Course 2 ----Led Twinkle

The purpose of the experiment:

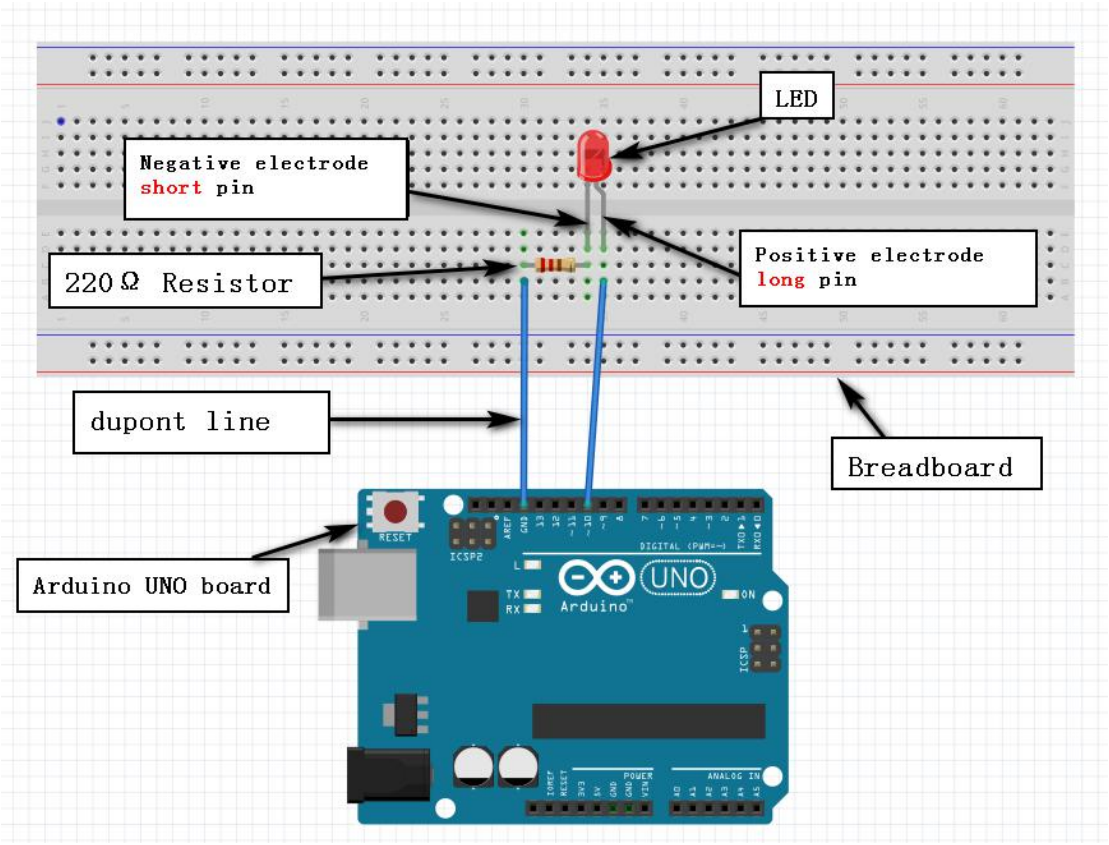
This course is to use the I/O port on the Arduino UNO board and an external LED light to complete the experiment. The experiment is to make the LED light to twinkle, lights up for 1 second and turns off for 1 second.

List of components required for the experiment:

Arduino UNO board *1
USB cable *1
LED*1（Color random）
220Ω Resistor *1
Breadboard *1
Dupont line *1 bunch

Actual object connection diagram:

We need to connect the circuit as shown in the figure below.



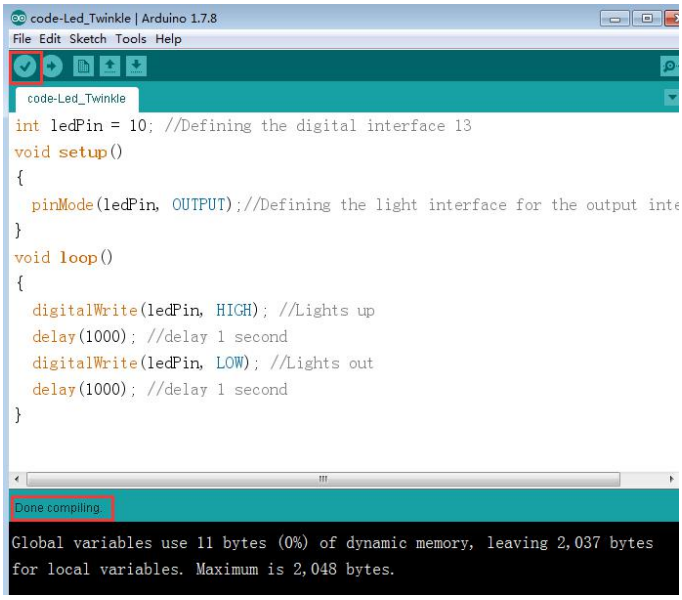
Experimental code analysis:

```
int ledPin = 10;        //Defining the digital port 10
void setup()
{
  pinMode(ledPin, OUTPUT);    //Defining the light port for the output port
```

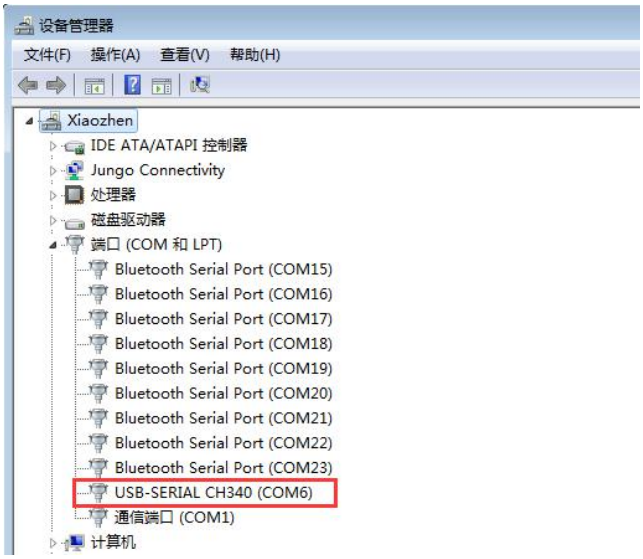
```
}
void loop()
{
   digitalWrite(ledPin, HIGH); //Lights up
   delay(1000); //delay 1 second
   digitalWrite(ledPin, LOW); //Lights out
   delay(1000); //delay 1 second
}
```

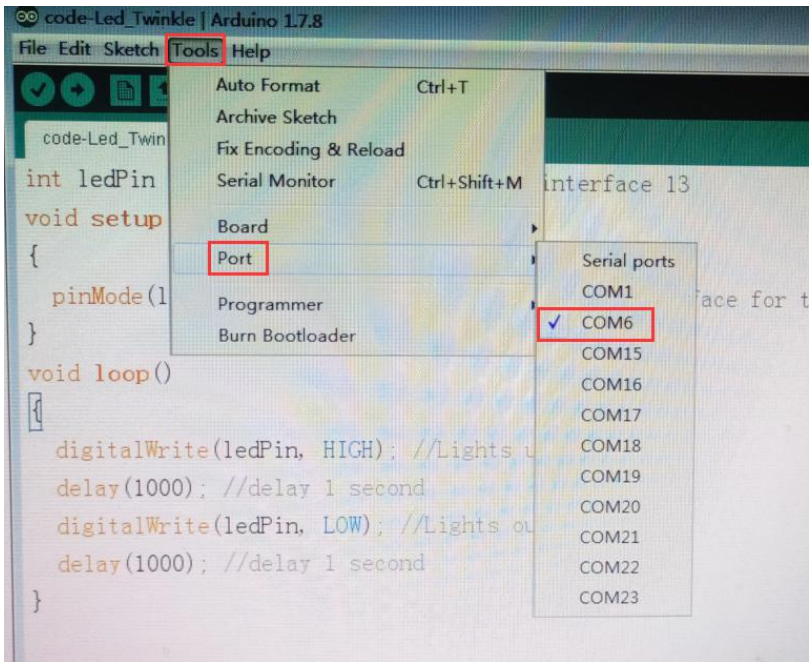
Experimental steps:

1. We need to open the code of this experiment: **code-Led_Twinkle.ino**, click " √ " under the menu bar to compile the code, and wait for the word "**Done compiling** " in the lower right corner, as shown in the figure below.

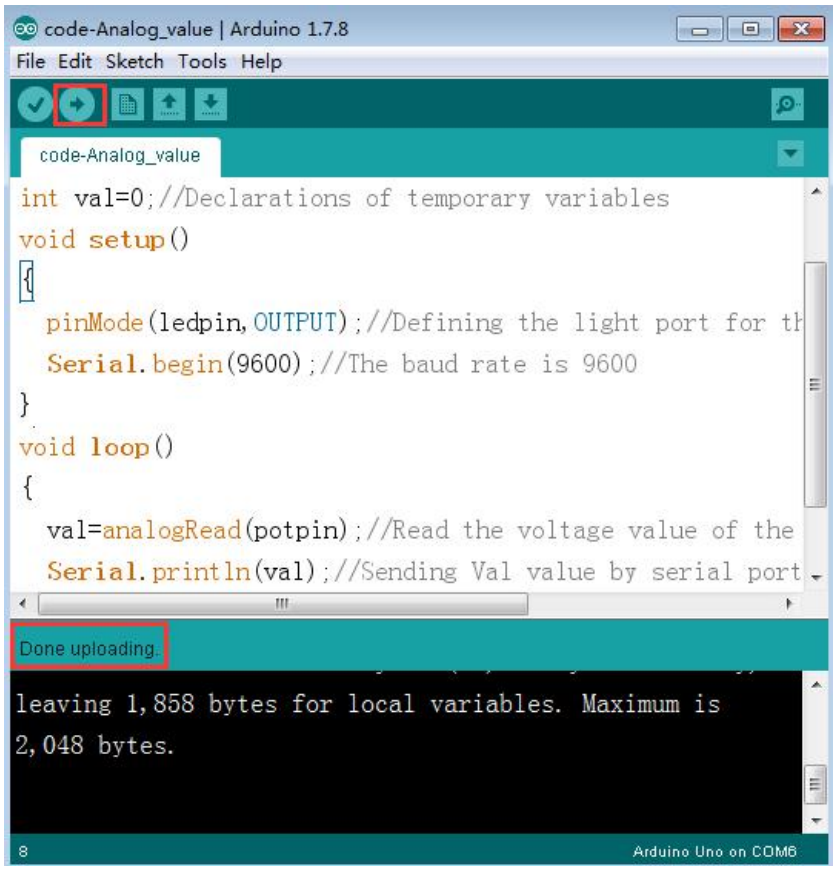


2. In the menu bar of Arduino IDE, we need to select 【Tools】---【Port】--- selecting the port that the serial number displayed by the device manager just now, as shown in the figure below.

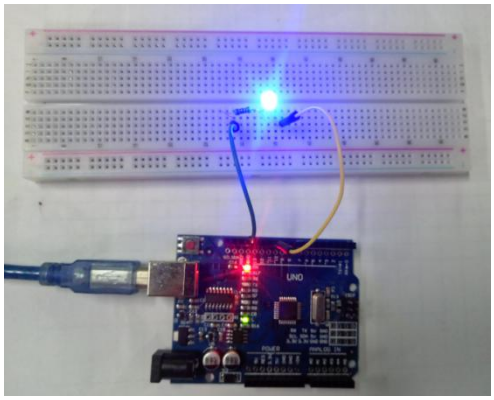


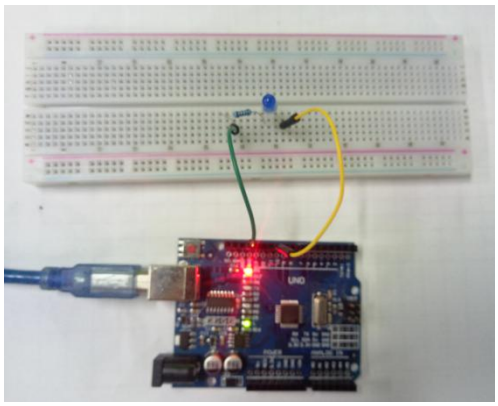


3.After the selection is completed, you need to click "→"under the menu bar to upload the code to the Arduino UNO board. When the word "**Done uploading**" appears in the lower left corner, the code has been successfully uploaded to the Arduino UNO board, as shown in the figure below.



4.After the code is uploaded, we can see LED light twinkle every second, as shown in the picture below.





The code of the experiment: