

Set Development Environment

i If you want to run the programming games through computer, please check this lesson. You will also know how to find and modify the programmings.

1. Getting Ready

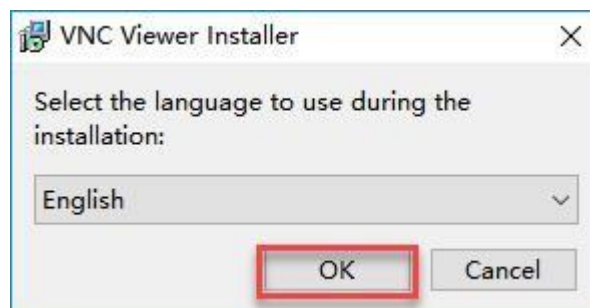
1.1 Hardware Preparation

A laptop or a desktop computer is required. If you're using a desktop computer, please prepare your own wireless network card (supporting 5G frequency band). If the network card 5G is not supported, you may not be able to search for the hotspot launched by the Raspberry Pi. For the modification of frequency band, please go to the folder "4.Expanded Lesson/2.Basic Lesson/ Mesanum Wheel Car Control Lesson/ 0.Set Development Environment/ 3.Frequency Band Modification ".

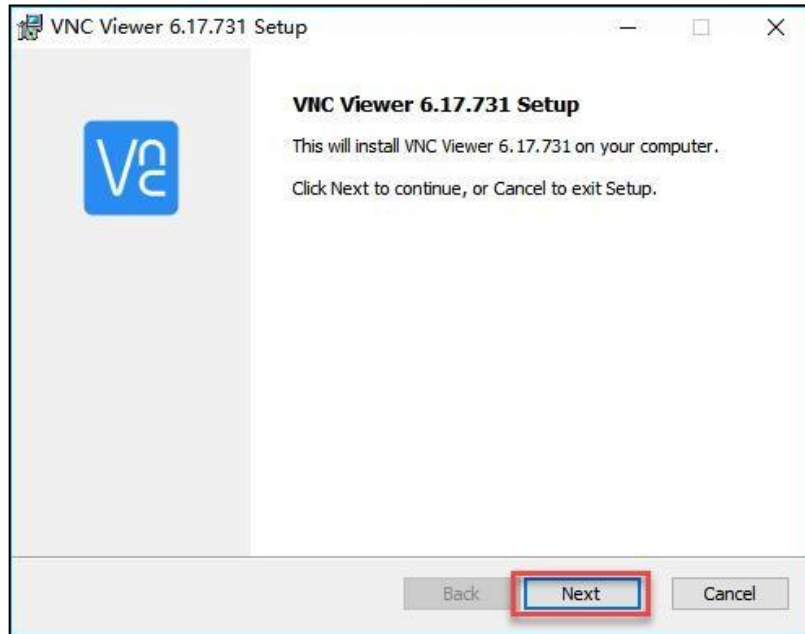
1.2 VNC Remote Control Tool Installation

VNC is a graphics remote control software. With VNC, we can control the Raspberry Pi directly from your computer through the hotspot created by Raspberry Pi. Next, you will learn how to use VNC.

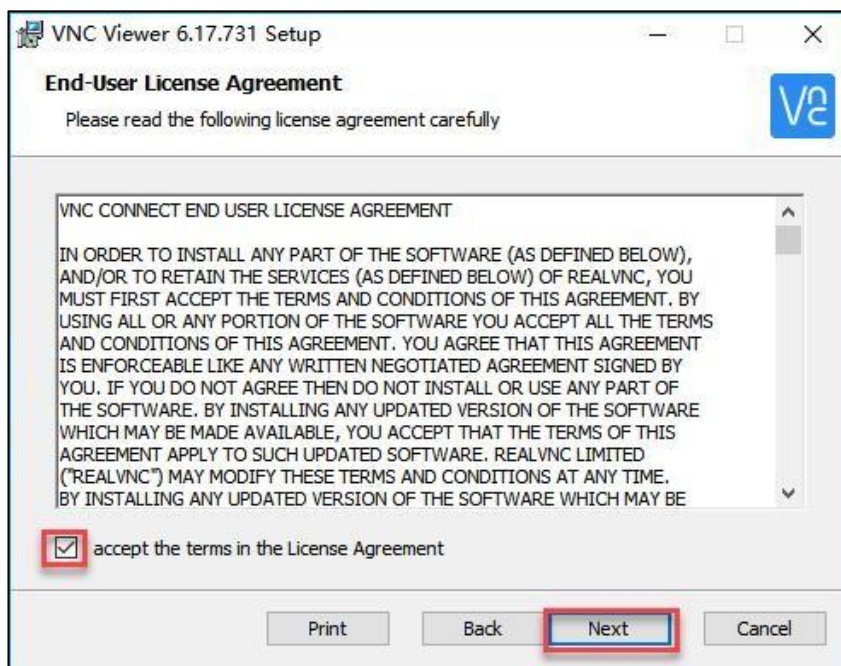
1) Double-click the "VNC-Viewer-6.17.731-Windows" file in this folder. In the pop-up dialogue box, select the installation language as "English" and then click "OK" button.



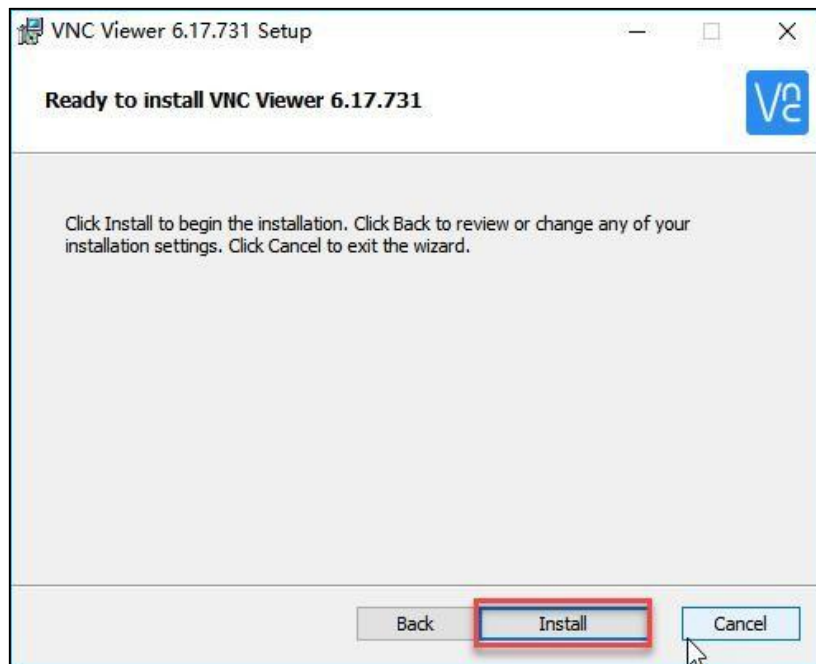
2) Then click the "Next" button on the pop-up interface.



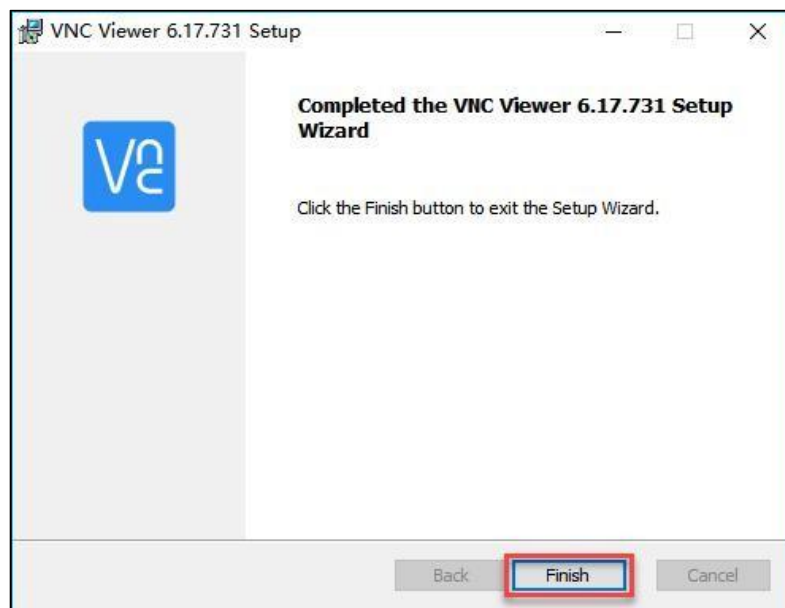
3) Then click “accept the terms in the License Agreement” in the prompt box, and click “Next” to enter the next step.



4) Then click "Install" in the pop-up page.



5) After VNC has been successfully installed, click the “Finish” button which completes the installation process. You can now open VNC.



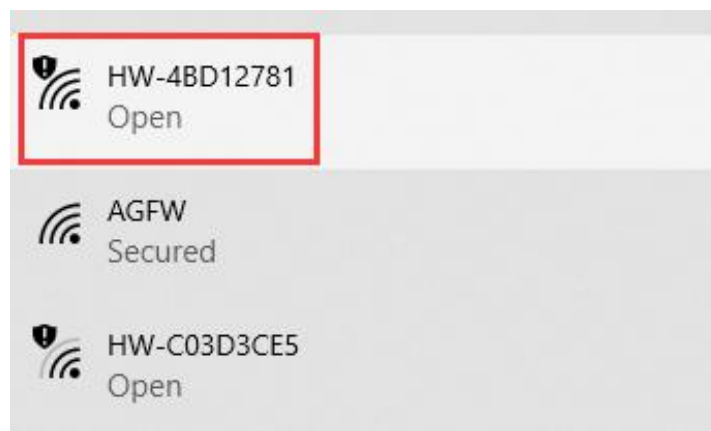
6) After successfully connecting, double click VNC Viewer to open (run).

1.3 Turn on MasterPi

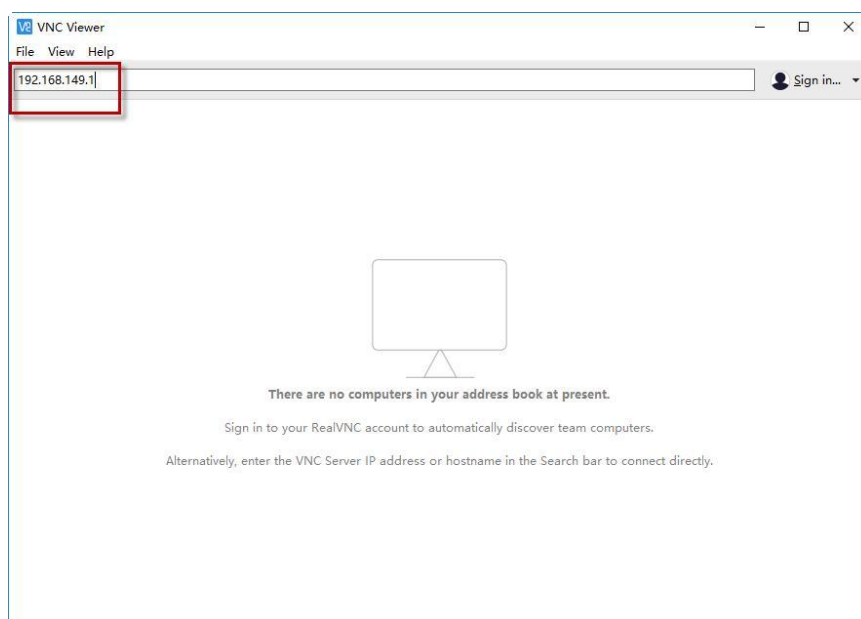
Switch on Raspberry Pi expansion board after connecting the adapter. The LED2 of Raspberry Pi expansion board will be on firstly and then the LED2 will flash every 2 seconds, which means the robot is turned on successfully.

2. Device Connection

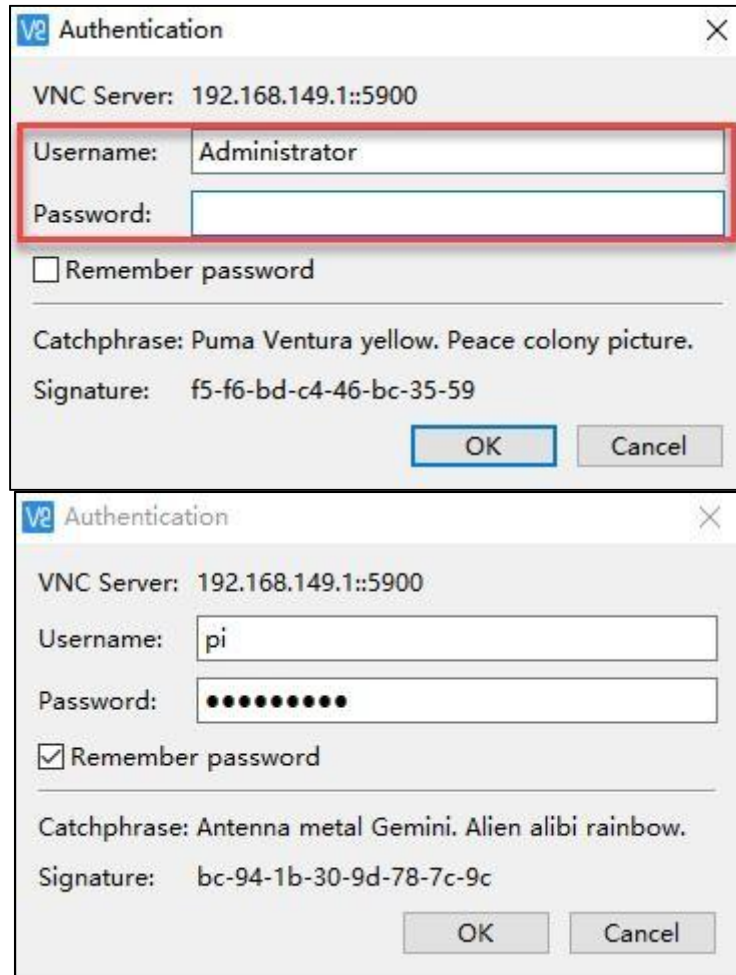
1) After turning on, Raspberry Pi will launch a Wi-Fi hotspot with a network named with the first letters “HW”. Click to connect.

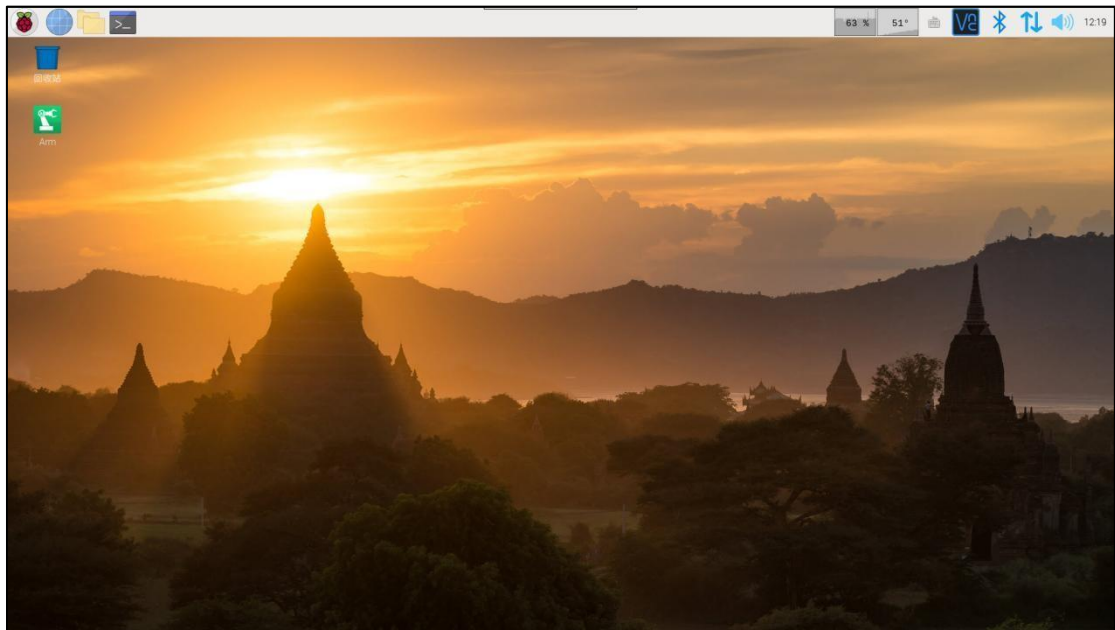


2) Enter the default IP address of the Raspberry Pi 192.168.149.1 in the VNC Viewer, and then press "Enter". If the software warns that the connection is not safe just click “Continue”.



3) Enter the password "raspberrypi" in the pop-up prompt box (if it requires you to enter an account name, use "pi"), then check the "Remember password" box, and then click "OK". The Raspberry Pi's desktop will now display on your computer's monitor.





4) After entering the Raspberry Pi interface, a warning dialogue box will pop up (This is normal), click "OK" to close it (if a black screen occurs, please restart the Raspberry Pi).



Detailed starting steps of each game project can be found in the corresponding lesson.