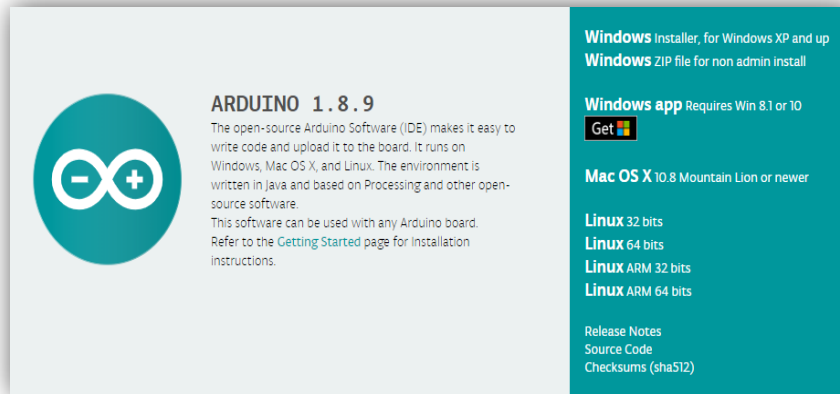


Upload Penguin Bot program for Windows

STEP1: Download the Arduino IDE

Go to <https://www.arduino.cc/en/Main/Software> and find 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.

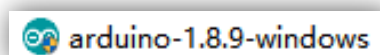
Press the char **"Windows Installer, for Windows XP and up"**.

Windows Installer, for Windows XP and up

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

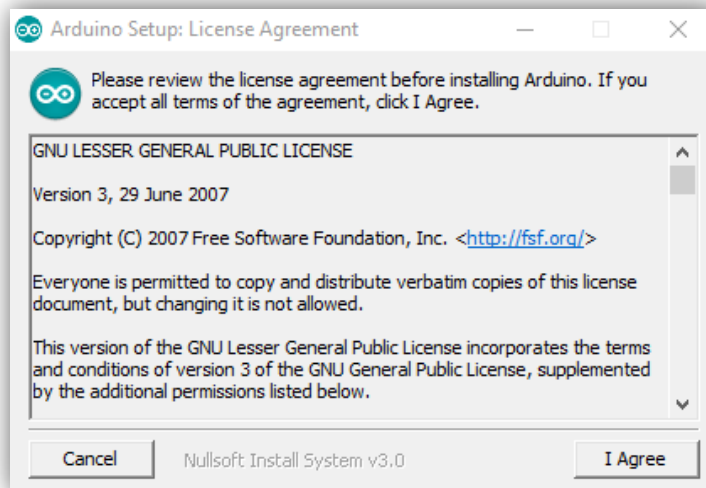


After the download is complete, an installation package will appear in the download directory

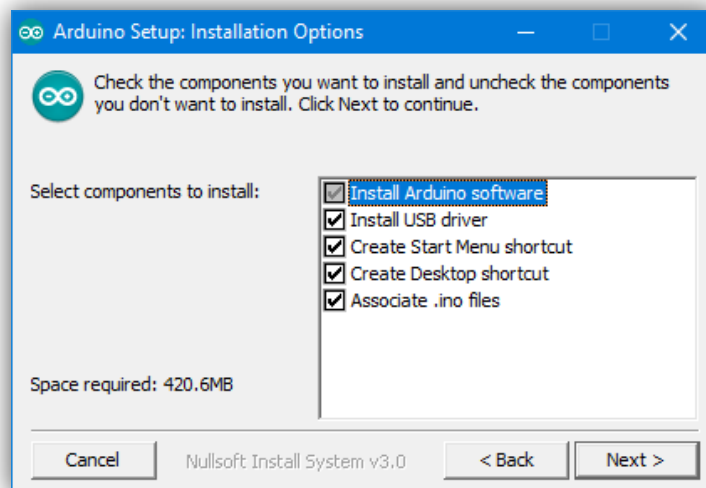


STEP2: Install Arduino IDE

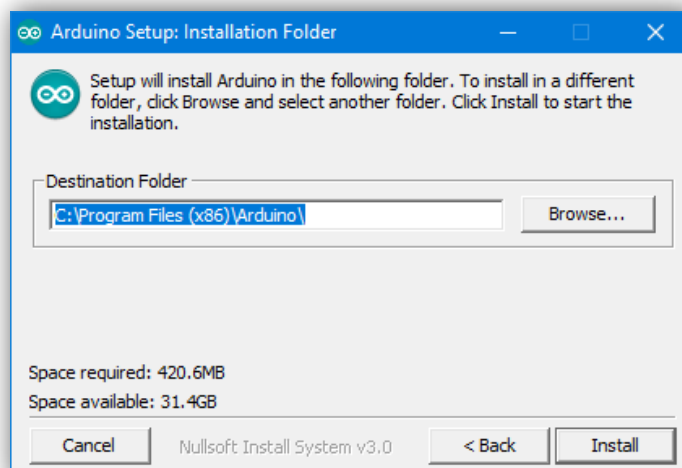
Double-click the installation package to enter the software installation interface and click “I Agree” button.



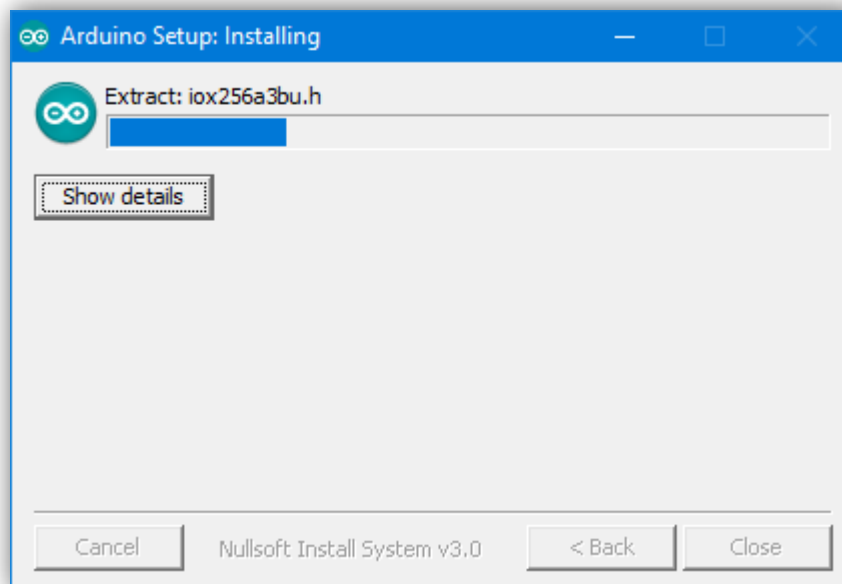
Click “Next” button.



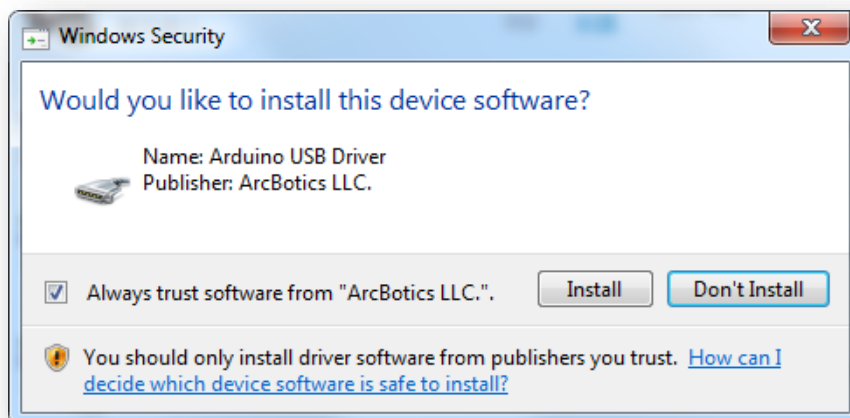
Click “Install” button to initiate installation.



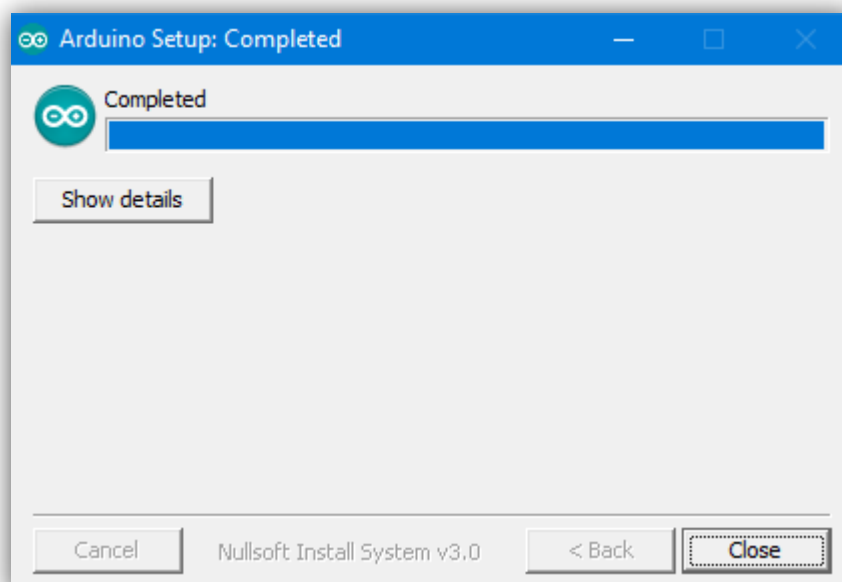
Arduino IDE installing.



Driver installation screen may appear during installation. Click **“Install”** to install the Arduino USB Driver.



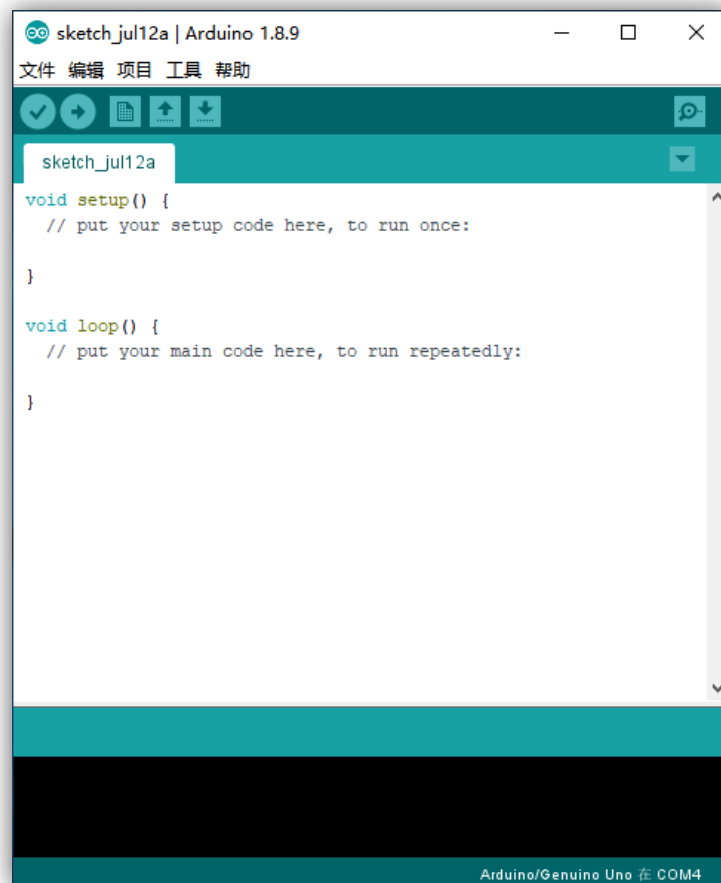
Installation Completed. Click **“Close”** button.



Finally, Arduino IDE shortcut icon appears on the desktop.



Double-click the Arduino IDE shortcut icon to enter the arduino programming development environment.




STEP3: Install the USB Driver.

****NOTICE:** This driver is only for Windows7, if your Computer's OS is not win7, you can skip step3. **

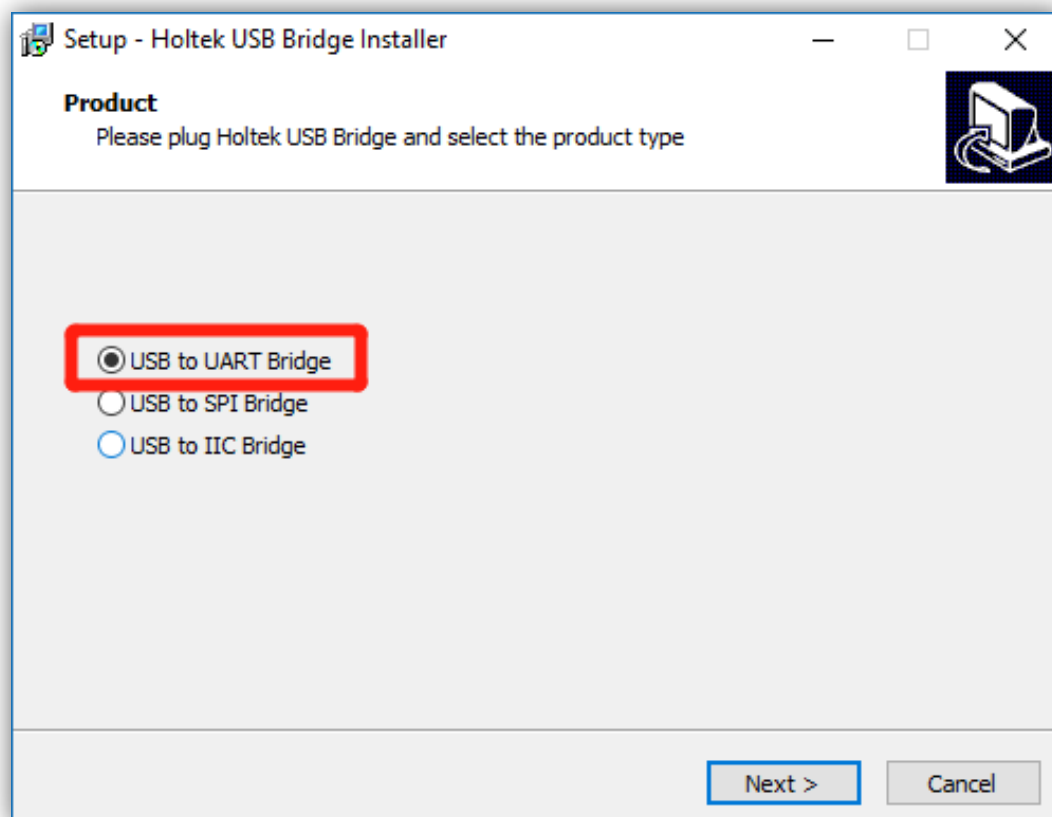
Download the tutorial of Penguin Bot on our website:

<https://www.elegoo.com/download/>

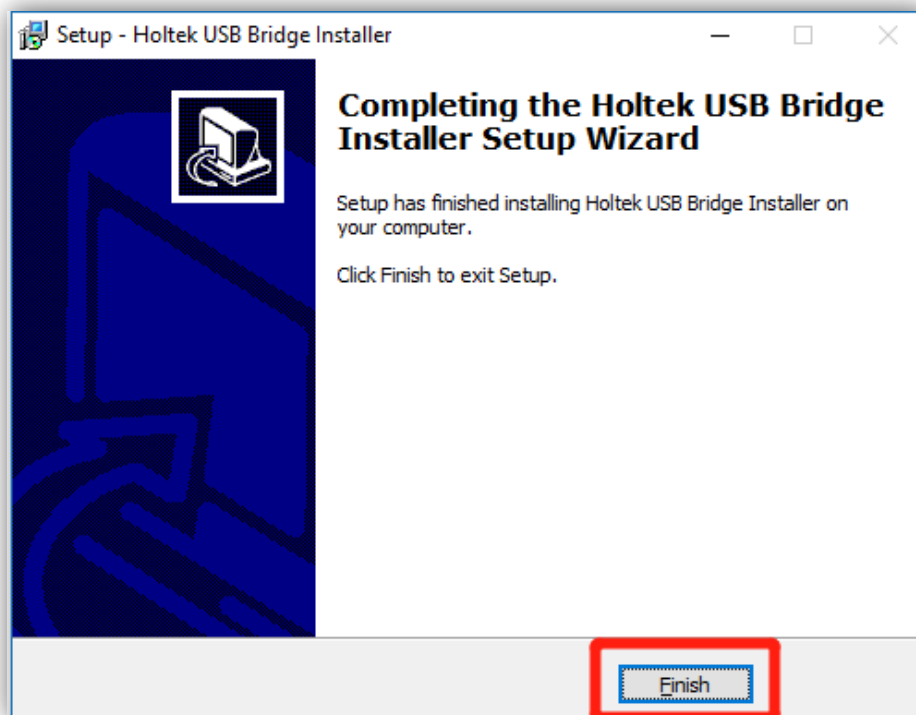
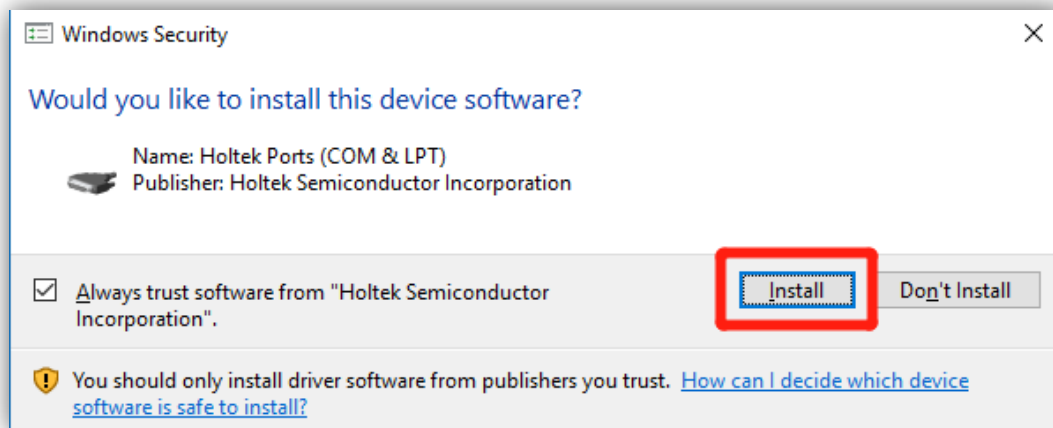
Unzip the zip file, running the installer “usbbridgeSetup_CA Win7.exe”

 USBBridgeSetup_CA	02/12/2016 15:20	Application
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Select “USB to UART Bridge” section and click “Next >” until the windows popup:

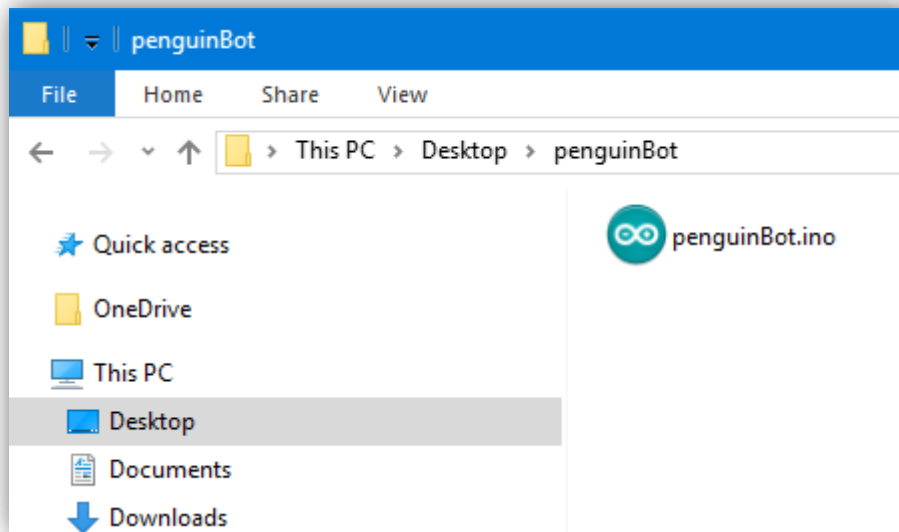


Click “Install”, and finished the installation:

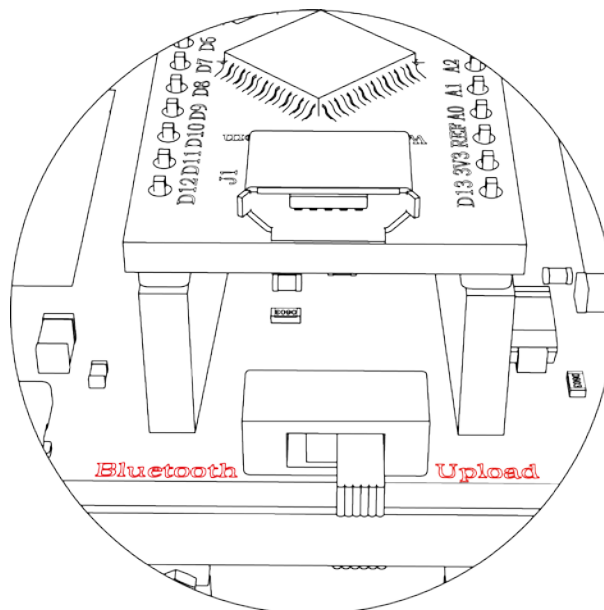


STEP4: Upload Penguin Bot program.

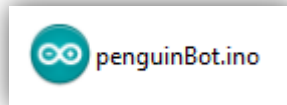
Open the directory where the Penguin Bot sketch is located.



Turn the “Bluetooth-Upload” switch to the “Upload” side, which means the Penguin Bot is in Upload mode.



Double-click Penguin Bot sketch.



After open the Penguin Bot sketch, we can see the code in the Arduino IDE.

A screenshot of the Arduino IDE window titled "PenguinBot | Arduino 1.8.9". The window has a menu bar with "File", "Edit", "Sketch", "Tools", and "Help". Below the menu bar is a toolbar with icons for checking, running, serial monitor, and saving. The main editor area shows the code for "PenguinBot.ino". The code includes several headers and defines control keys for a hand tour app.

```
PenguinBot | Arduino 1.8.9
File Edit Sketch Tools Help

PenguinBot MsTimer2.cpp MsTimer2.h NeoSWSerial.cpp NeoSWSerial.h Os ator.

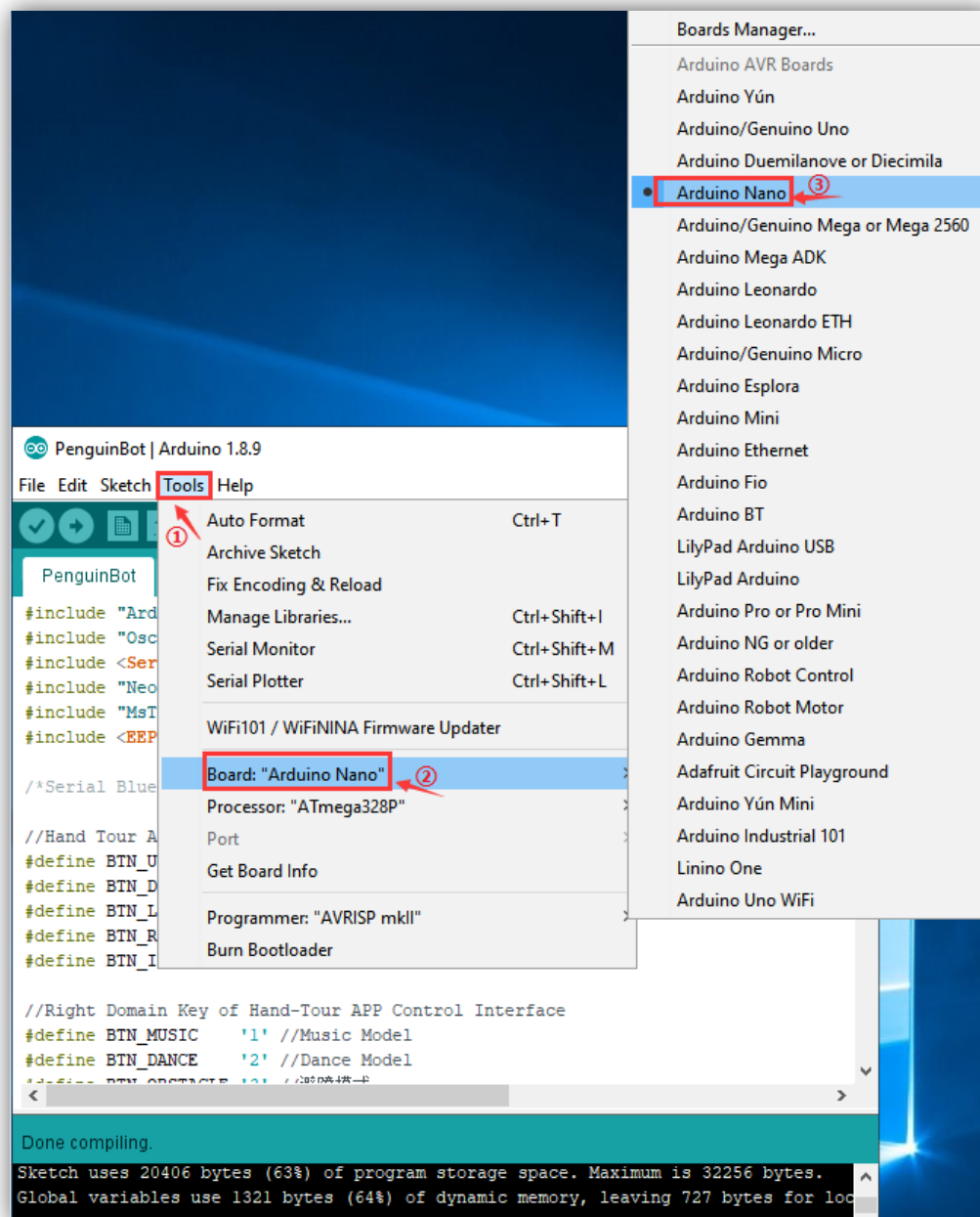
#include "Arduino.h"
#include "Oscillator.h"
#include <Servo.h>
#include "NeoSWSerial.h"
#include "MsTimer2.h"
#include <EEPROM.h>

/*Serial Bluetooth Communication Control Command Data Frame*/

//Hand Tour APP Control Interface Left Domain Key
#define BTN_UP 'f' //go forward
#define BTN_DOWN 'b' //go back
#define BTN_LEFT 'l' //turn left
#define BTN_RIGHT 'i' //turn right
#define BTN_IDLE 's' //stop

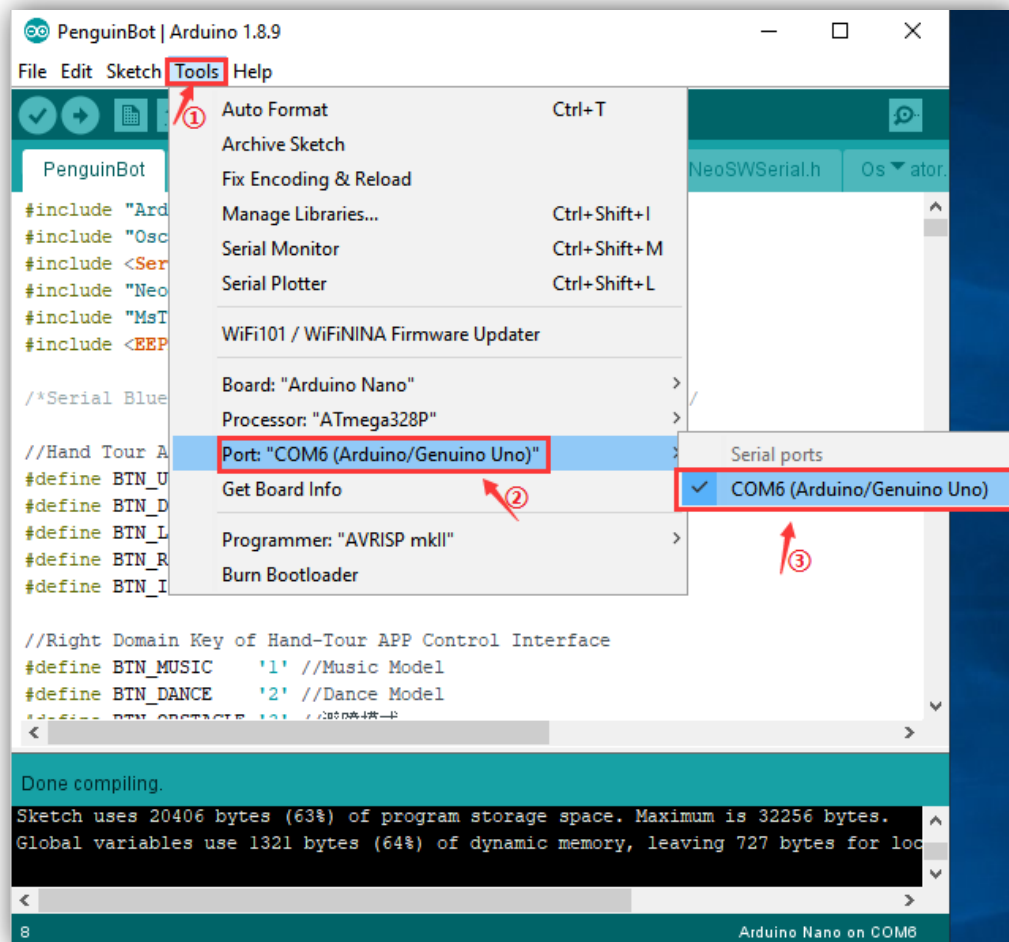
//Right Domain Key of Hand-Tour APP Control Interface
#define BTN_MUSIC '1' //Music Model
#define BTN_DANCE '2' //Dance Model
```


Select the Arduino Nano board.



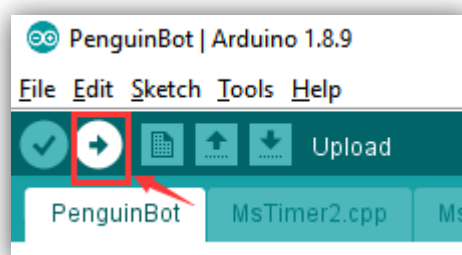
Select the Serial Port name.

(Tips: Each Arduino Nano board has a different COM number on the same computer. You should



choose the COM number of the actual display.)

Click the upload button to start upload the Penguin Bot program.



Done uploading.

Done uploading.

avrdude done. Thank you.