

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.



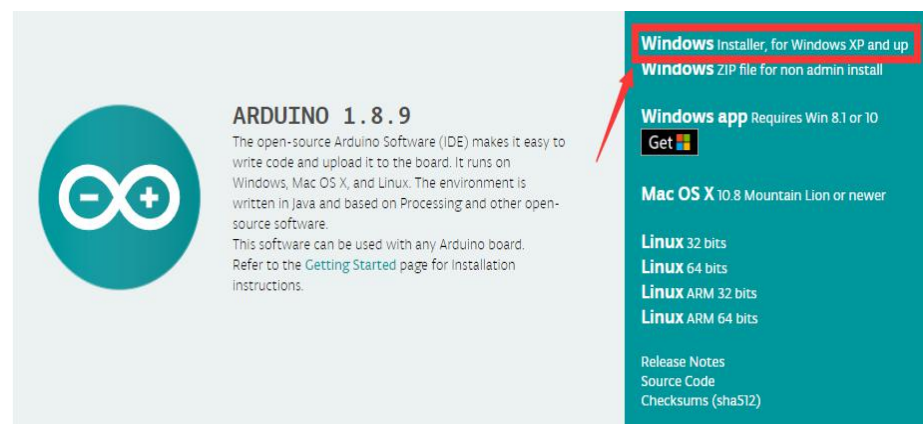
STEP2:

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.



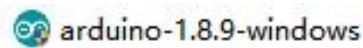
The following is the exe implementation of the installation procedures.

Press the char **"Windows Installer"**

STEP3:

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

The download file:



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.](#)



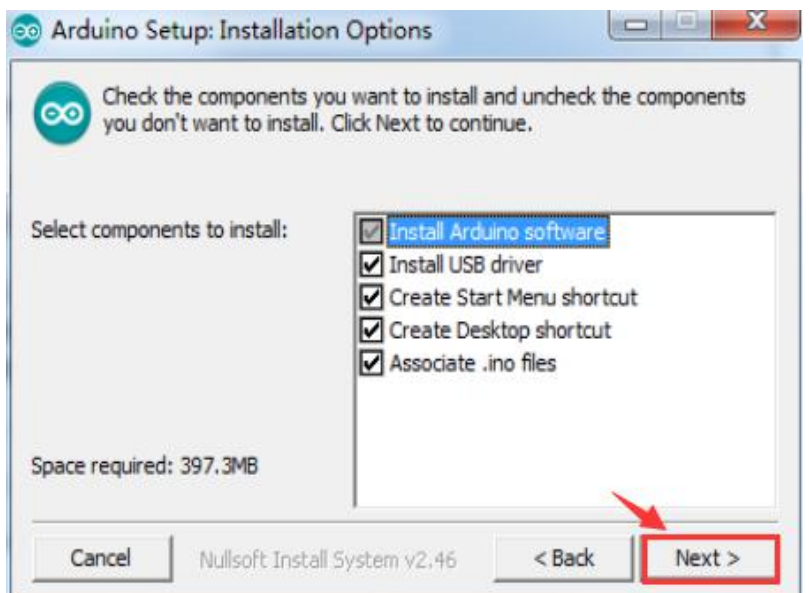
CONTRIBUTE & DOWNLOAD

STEP4:

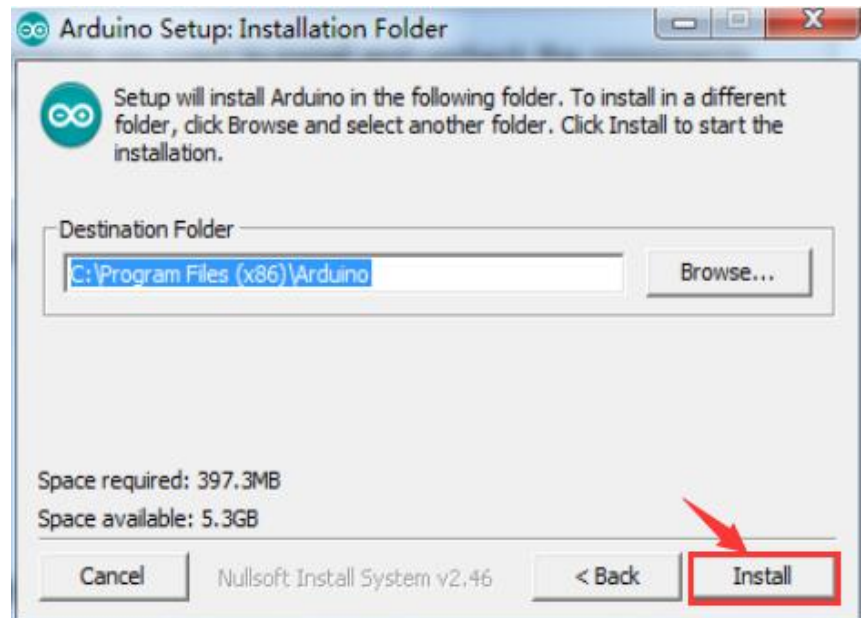
These are available in the materials we provide, and the versions of our materials are the latest versions when this course was made.



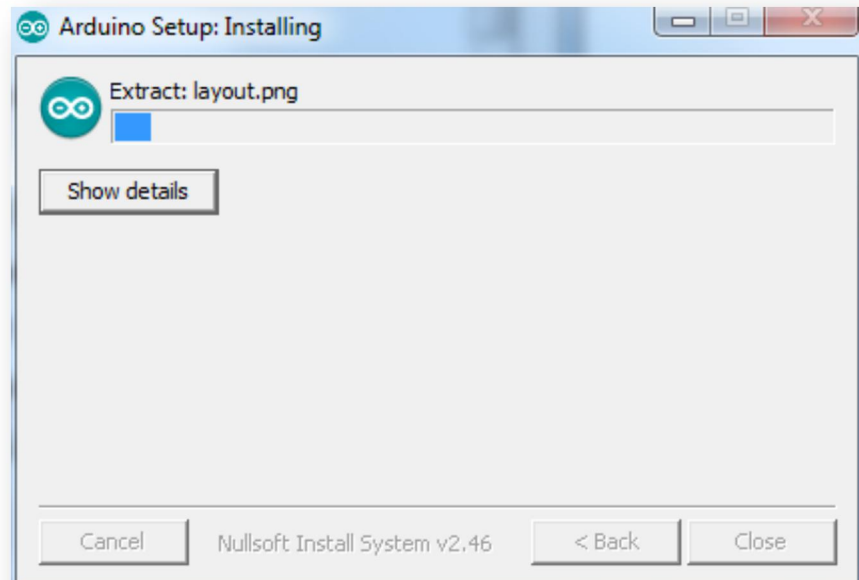
Choose **"I Agree"** to see the following interface.



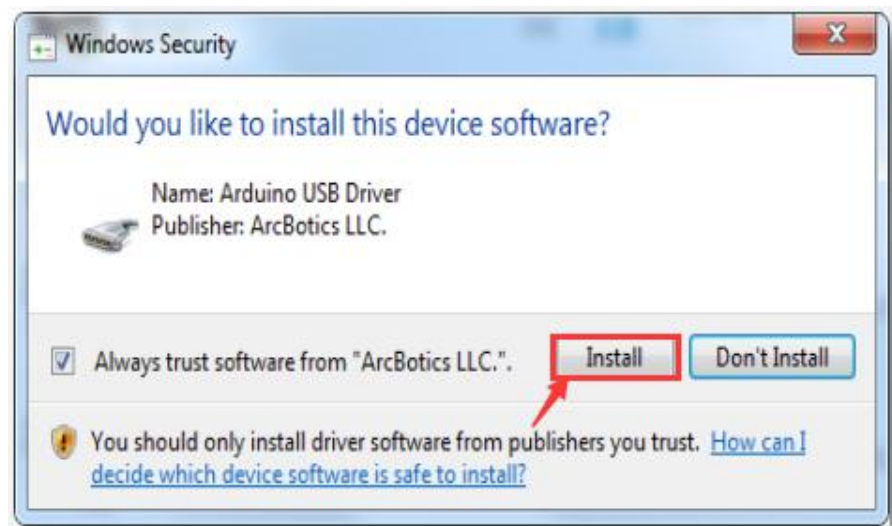
Choose **"Next"** to see the following interface.



Press **"Install"** to initiate installation.



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

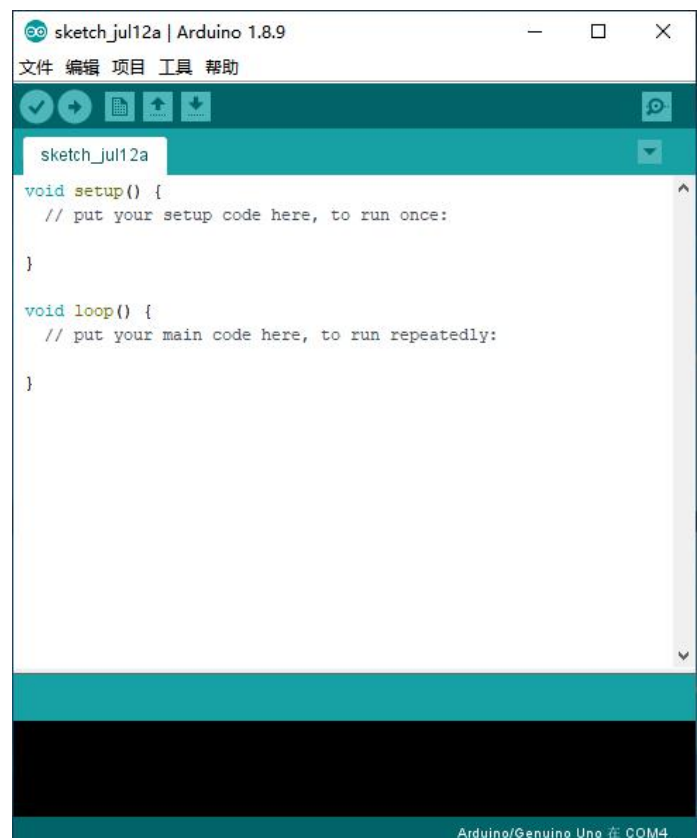


STEP5:

Next, the following icon appears on the desktop.



Double-click to enter the desired development environment.



STEP6:

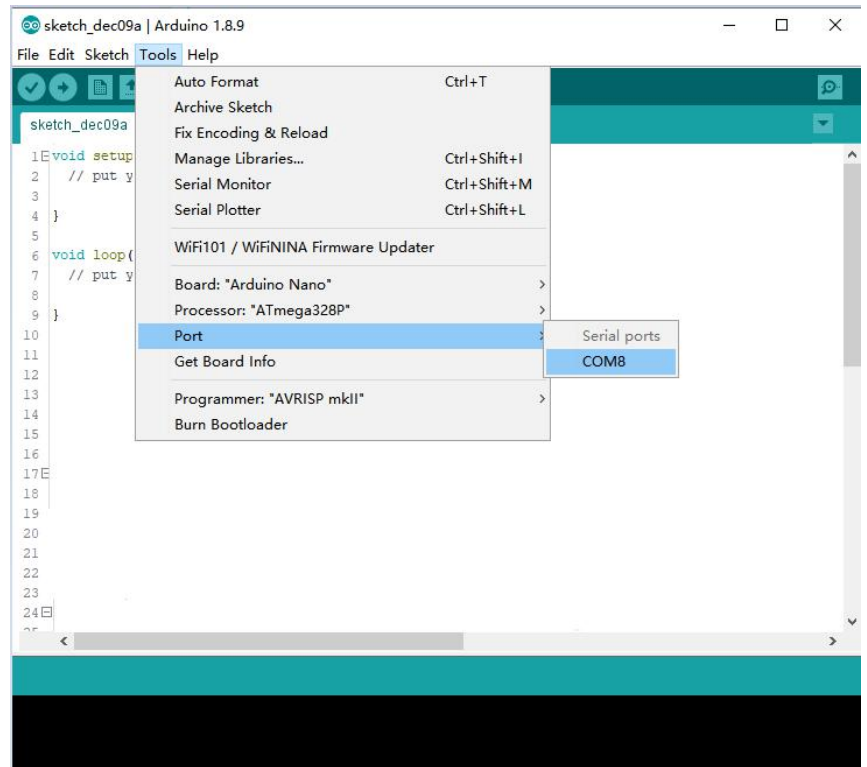
Connect development board of the car to the computer.



STEP7:

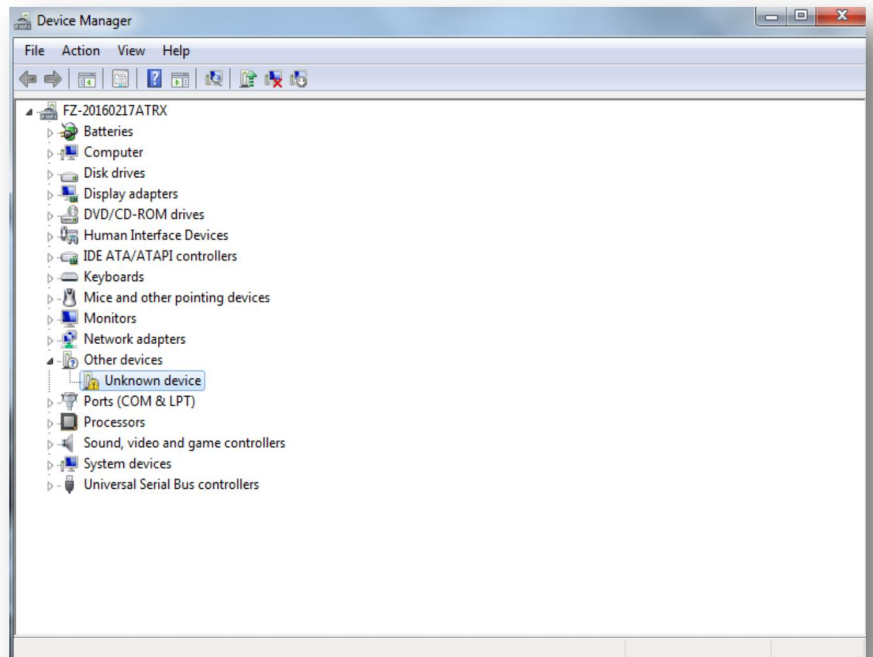
Open the Arduino IDE. Select **"Tool"** → **"Port:"** → **"COM (Arduino Nano)"**.

Each Arduino Nano board has a different COM number on the same computer and usually the COM number with a suffix name **"(Arduino Nano)"** in Arduino 1.8.9. You should choose the COM number of the actual display.



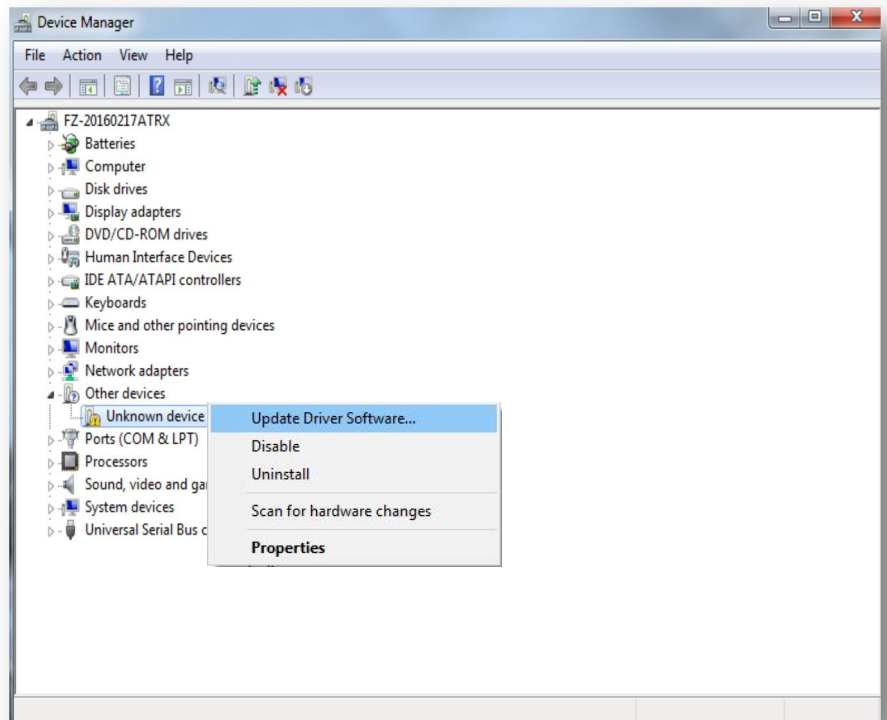
STEP8:

If you see the port **"COM (Arduino Nano)"**, 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..

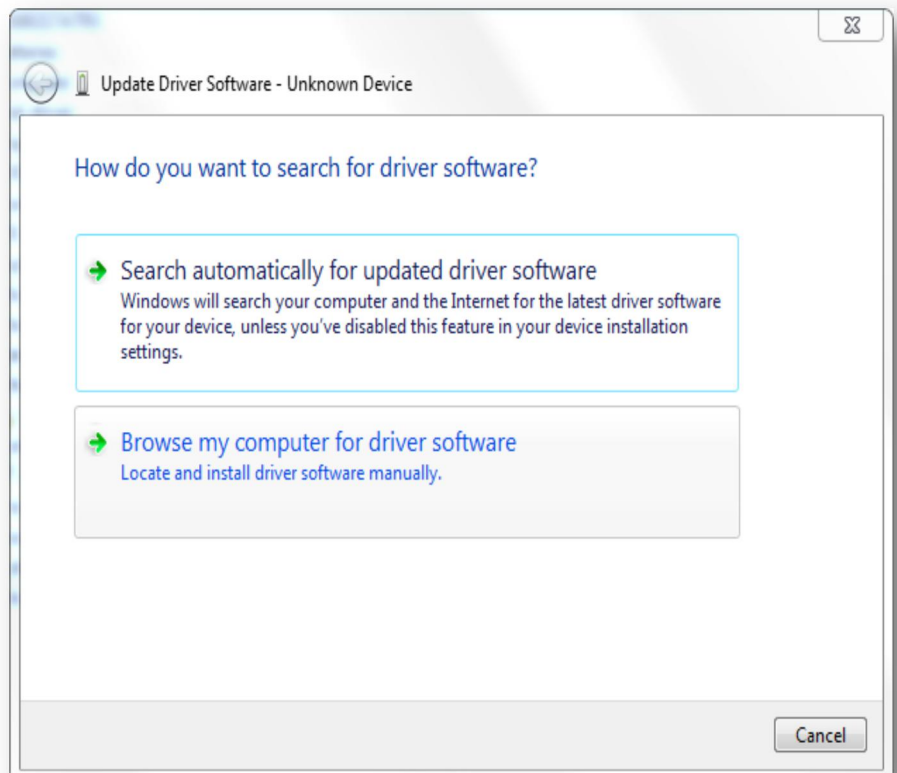


Open Device Manager by right clicking **My Computer**—**Management**—**Device Manager**.

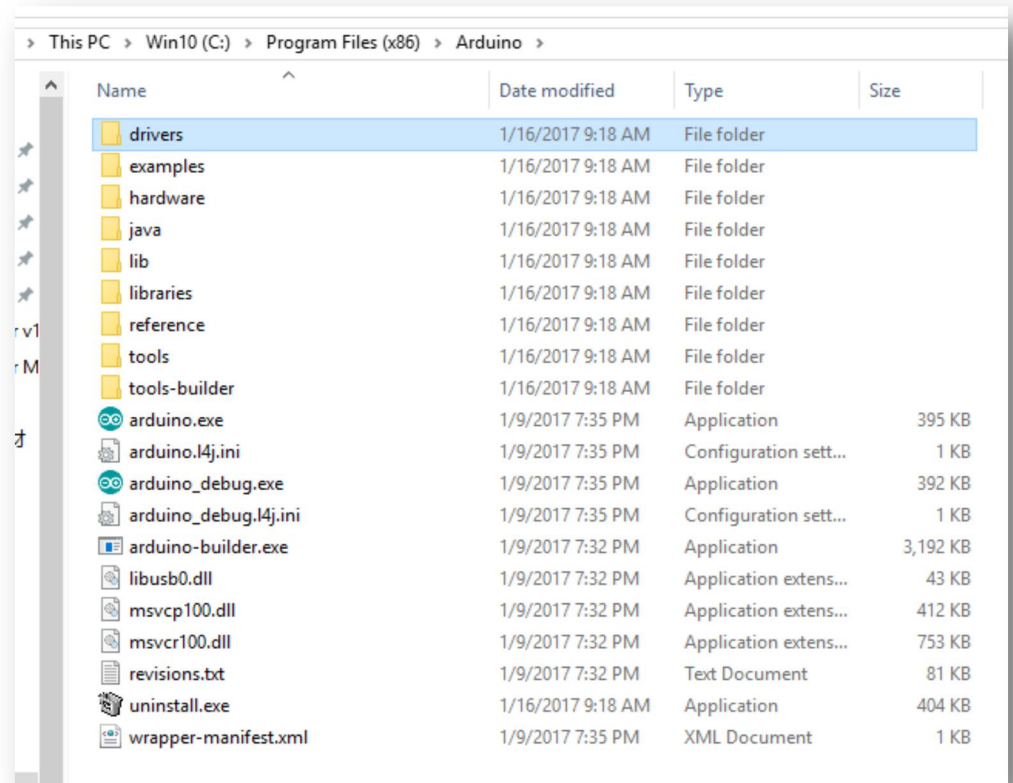
Right click unknown device-----update device software.



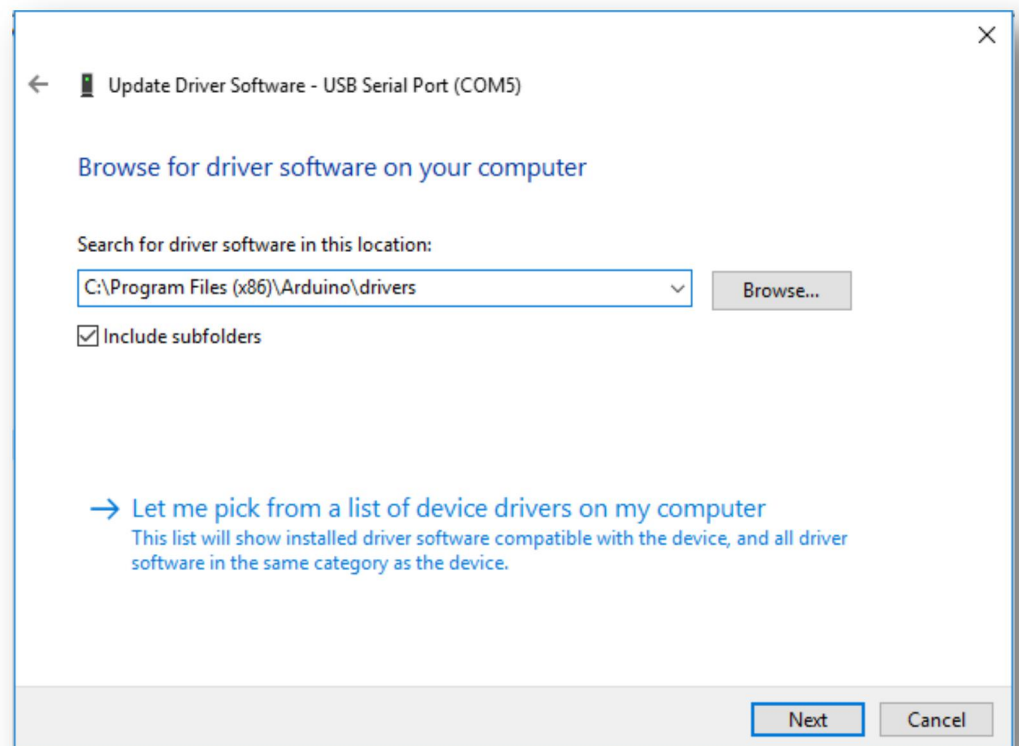
It shows that the driver has not been installed, and you need to click **Browse my computer** for driver software to find the drivers. The drives is in the Arduino folder. Normally you will install the folder in **C:\Program Files (x86)\Arduino**.



Arduino install folder.

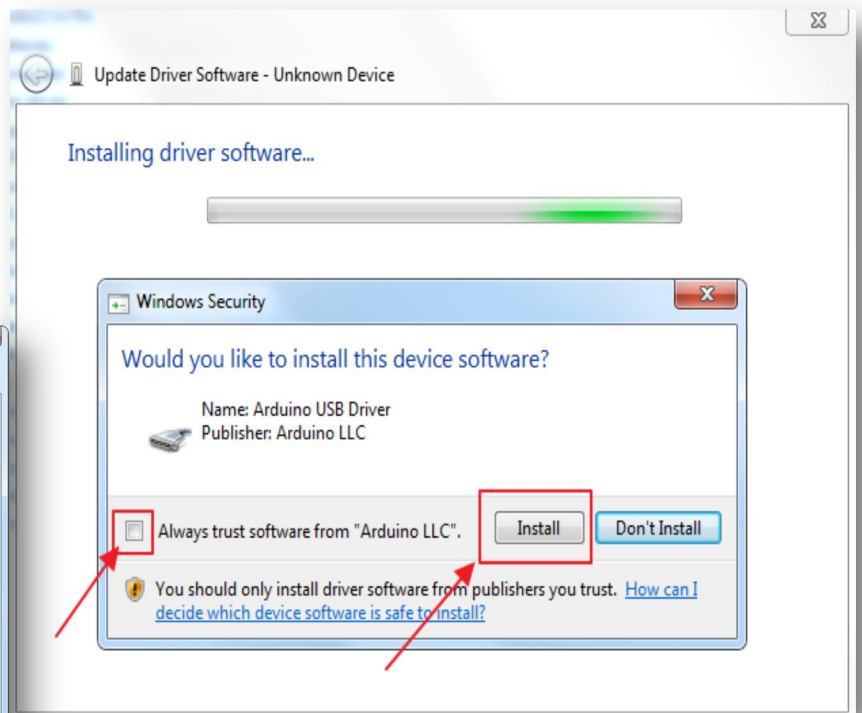
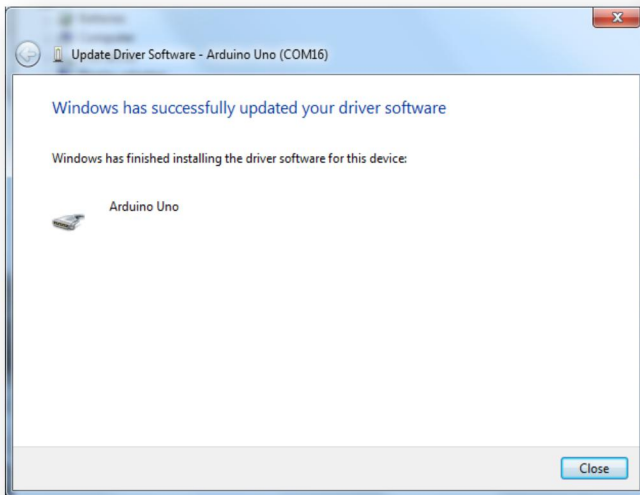


Select the Arduino driver folder.



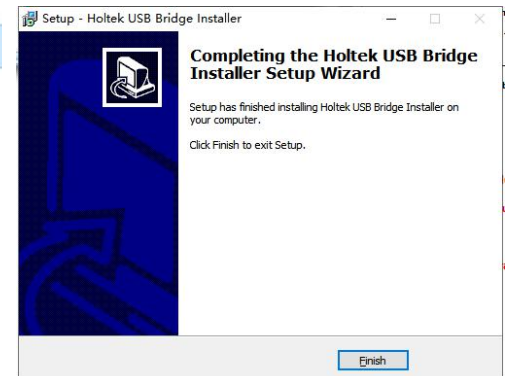
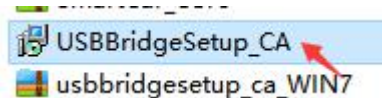
Install Arduino USB device.

Finally,



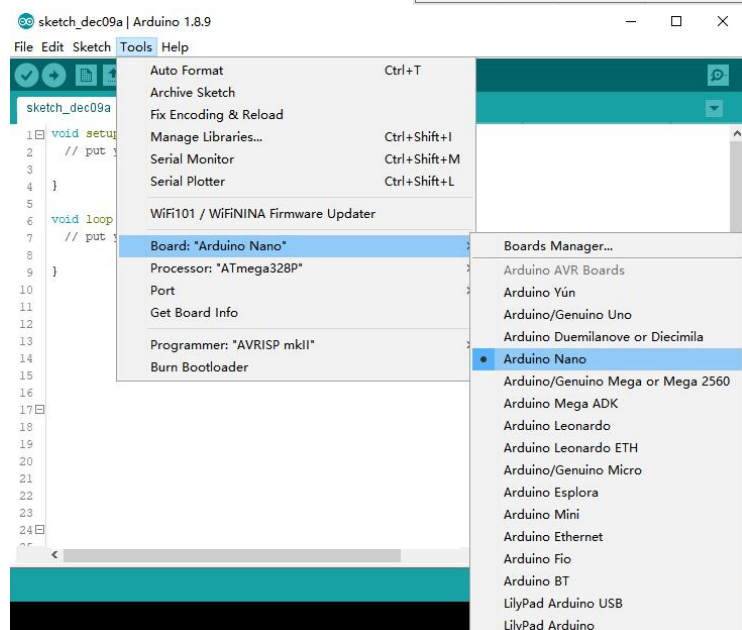
If your computer's OS is win7, you should download the usbbridgesetup_ca_WIN7 on our website:

<http://www.elegoo.com/download/>
unzip the zip file, running the installer "USBBridgeSetup_CA"



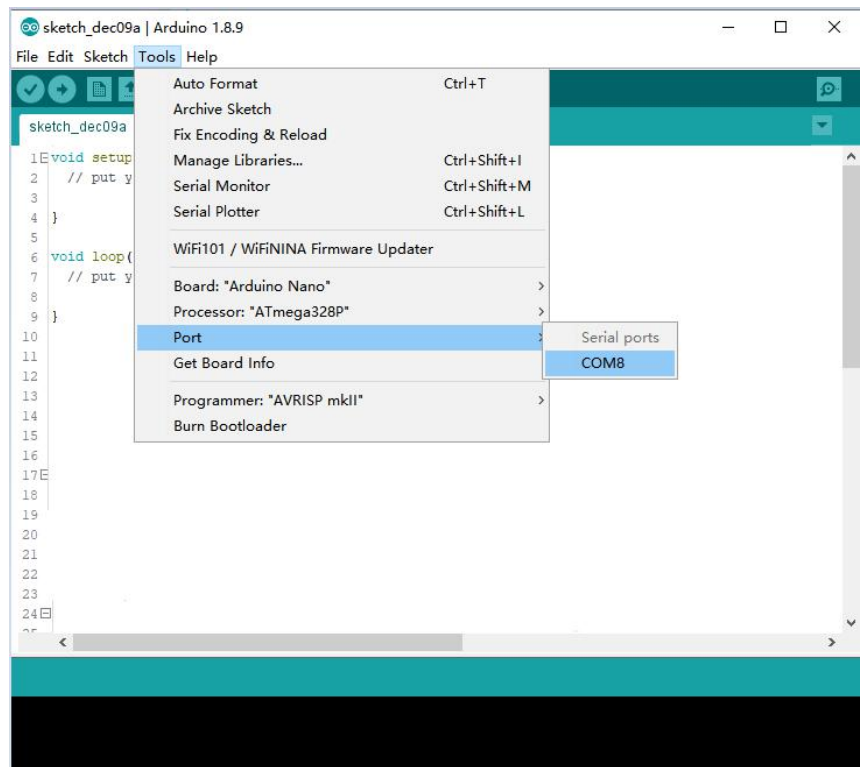
STEP9:

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



STEP10:

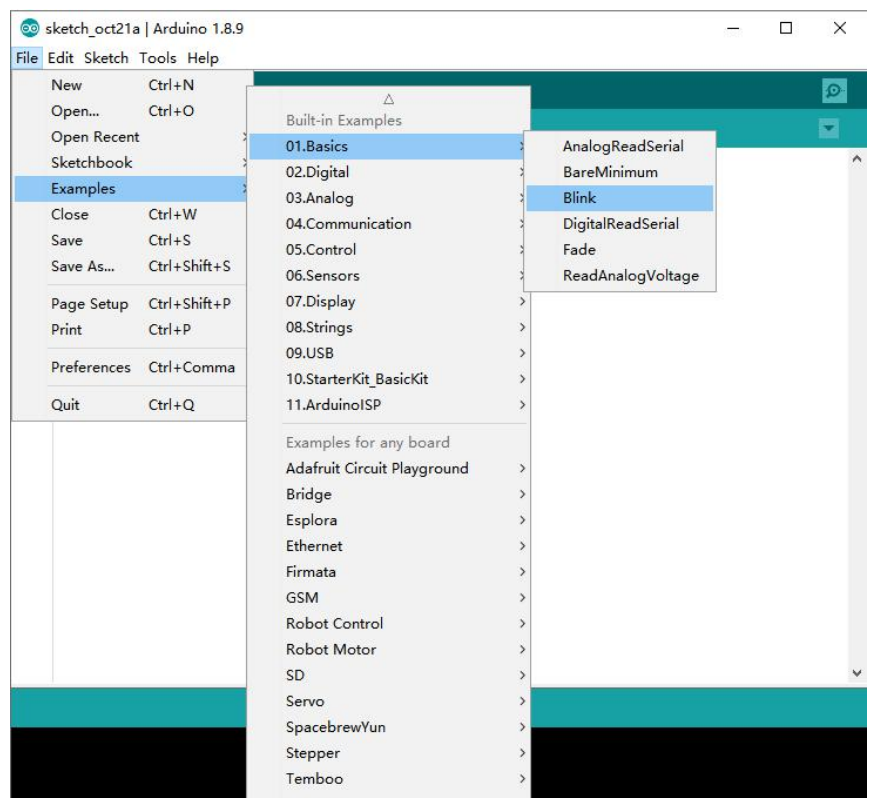
Click **“Tools”** → **“Port”** → **“COM”**.



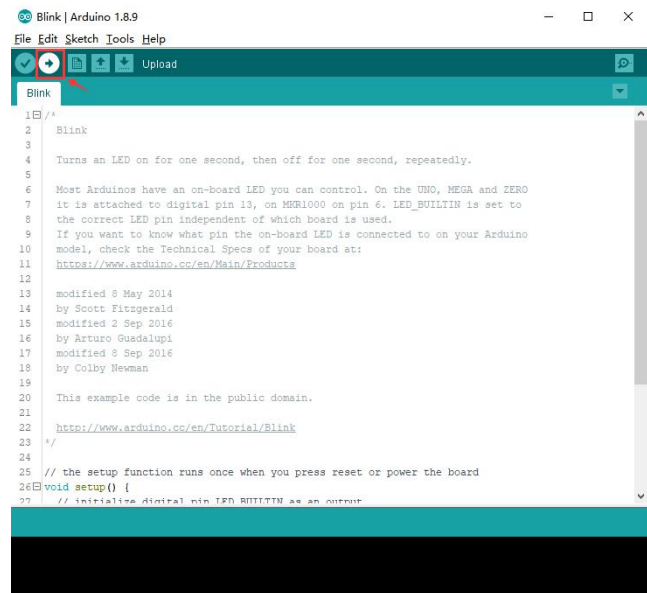
STEP11:

Then we can find a program to u
pload.

Click **“Examples”** → **“01.Basics”** →
“Blink” .



Then upload to Nano controller board.



The picture above shows that it is uploaded successfully.

Done uploading.
Sketch uses 930 bytes (3%) of program storage space. Maximum is 30720 bytes.
Global variables use 9 bytes (0%) of dynamic memory, leaving 2039 bytes for local variables. Maximum is 2048 bytes.

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



<http://www.elegoo.com>

2019.10.21