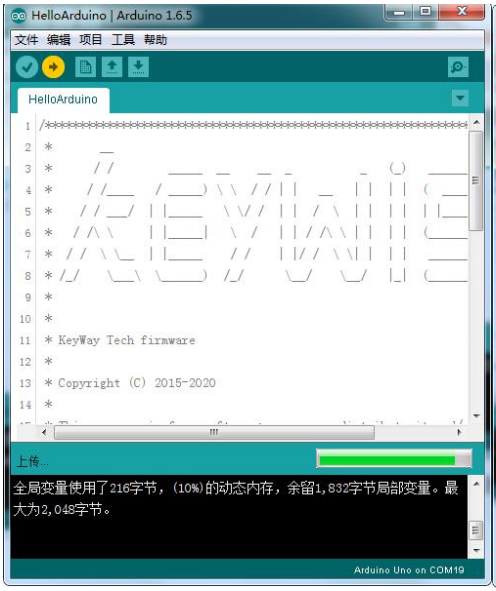


Figure 3.1.5 burning

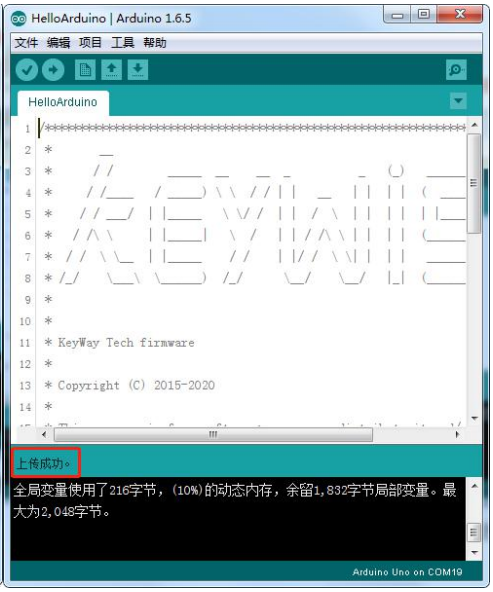


figure 3.1.6 burning is completed

5) open the serial port monitor, as shown in figure 3.1.7 and figure 3.1.8, and set the baud rate to 9600 (the baud rate should be consistent with the code,

Otherwise, the printed content will appear garbled code), and you will see the serial port end to print "Hello Arduino!

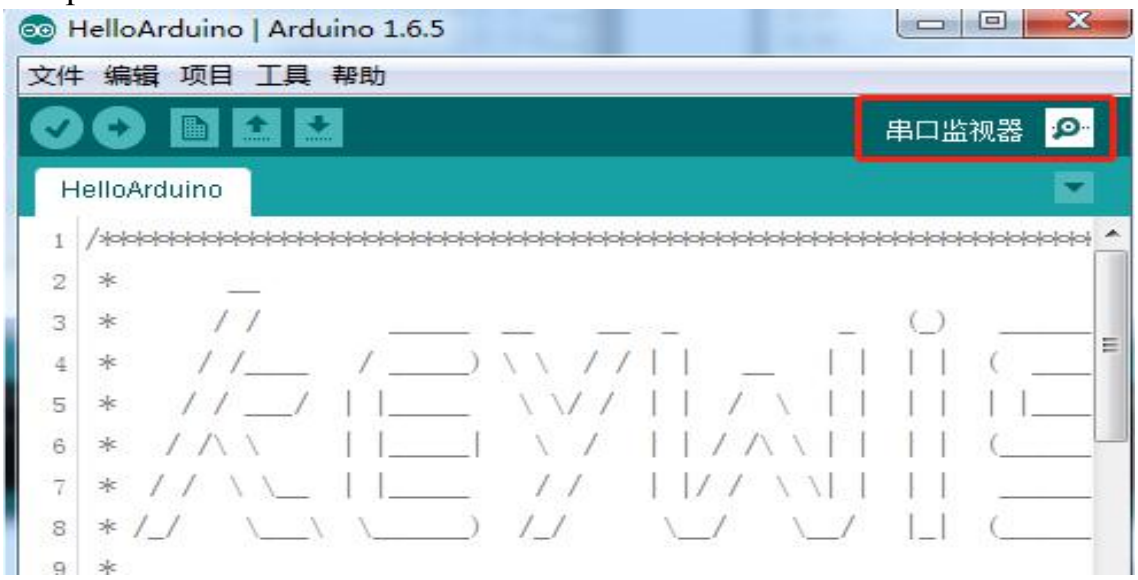


Figure 3.1.7 serial monitor switch

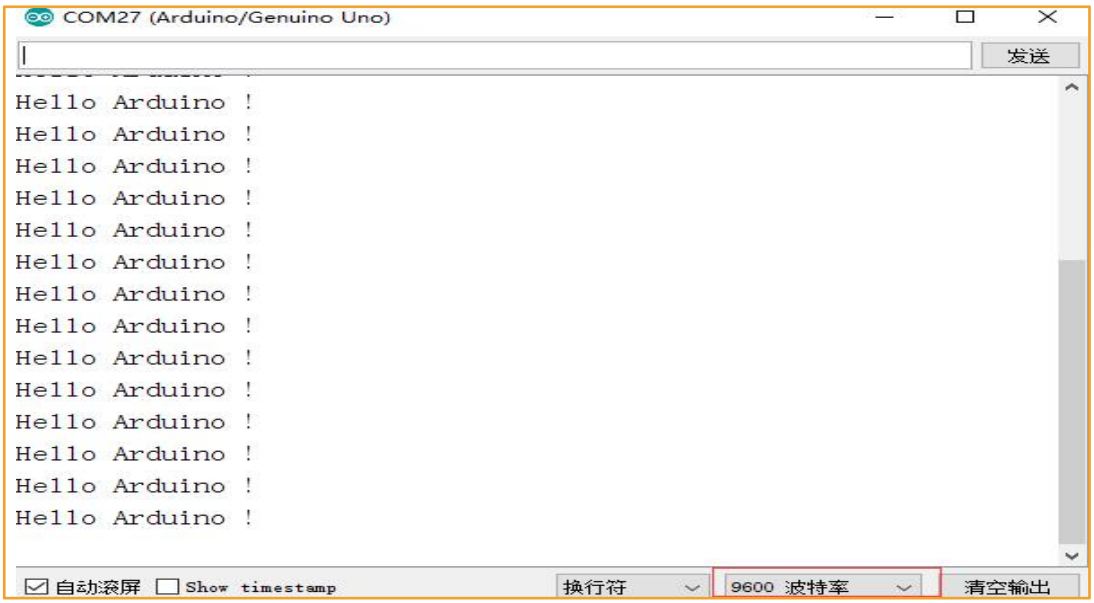
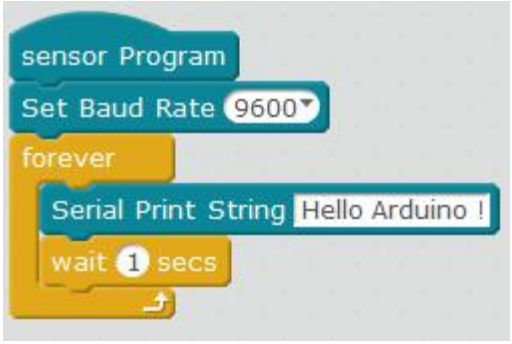


Figure 3.1.8 serial port printing interface

Mblock programming program

Write a serial port to print Hello Arduino with mBlock!The program is shown in the following figure:


sensor Program
Set Baud Rate 9600
forever
Serial Print String Hello Arduino !
wait 1 secs