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.
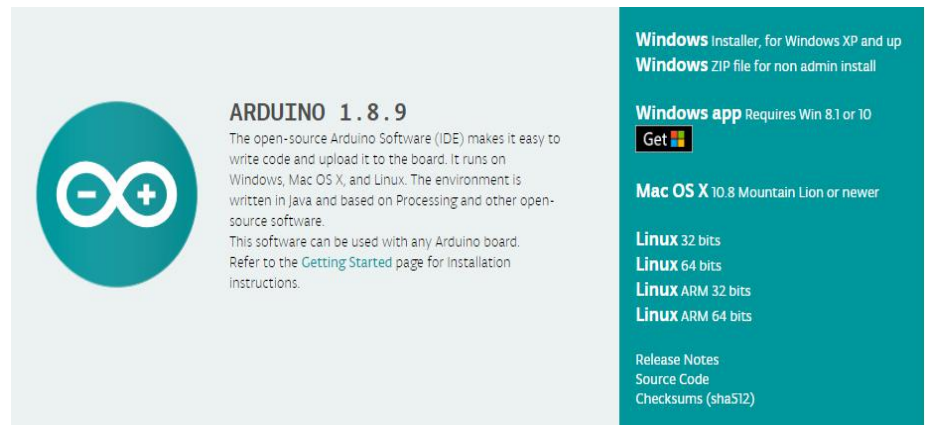
so,Where can we download arduino IDE?

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.

STEP2：

Download the development software that is suited for the operating system of your computer.
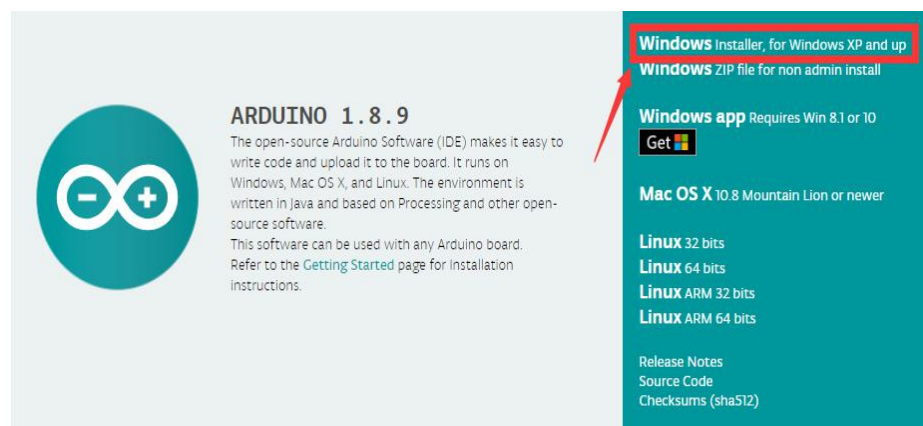
Take Windows as an example here.
If you are macOS, please pull to the end.

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

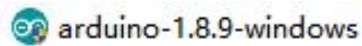**The following is the exe implementation of the installation procedures.**
Press the char "Windows Installer"

STEP3:

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

The download file:

arduino-1.8.9-windows

Contribute to the Arduino Software

Consider supporting the Arduino Software by contributing to its development. (US tax payers, please note this contribution is not tax deductible). Learn more on how your contribution will be used.

SINCE MARCH 2015, THE ARDUINO IDE HAS BEEN DOWNLOADED 33,900,847 TIMES. (IMPRESSIVE!) NO LONGER JUST FOR ARDUINO AND GENUINO BOARDS, HUNDREDS OF COMPANIES AROUND THE WORLD ARE USING THE IDE TO PROGRAM THEIR DEVICES, INCLUDING COMPATIBLES, CLONES, AND EVEN COUNTERFEITS. HELP ACCELERATE ITS DEVELOPMENT WITH A SMALL CONTRIBUTION! REMEMBER: OPEN SOURCE IS LOVE!
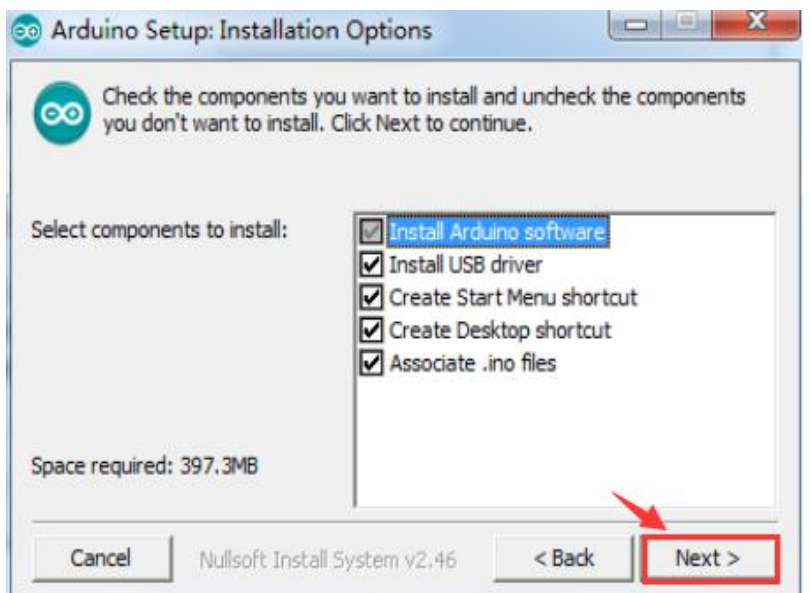
$3 $5 $10 $25 $50   OTHER
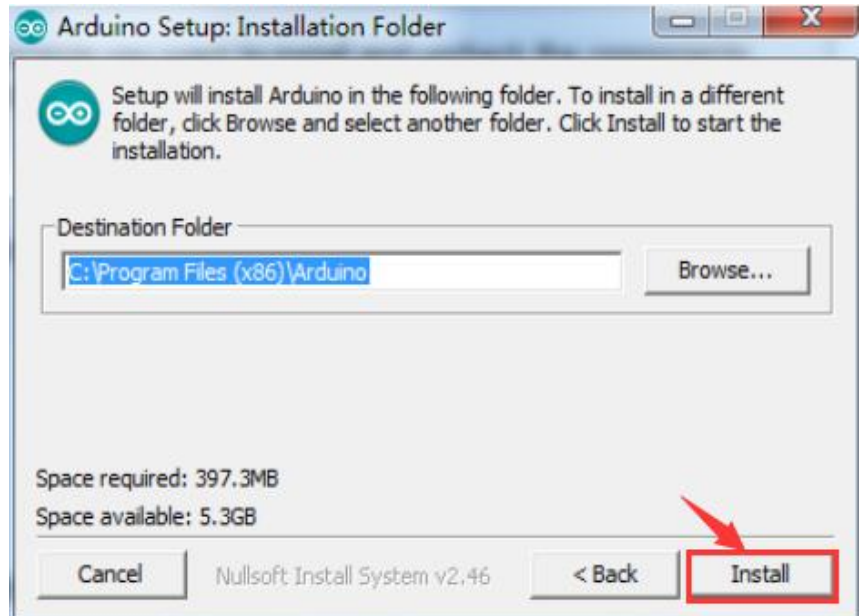
JUST DOWNLOAD   CONTRIBUTE & DOWNLOAD

STEP4:

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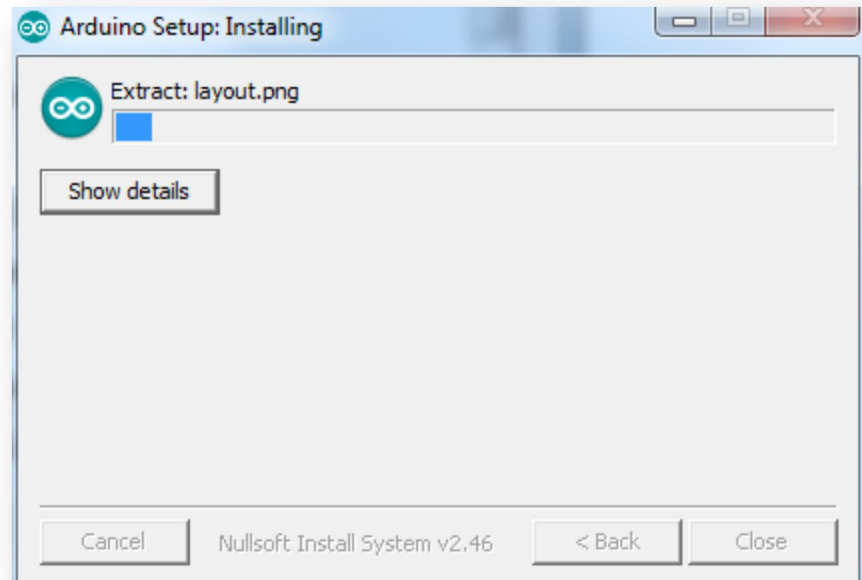
Arduino Setup: License Agreement

Please review the license agreement before installing Arduino. If you accept all terms of the agreement, click I Agree.

GNU LESSER GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. <http://fsf.org/>

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

This version of the GNU Lesser General Public License incorporates the terms and conditions of version 3 of the GNU General Public License, supplemented by the additional permissions listed below.

Cancel   Nullsoft Install System v2.46   I Agree

Choose "I Agree" to see the following interface.

Arduino Setup: Installation Options

Check the components you want to install and uncheck the components you don't want to install. Click Next to continue.

Select components to install:
☑ Install Arduino software
☑ Install USB driver
☑ Create Start Menu shortcut
☑ Create Desktop shortcut
☑ Associate .ino files

Space required: 397.3MB

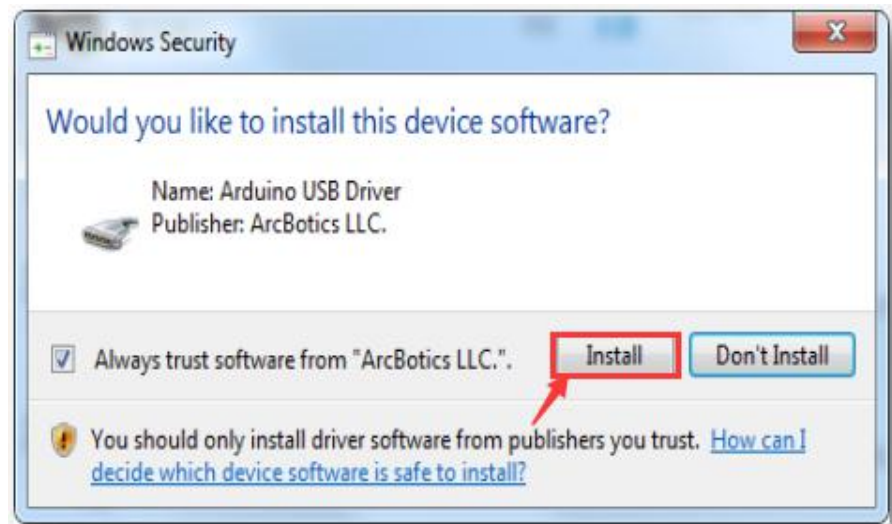Cancel   Nullsoft Install System v2.46   < Back   Next >

Choose "Next" to see the following interface.

Press "Install" to initiate installation.

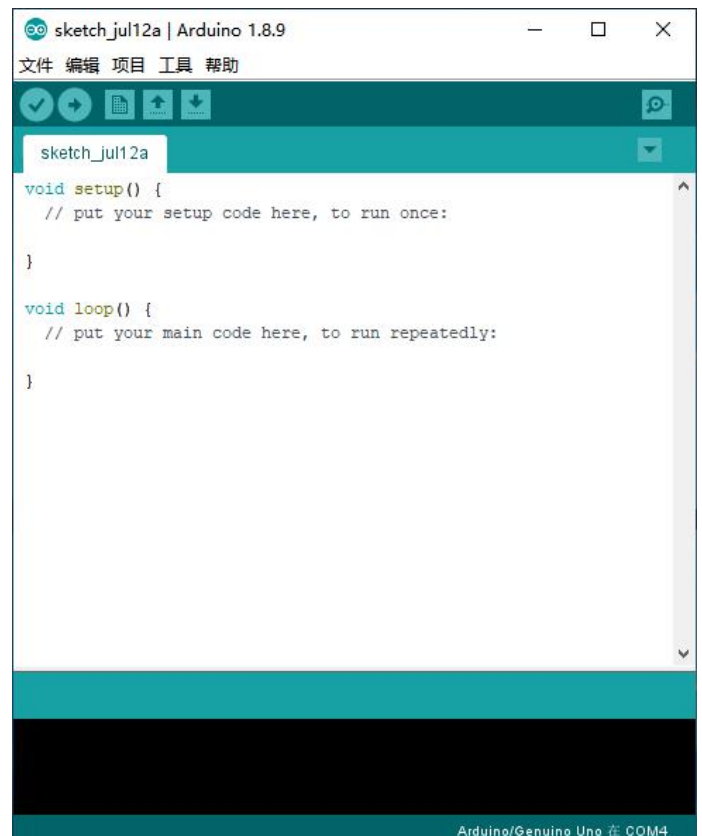**Finally,the following interface appears, you should choose Install to ensure correctness of development.**

STEP5：

Next, the following icon appears on the desktop.

Arduino

Double-click to enter the desired development environment.

STEP6：

**Connect development board of the car to the computer.**

STEP7：

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.
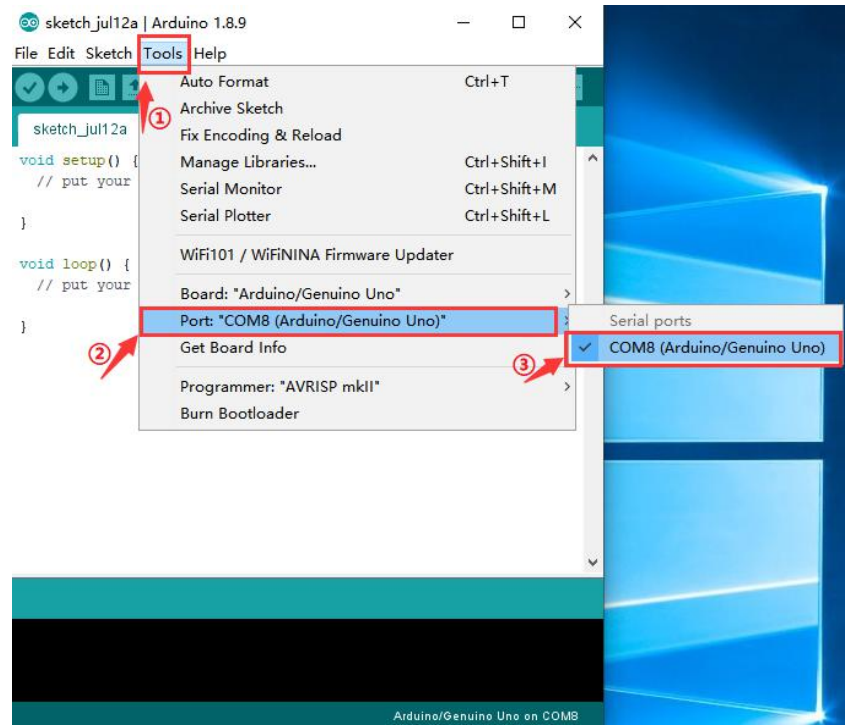
STEP8：

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.
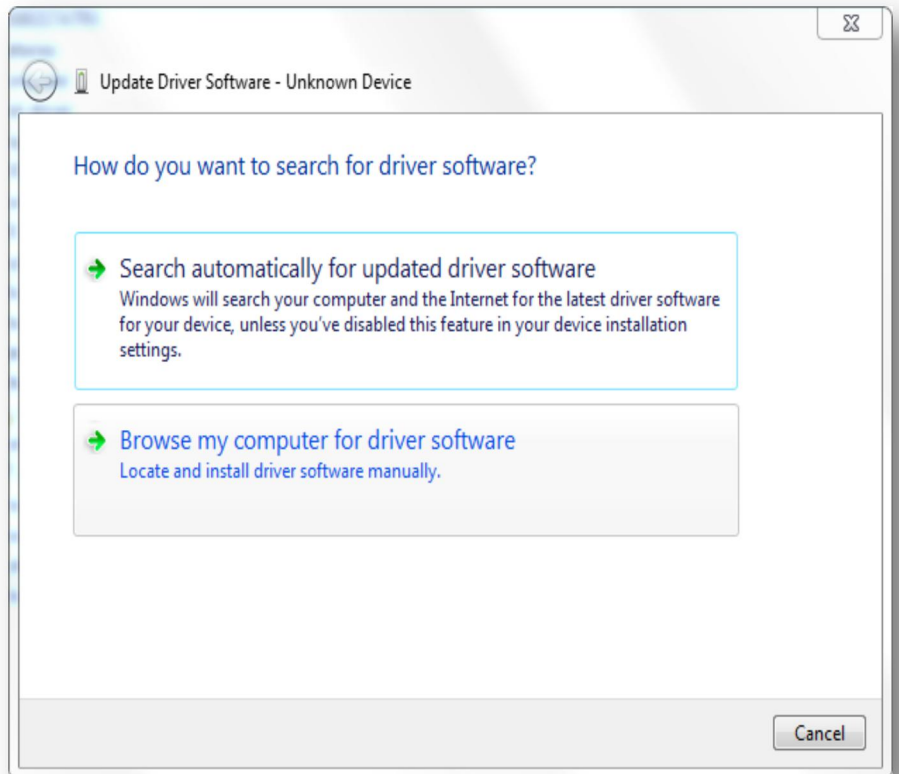**Otherwise, you need to install the driver in**
the following way manually..
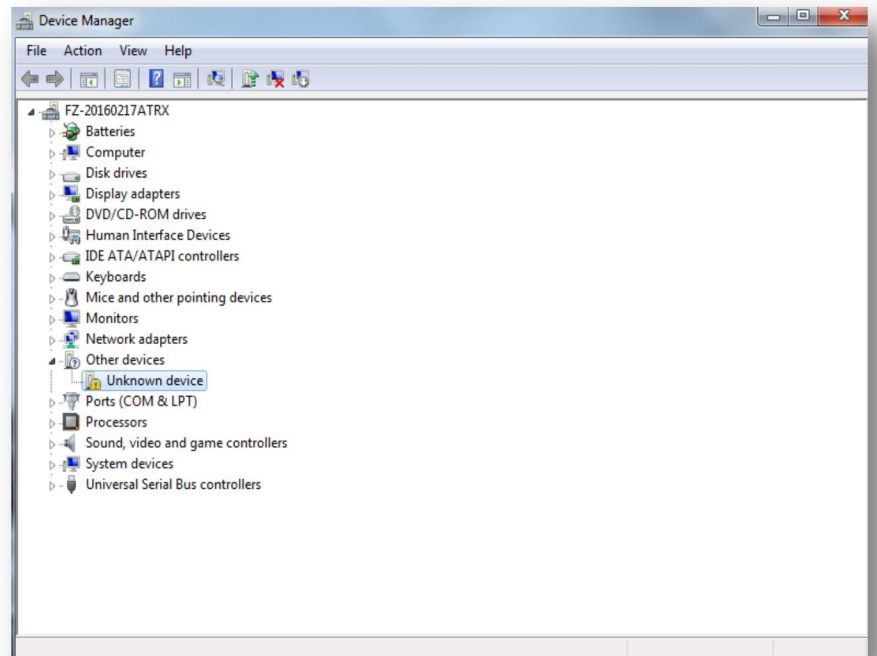
Open Device Manager by right clicking **My Computer——Management——Device Manager.**
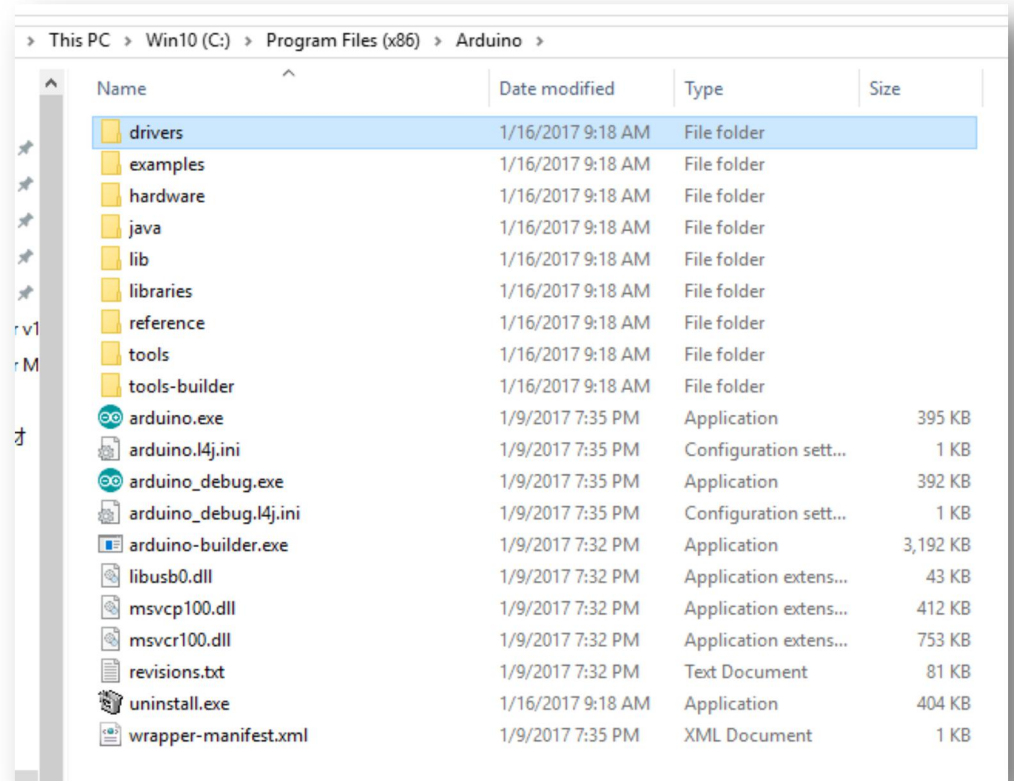
Right click unknown device-----update device software.
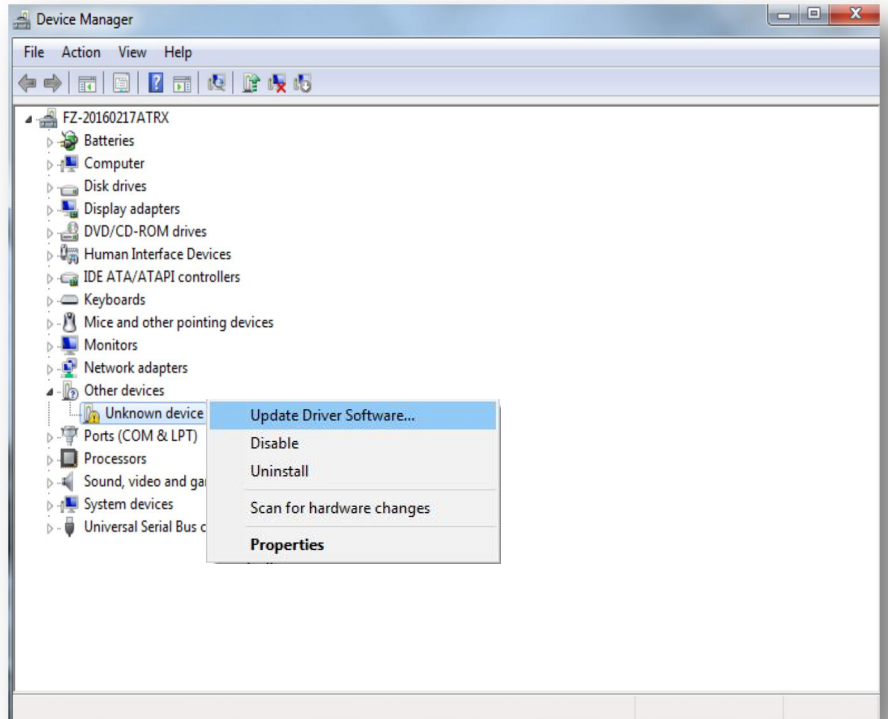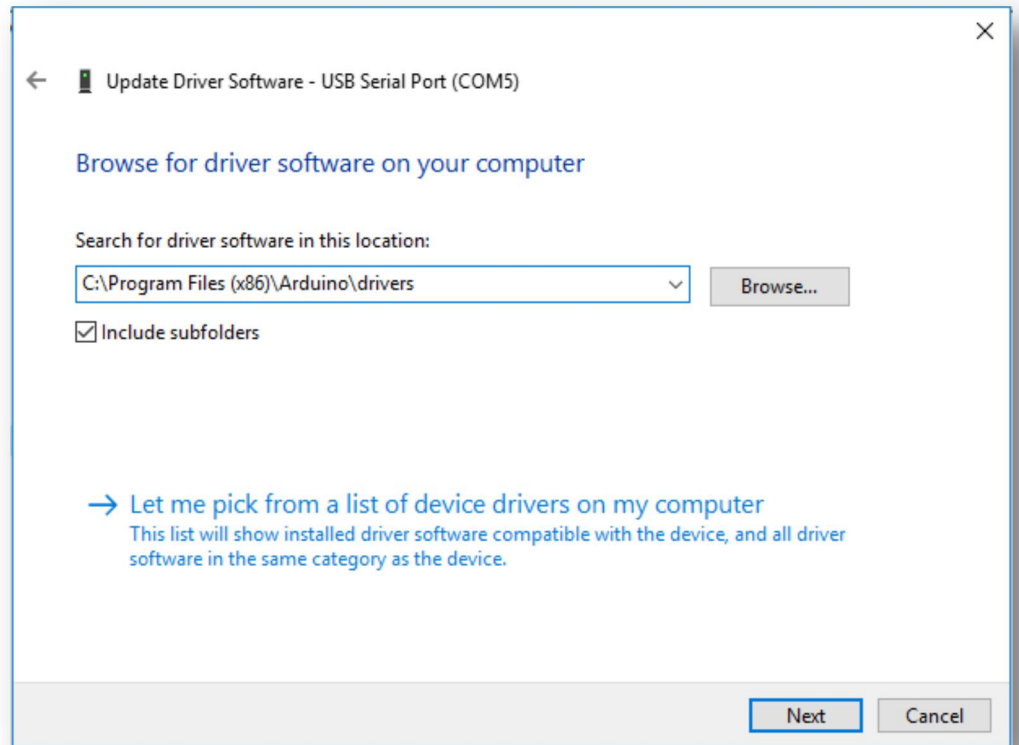

It shows that the driver has not been installed, and you need to click Browse my computer for driver software to find the drivers. The drives is in the Arduino folder. Normally you will install the folder in **C:\Program Files (x86)\Arduino.**
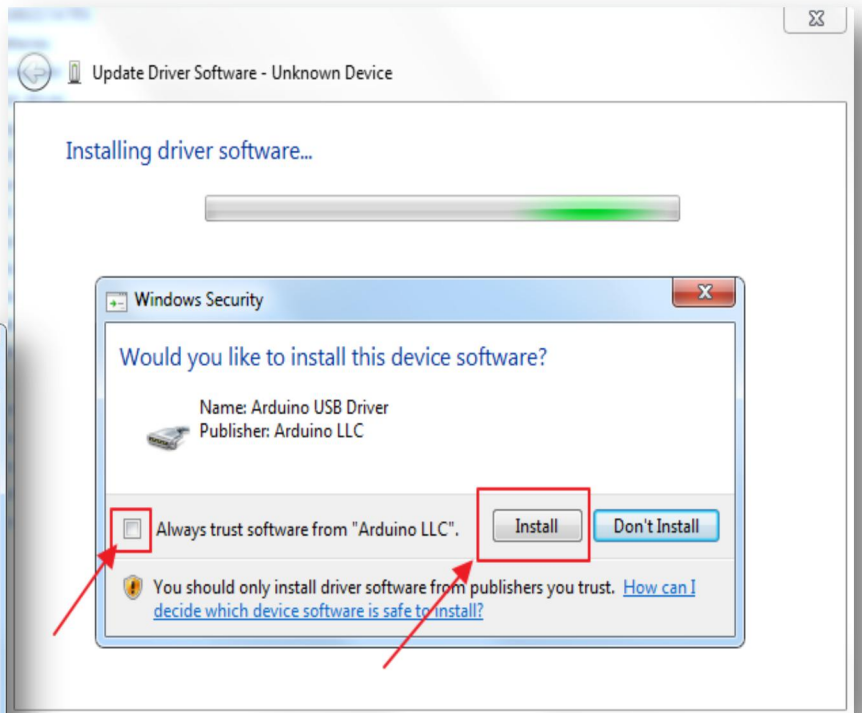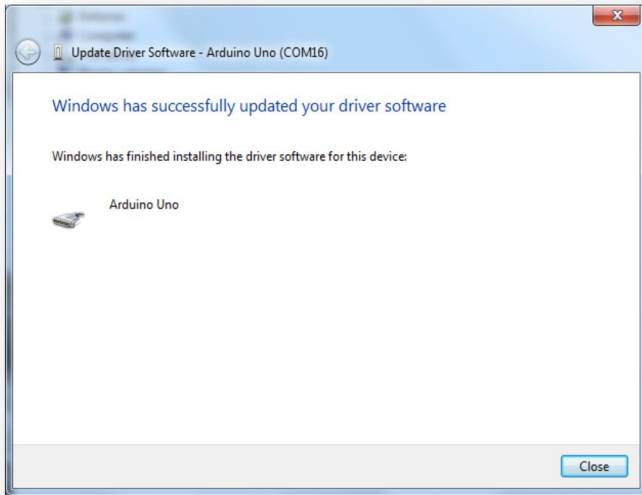
Arduino install folder.

Name	Date modified	Type	Size
drivers	1/16/2017 9:18 AM	File folder	
examples	1/16/2017 9:18 AM	File folder	
hardware	1/16/2017 9:18 AM	File folder	
java	1/16/2017 9:18 AM	File folder	
lib	1/16/2017 9:18 AM	File folder	
libraries	1/16/2017 9:18 AM	File folder	
reference	1/16/2017 9:18 AM	File folder	
tools	1/16/2017 9:18 AM	File folder	
tools-builder	1/16/2017 9:18 AM	File folder	
arduino.exe	1/9/2017 7:35 PM	Application	395 KB
arduino.l4j.ini	1/9/2017 7:35 PM	Configuration sett...	1 KB
arduino_debug.exe	1/9/2017 7:35 PM	Application	392 KB
arduino_debug.l4j.ini	1/9/2017 7:35 PM	Configuration sett...	1 KB
arduino-builder.exe	1/9/2017 7:32 PM	Application	3,192 KB
libusb0.dll	1/9/2017 7:32 PM	Application extens...	43 KB
msvcp100.dll	1/9/2017 7:32 PM	Application extens...	412 KB
msvcr100.dll	1/9/2017 7:32 PM	Application extens...	753 KB
revisions.txt	1/9/2017 7:32 PM	Text Document	81 KB
uninstall.exe	1/16/2017 9:18 AM	Application	404 KB
wrapper-manifest.xml	1/9/2017 7:35 PM	XML Document	1 KB

This PC › Win10 (C:) › Program Files (x86) › Arduino ›

Select the Arduino driver folder.

← Update Driver Software - USB Serial Port (COM5)

Browse for driver software on your computer

Search for driver software in this location:

C:\Program Files (x86)\Arduino\drivers   Browse...

☑ Include subfolders

→ Let me pick from a list of device drivers on my computer
This list will show installed driver software compatible with the device, and all driver software in the same category as the device.
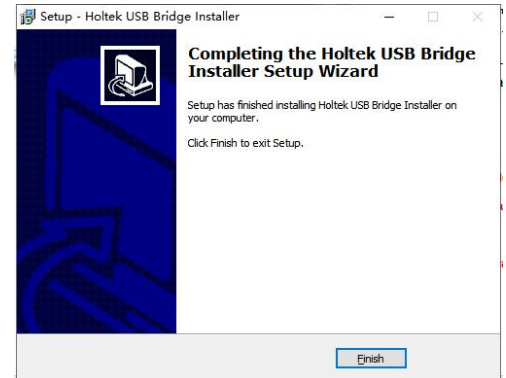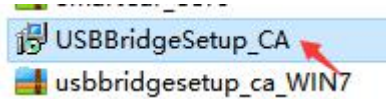
Next   Cancel

Install Arduino USB device. ⟹

finally, ⬇

if your computer's OS is win7, you should download the usbbridgesetup_ ca_WIN7 on our website:
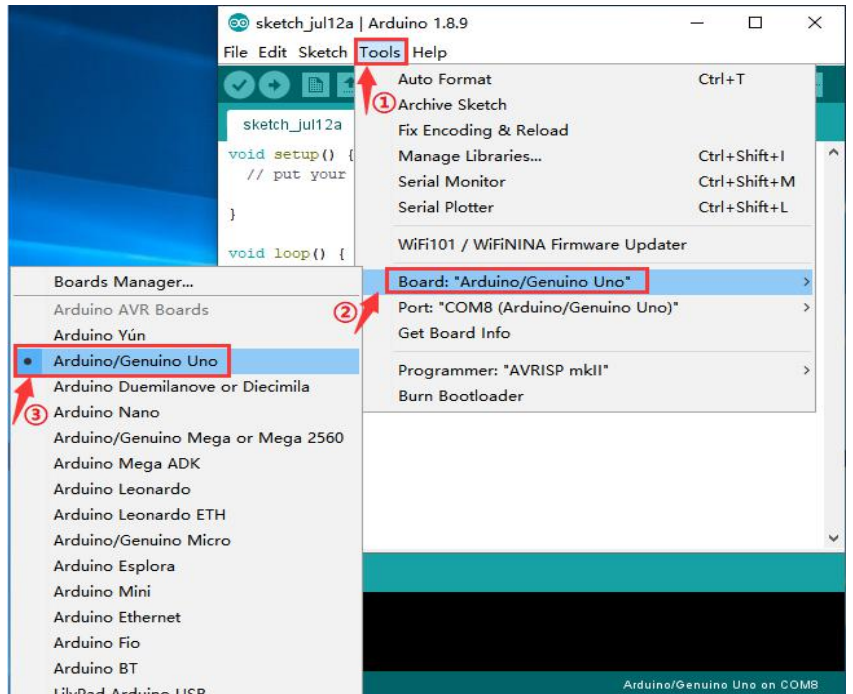http://www.elegoo.com/download/
unzip the zip file,running the installer "USBBridgeSetup_CA"
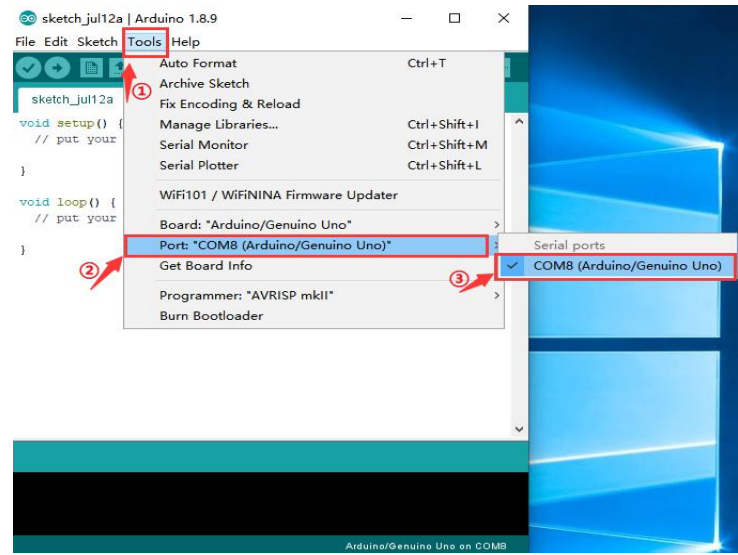

STEP9:
After the driver is installed, please open the IDE and then click "Tools" → "Board" → "Arduino/Genuino Uno".

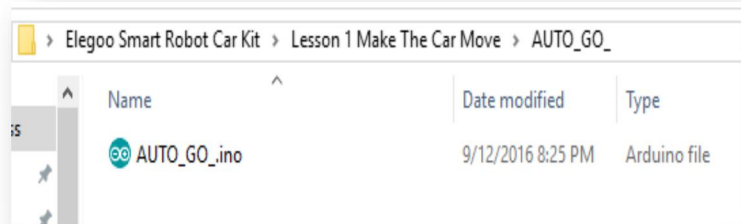**STEP10:**

Click "Tools" → " Port" →COM.

STEP11：

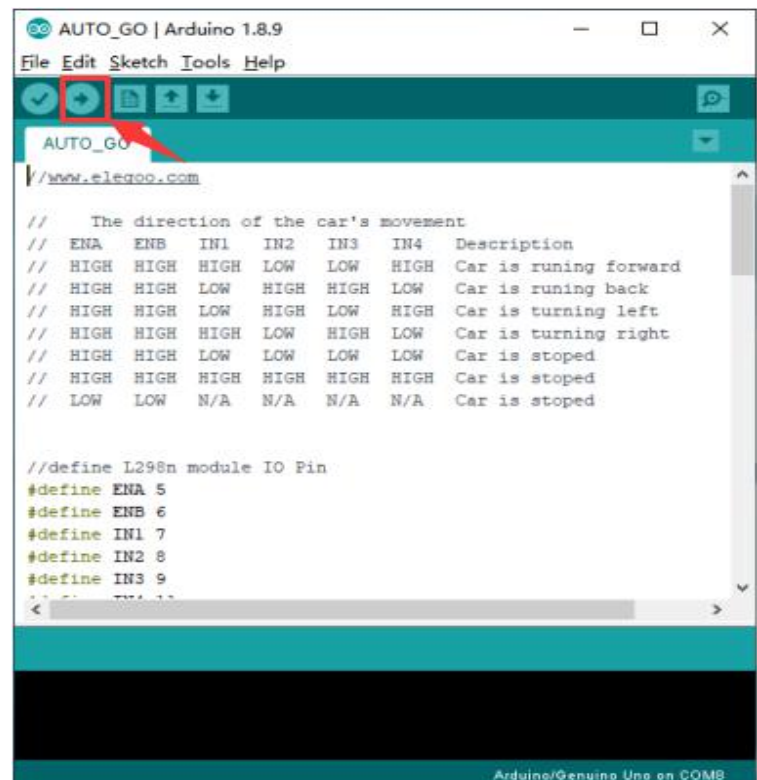**Open the code file in the directory**

"\Lesson 1 Make The Car Move \AUTO_ GO_\AUTO_GO_.ino"

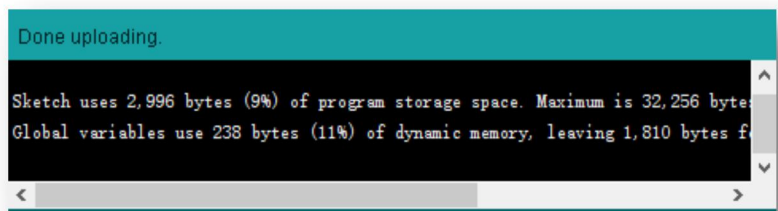**upload to the UNO controller board.**

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 mount the Bluetooth module after the upload.

The picture above shows that it is uploaded successfully.

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

ELEGOO

http://www.elegoo.com

2019.7.15