LESSON 0

Sets up

development environment --

Arduino IDE

But..

e.....

what is Arduino IDE.....?

http://www.elegoo.com

Arduino IDE

As an open source software, Arduino IDE, basing on Processing IDE development is an integrated development environment officially launched by Arduino.

In the next part, each movement of the vehicle is controlled by the program so it's necessary to get the program installed and set up correctly. By using Arduino IDE, you just write the program code in the IDE and upload it to the Arduino circuit board. The program will tell the Arduino circuit board what to do.

So, where can we download Arduino IDE?

STEP 1:

Go to

https://www.arduino.cc/en/Main/Software

and you will see below page.

The version available at this website is usually the latest version, and the actual version may be newer than the version in the picture.

STEP 2：

Download the development software that is suitable for the operating system of your computer.

Take Windows as an example here.

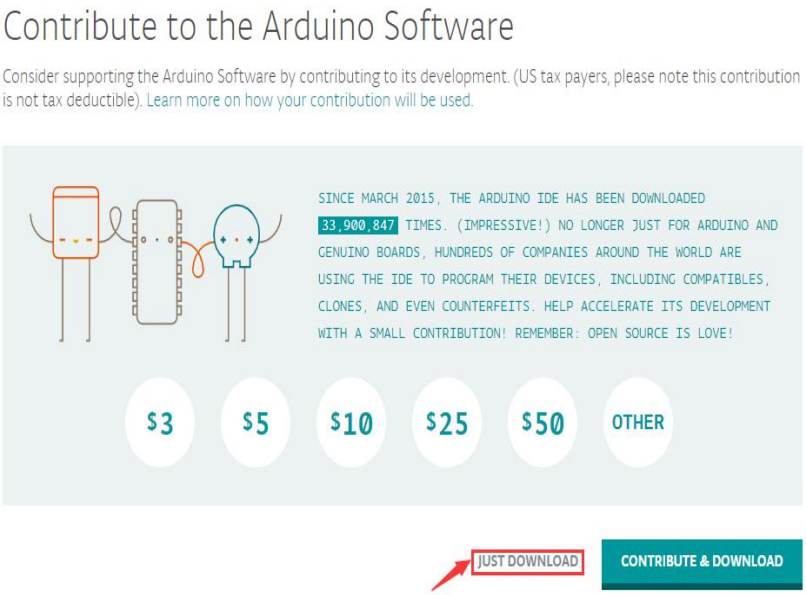
If you are MacOS, please close the file and open the "For Mac Lesson 0 Setting up development environment".

You can install it using the EXE installation package or the green package.

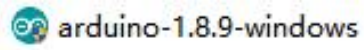
The following is the exe implementation of the installation procedures.

STEP 3：

Press the button "JUST DOWNLOAD" to download the software.



The download file:

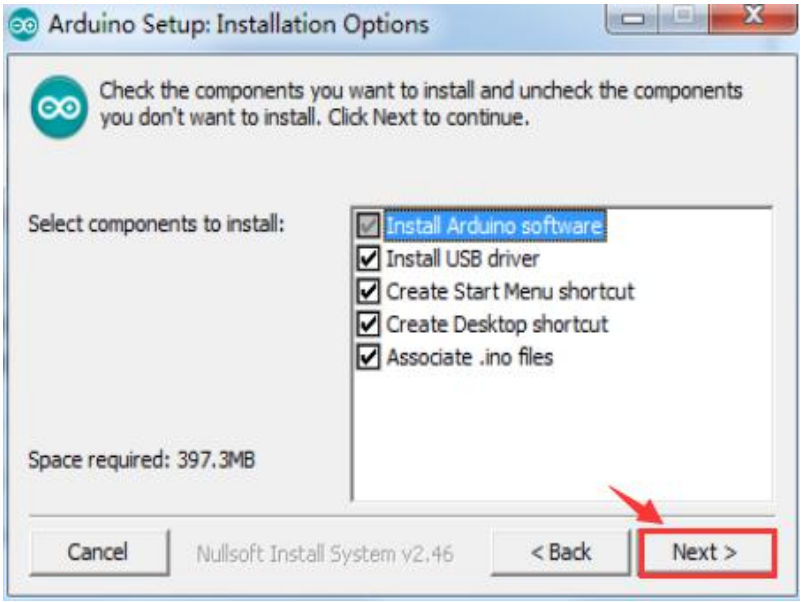


STEP 4：

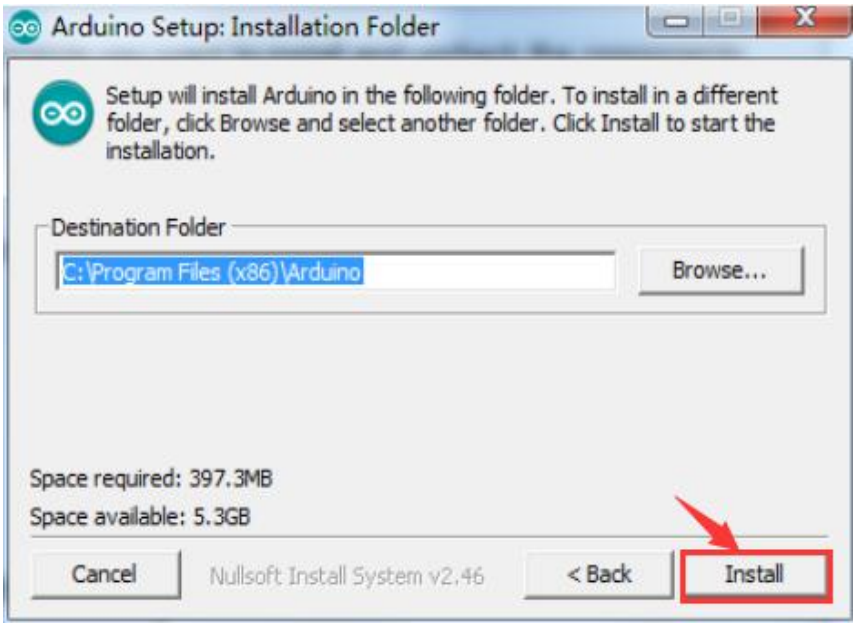
These are available in the materials we provide, and the versions of our materials are the latest versions when this course was made.

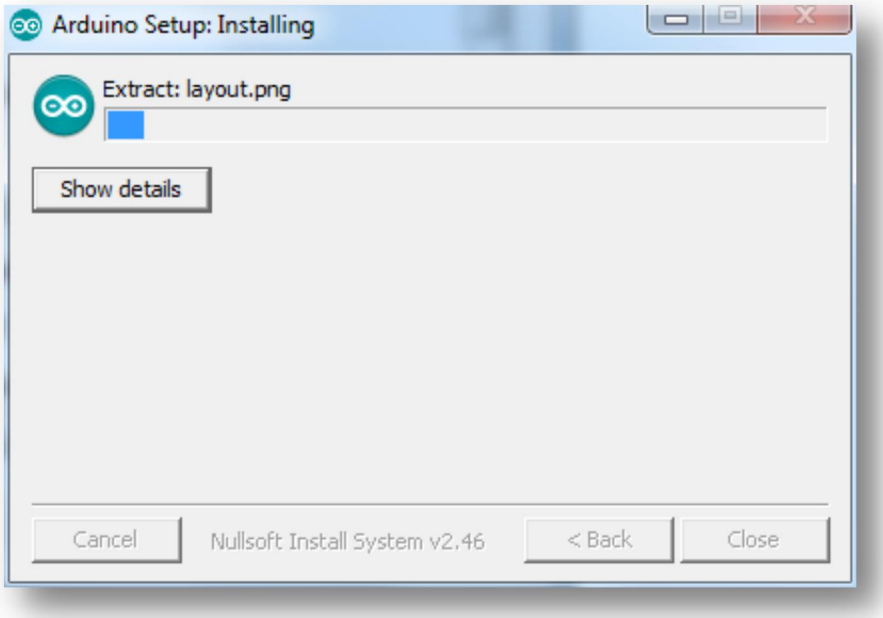
Choose "I Agree" to see the following interface.

Choose "Next" to see the following interface.



Press "Install" to initiate installation.



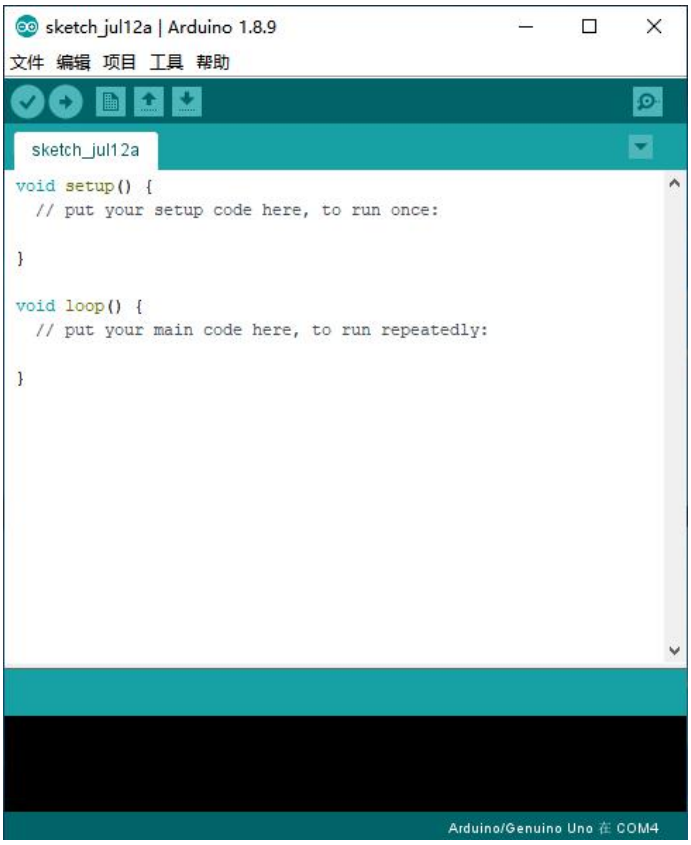


Finally, the following interface appe ars, you should choose "Install" to ensure the correctness of develop ment.

STEP 5：

Next, the following icon appears on the desktop.

Double-click to enter the desired development environment.

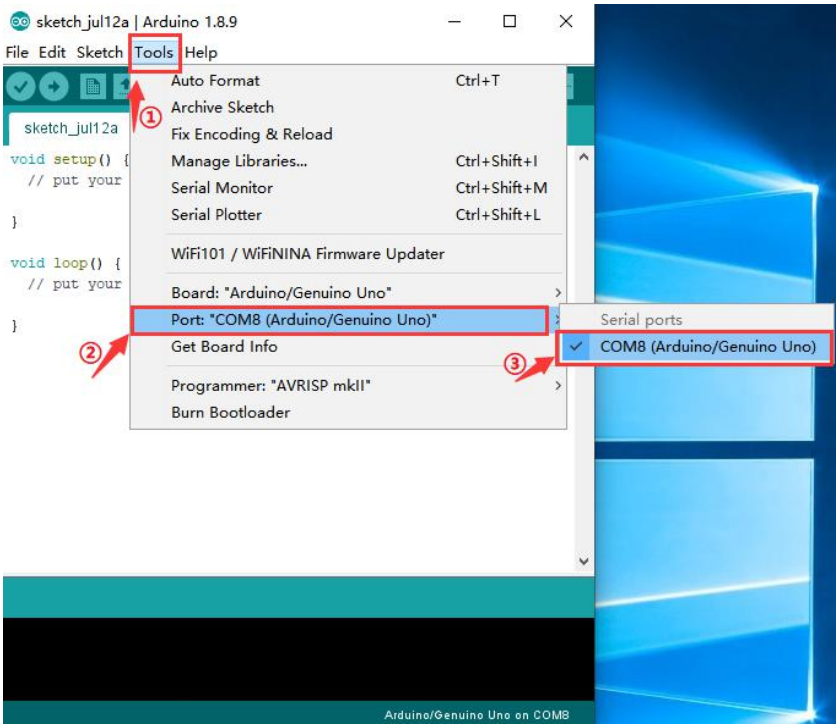


STEP 6：

Connect development board of the car to the computer.

STEP 7：

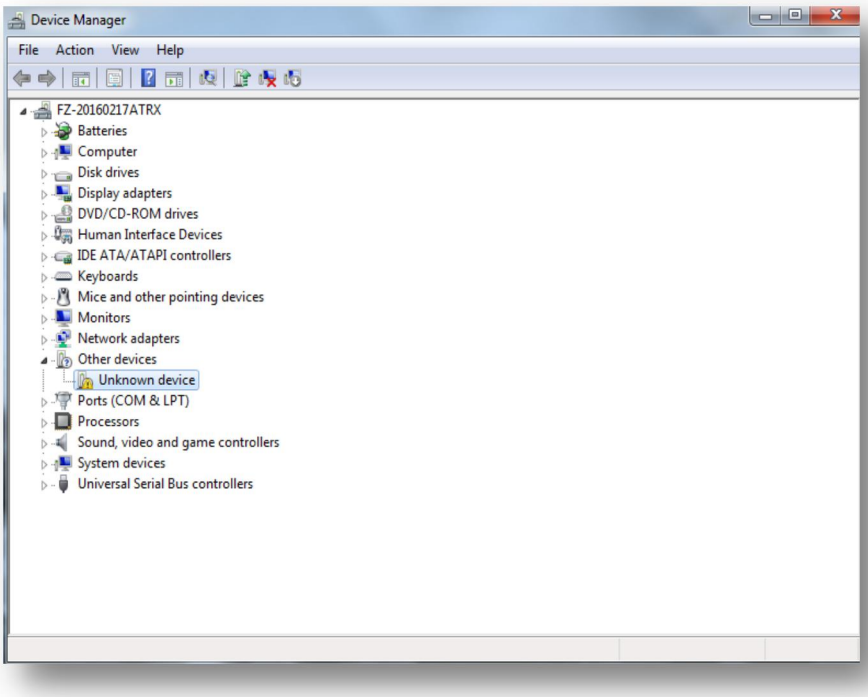
Open the Arduino IDE. Select “Tool” → “Board:” → ”Arduino/Genuino Uno”. Select “Tool” → ”Port:” → ”COM (Arduino/Genuino Uno)”.



Each Arduino Uno board has a different COM number on the same computer and usually the COM number with a suffix name “(Arduino/Genuino Uno)” in Arduino 1.8.9. You should choose the COM number of the actual display.

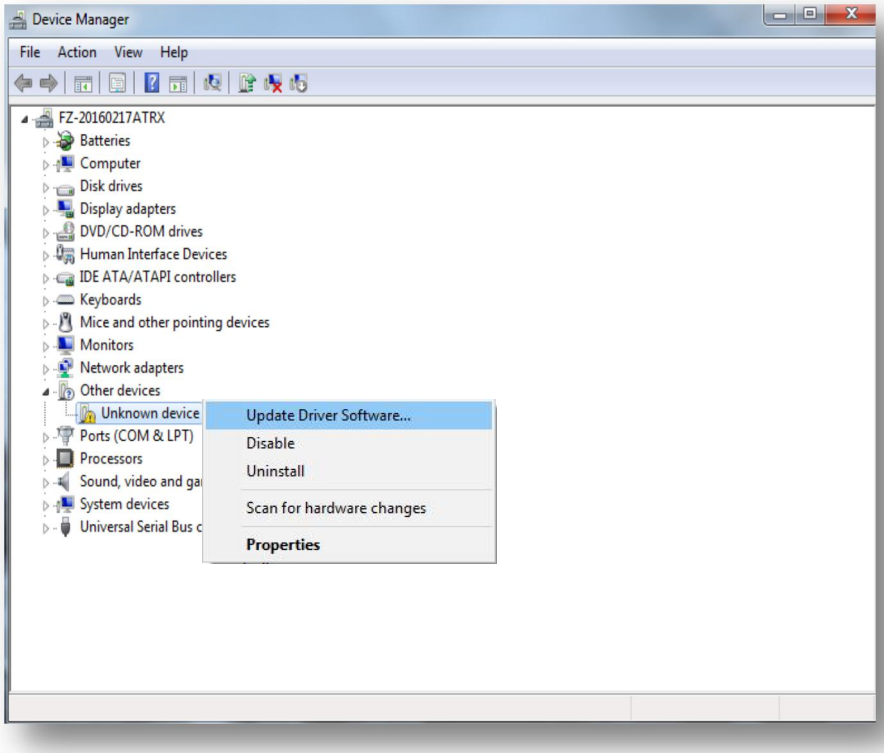
STEP 8：

If you see the port “COM (Arduino/Genuino Uno)”, it means that the vehicle has been connected correctly to the computer. In this case, you can jump to STEP 8 directly. Otherwise, you will need to manually install the driver in the following way.

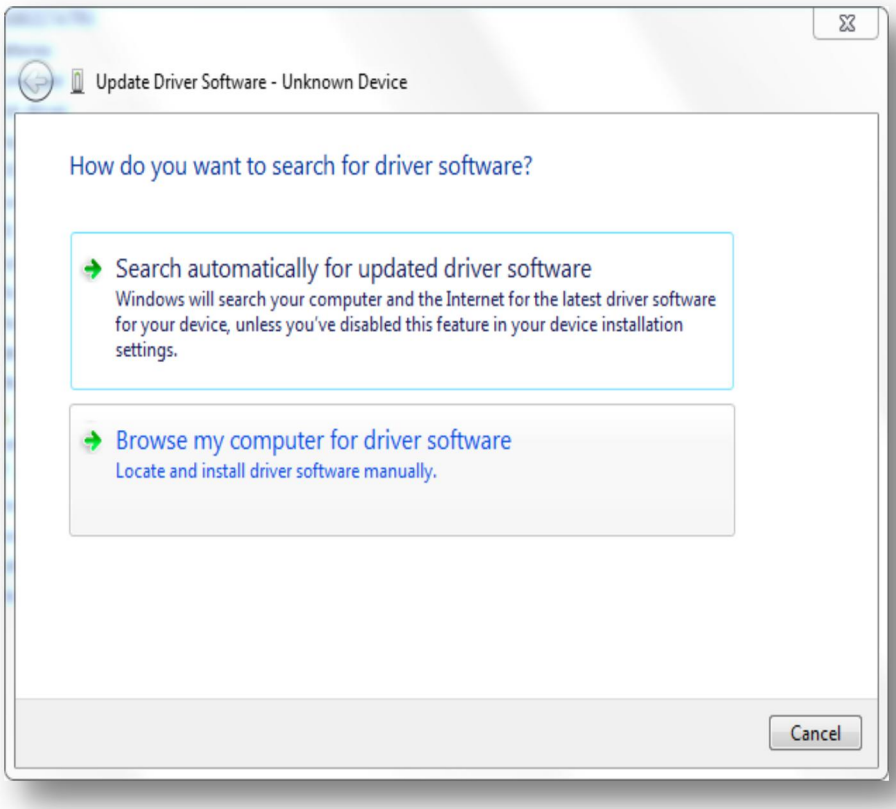


Open Device Manager by right click My Computer——Management——Device Manager.

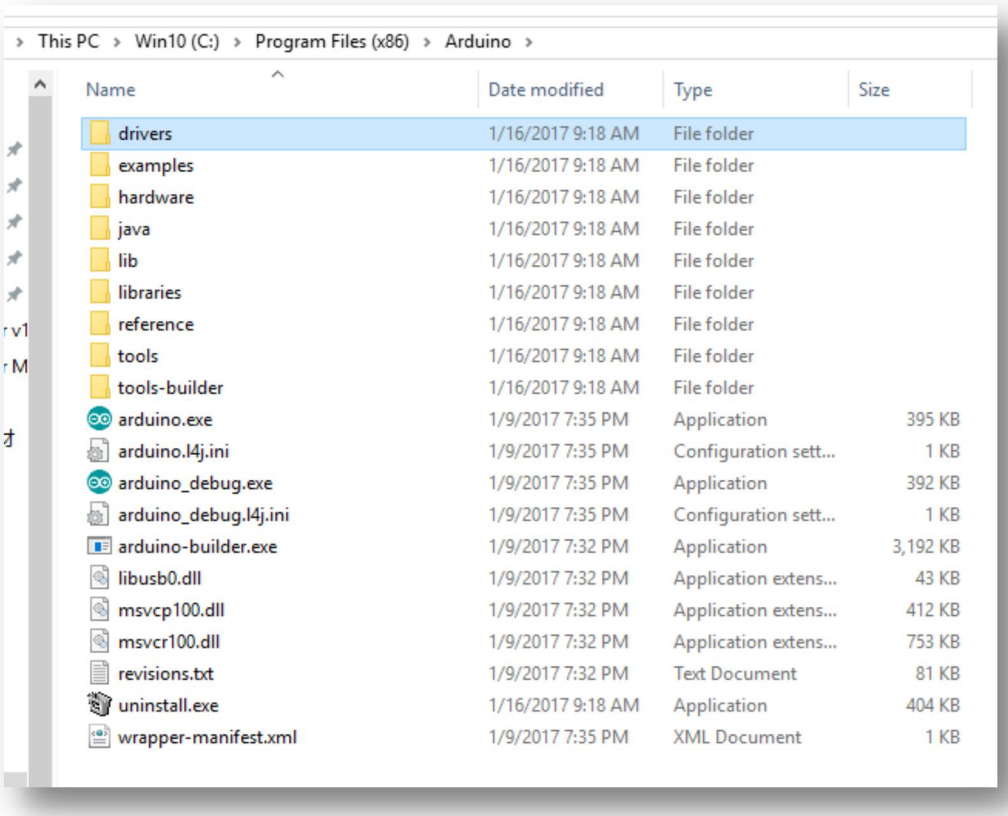
Right click unknown device-----Update Device Software.



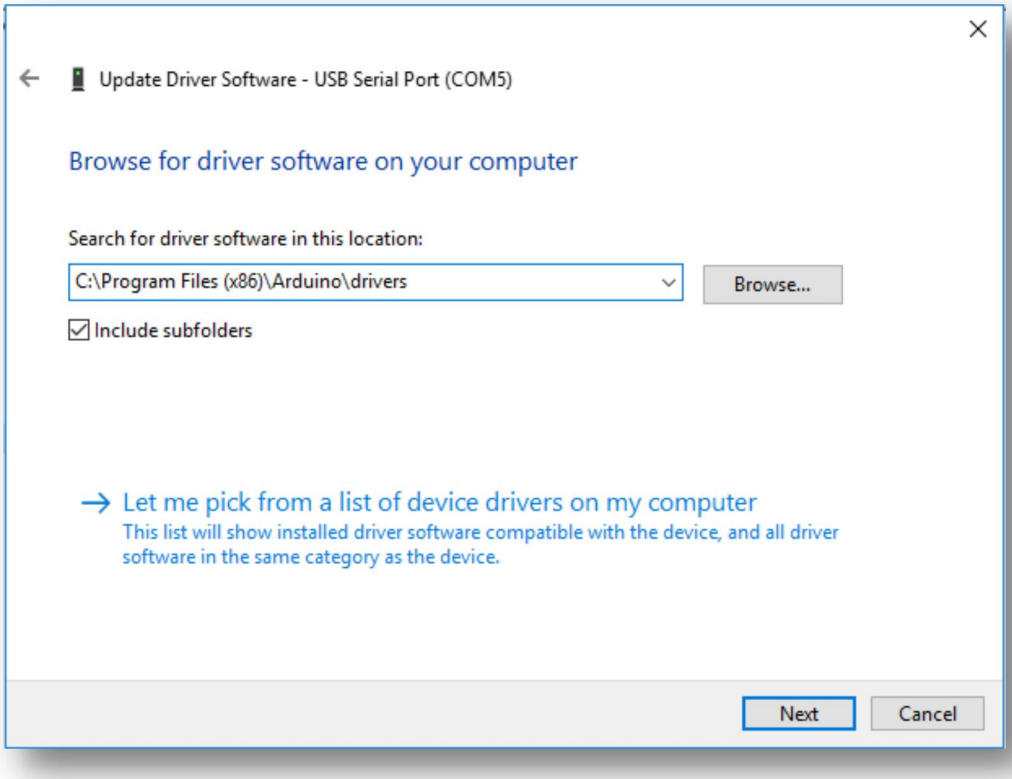
It shows that the driver has not been installed, and you need to click "Browse my computer for driver software" to find the drivers. The drives is in the Arduino folder. Normally you will install the folder in C:\Program Files (x86)\Arduino.



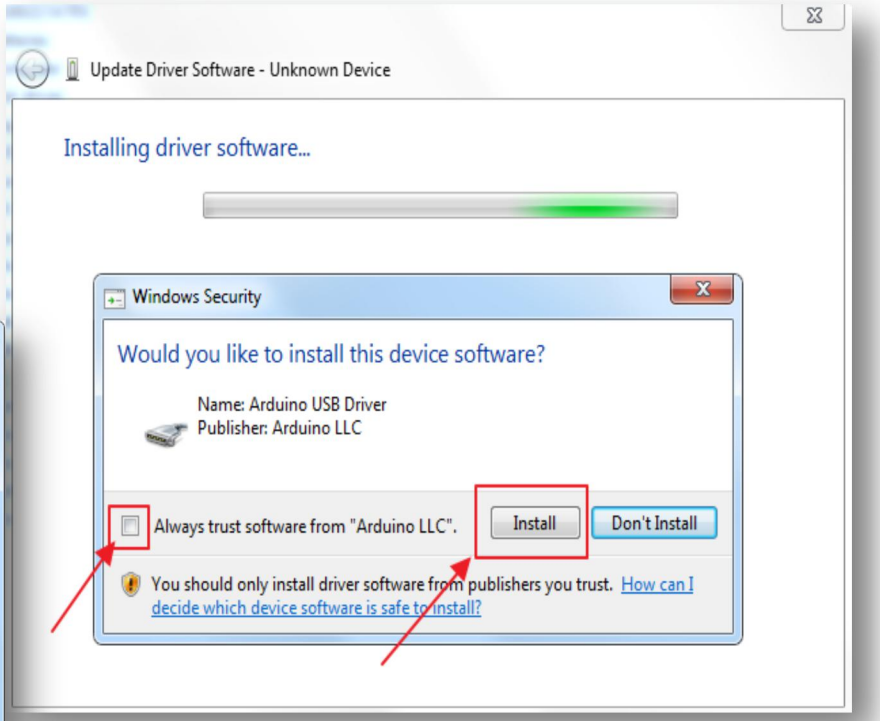
Arduino install folder.



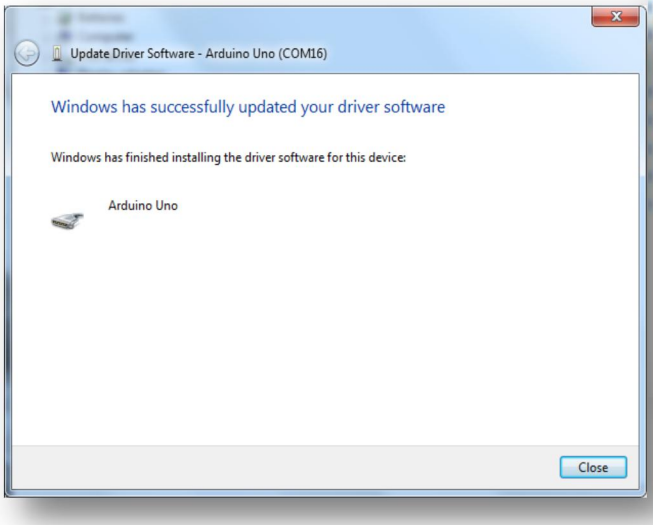
Select the Arduino driver folder.



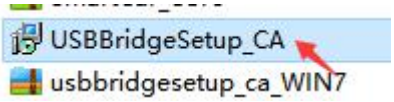
Install Arduino USB Device.

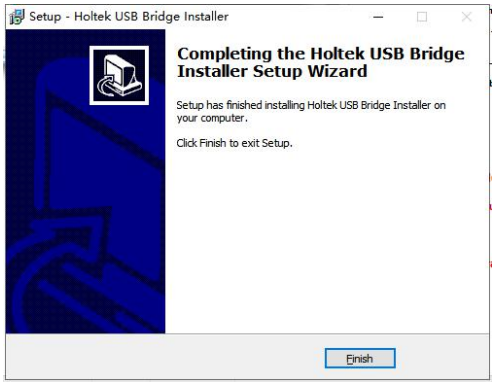


Finally,



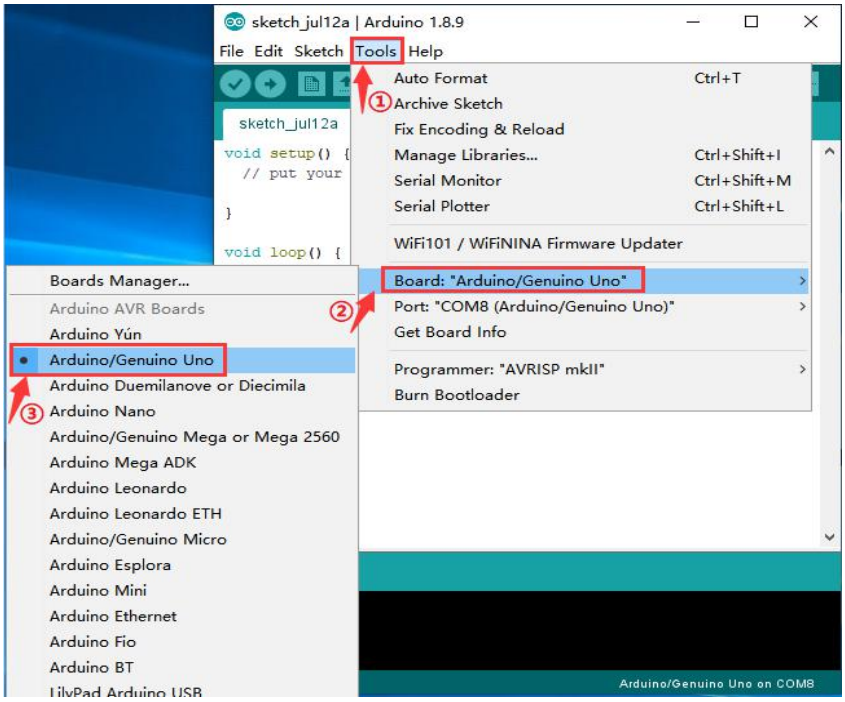
If your computer's OS is win7, you should download the USBBridgeSetup _CA_WIN7 on our website:
http://www.elegoo.com/download/
Unzip the zip file, running the installer "USBBridgeSetup_CA"





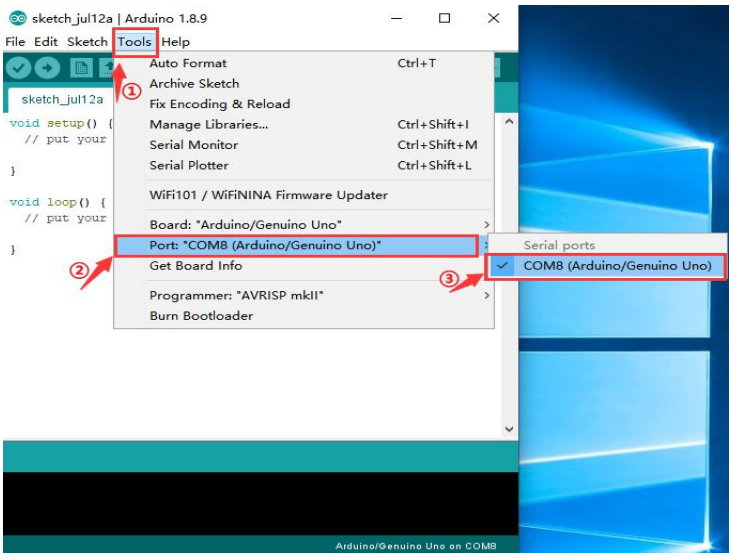
STEP 9:

After the driver is installed, please open the IDE and then click "Tools" → "Board" → "Arduino/Genuino Uno".



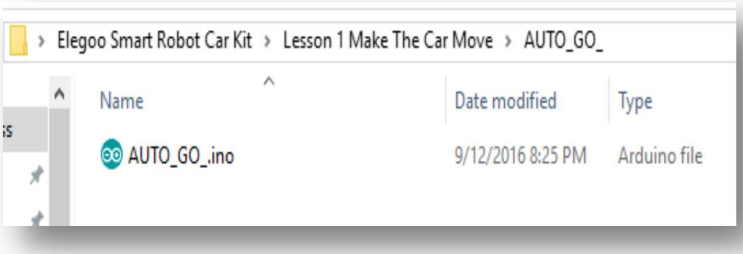
STEP 10:

Click “Tools”→” Port”→COM.



STEP11：

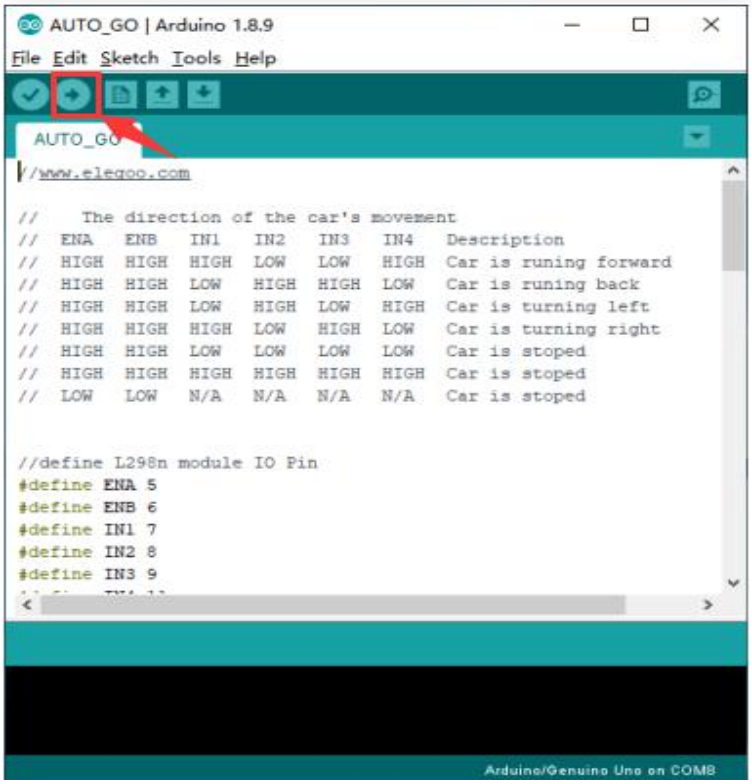
Open the code file in the directory "\Lesson 1 Make The Car Move \AUTO_GO_\AUTO_GO_.ino" upload to the UNO controller board.



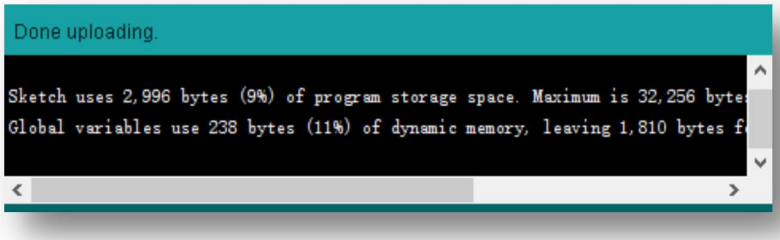
TIPS:

When uploading codes, please remove the Bluetooth module from the IO expansion board (Because the serial port for uploading codes and Bluetooth communication is the same one and there will be conflicts).

You can install the Bluetooth module after the program is uploaded.



The picture above shows that it is uploaded successfully.



At this time, the Arduino development environment has been successfully built.

http://www.elegoo.com

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