

# 1. Ultrasonic obstacle avoidance

## 1.1. Open source code

Open the tutorial provided by us, locate the folder of "03\_Tutorial\_&\_Code → Lesson3 Automatic obstacle avoidance → QuadBot-E-Auto", and double-click QuadBot-E-Auto.ino, open the source code.

## 1.2. Compile source code

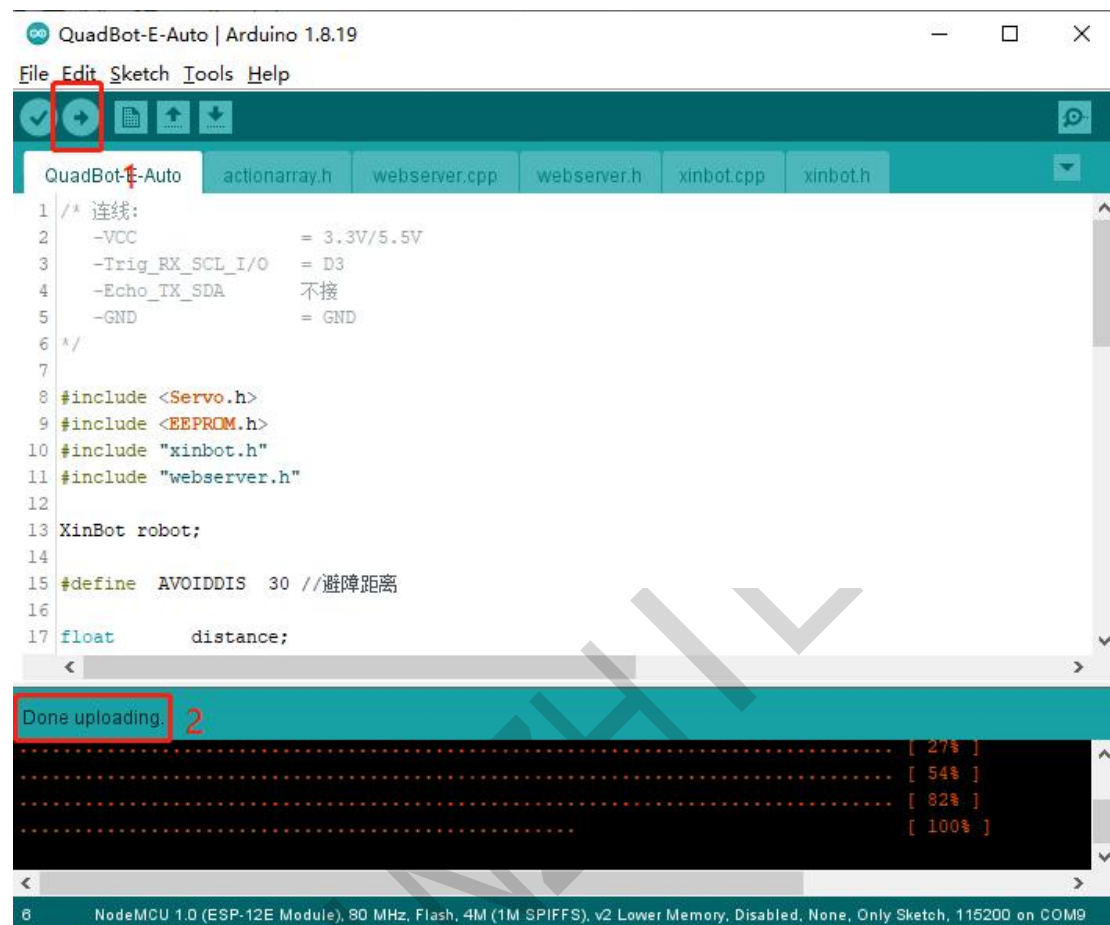
Click the 1 compile button as shown in the figure below, and if there is no problem, the 2 compile completion prompt will appear。



## 1.3. Upload code to NodeMcu

Connect the NodeMcu and the computer with a USB cable, select the correct COM port,

and then click the 1 "Download" button as shown in the figure below. If everything goes well, the 2 "Done uploading" prompt will appear. At this point, the program is downloaded successfully, and then unplug the USB cable.



## 1.4 Connect the ultrasonic module and servo shield

Servo shield	ultrasonic module
D3 -----	Trig
+ -----	Vcc
- -----	Gnd

After power-on, the robot moves forward and turns when encountering obstacles