Course 8-1 ---Active buzzer

The purpose of the experiment:

In this course, we need to use active buzzer to make an experiment to make the circuit sound.

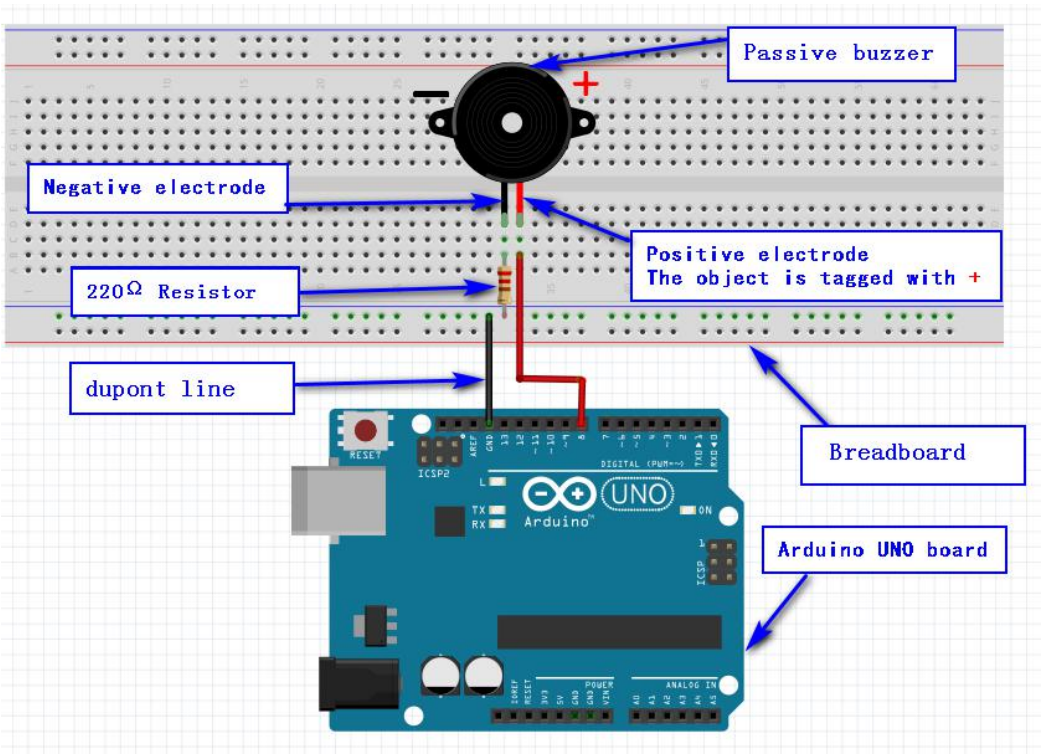
List of components required for the experiment:

Arduino UNO board *1
USB cable *1
220Ω Resistor *1
Active buzzer *1
Breadboard *1
Dupont line *1bunch

Actual object connection diagram:

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

Note: The active buzzer has positive and negative electrode. The actual object diagram below shows that the buzzer has positive and negative marks.

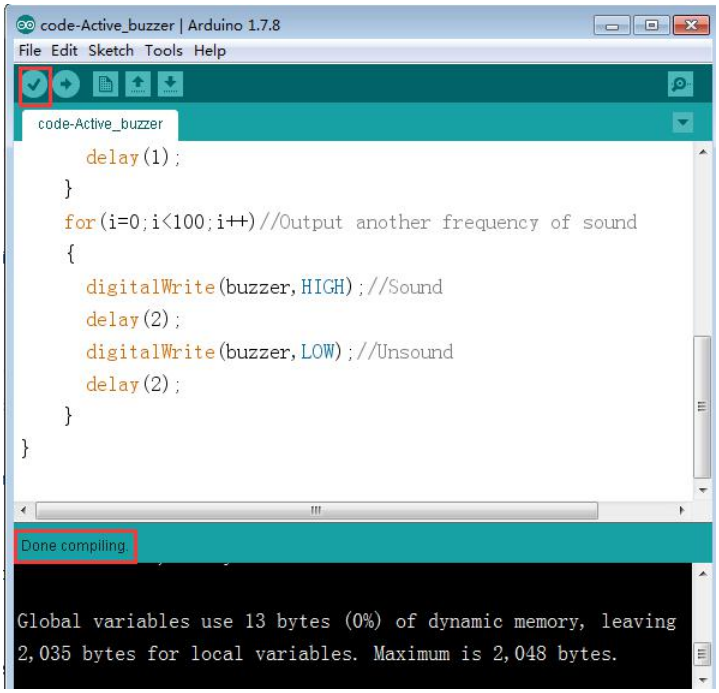


Experimental code analysis:

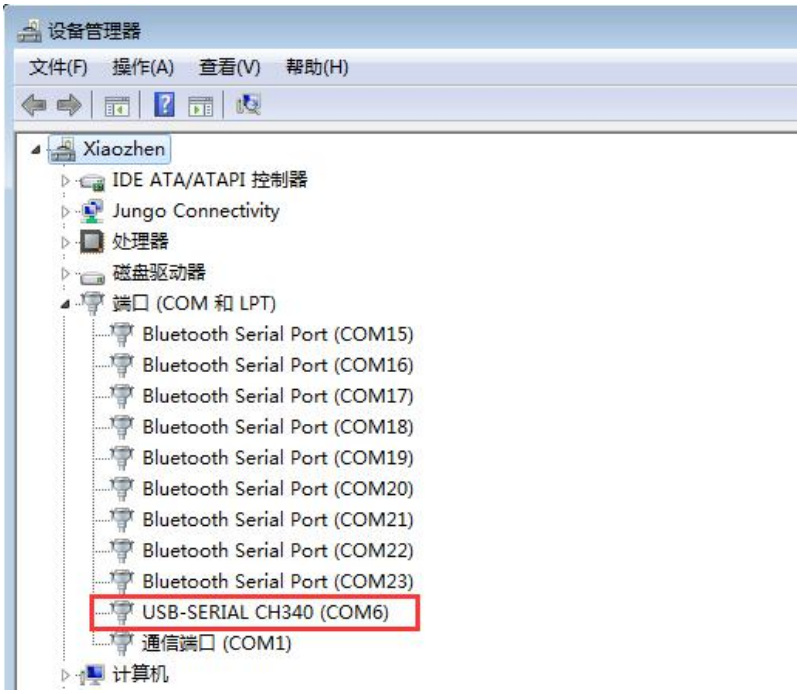
```
int buzzer=8;    //Defining the digital port 8 to control the buzzer
int i = 0;
void setup()
{
pinMode(buzzer,OUTPUT);      //Defining the buzzer port for the output port
}
void loop()
{
      for(i=0;i<80;i++)    //Output a frequency of sound
      {
        digitalWrite(buzzer,HIGH); //Sound
        delay(1);
        digitalWrite(buzzer,LOW);    //Unsound
        delay(1);
      }
      for(i=0;i<100;i++)    //Output another frequency of sound
      {
        digitalWrite(buzzer,HIGH);    //Sound
        delay(2);
        digitalWrite(buzzer,LOW);    //Unsound
        delay(2);
      }
}
```

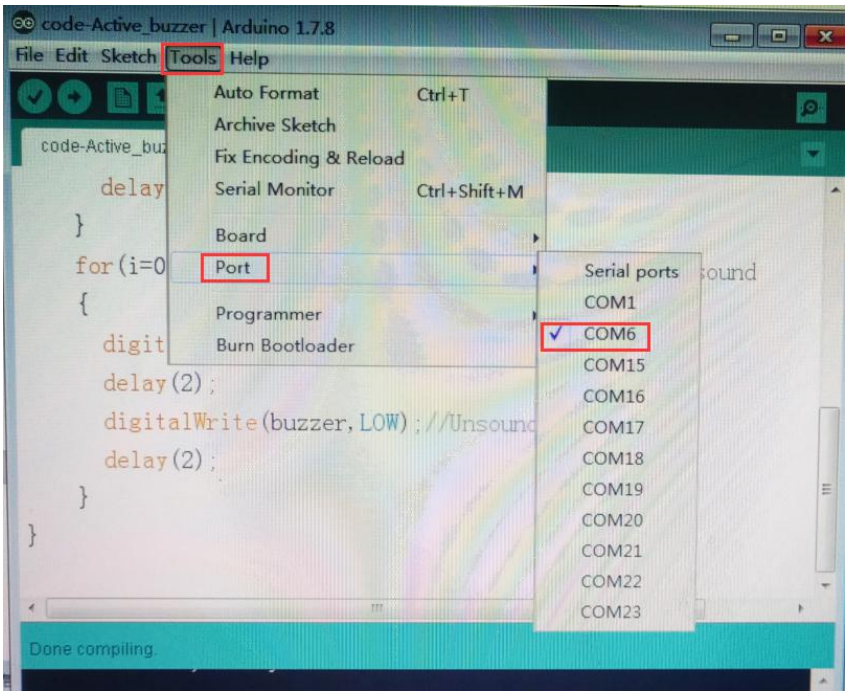
Experimental steps:

1. We need to open the code of this experiment: **code-Active_buzzer.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.

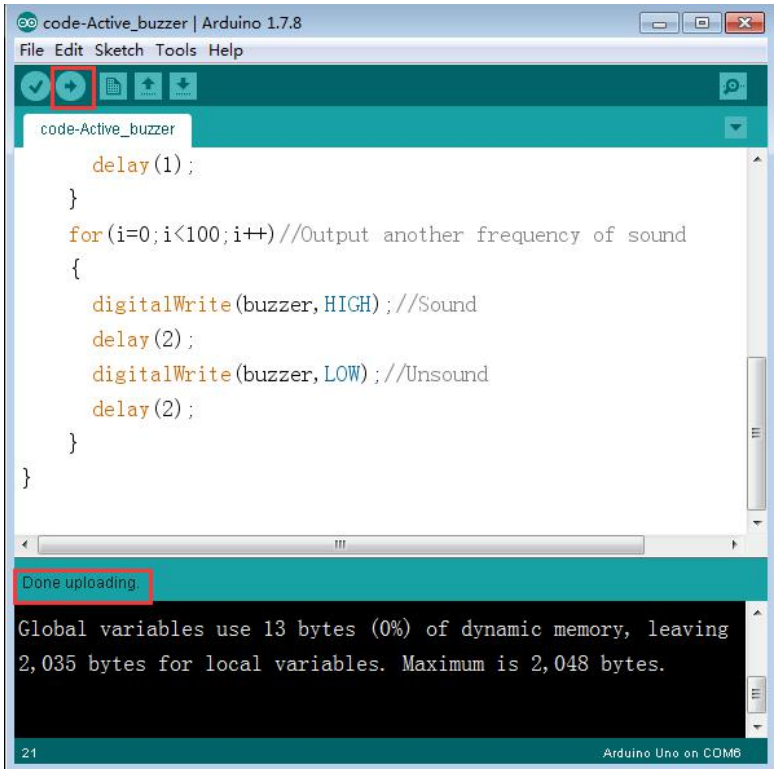


2.In the menu bar of Arduino IDE, we need to select 【Tools】---【Port】--- selecting the port that the serial number displayed by the device manager just now, as shown in the figure below. For example:COM6,as shown in the following figure.

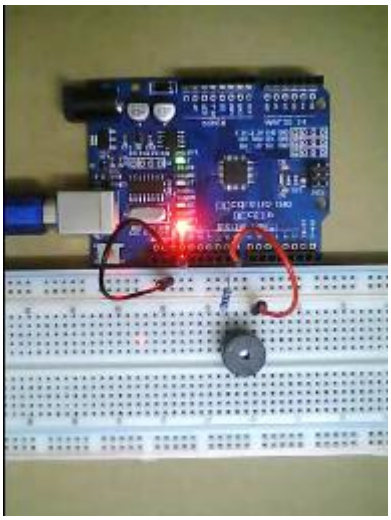




3.After the selection is completed, you need to click "→"under the menu bar to upload the code to the Arduino UNO board. When the word "**Done uploading**" appears in the lower left corner, the code has been successfully uploaded to the Arduino UNO board, as shown in the figure below.



4. After the code is uploaded, we can hear the buzzer sound every 0.2 seconds. As shown in the following figure.



The code of the experiment: