

Lesson 1 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

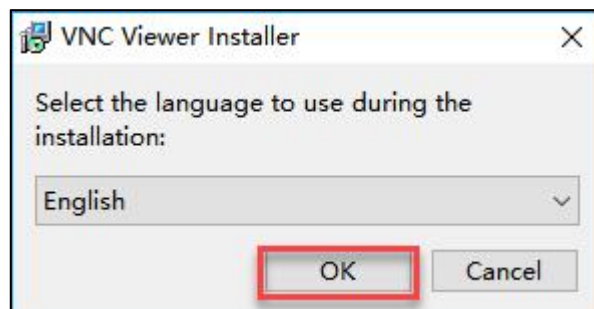
1.1 Hardware Preparation

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. Extended Lesson-> Network Configuration Lesson -> Lesson 2 Modify Wi-Fi".

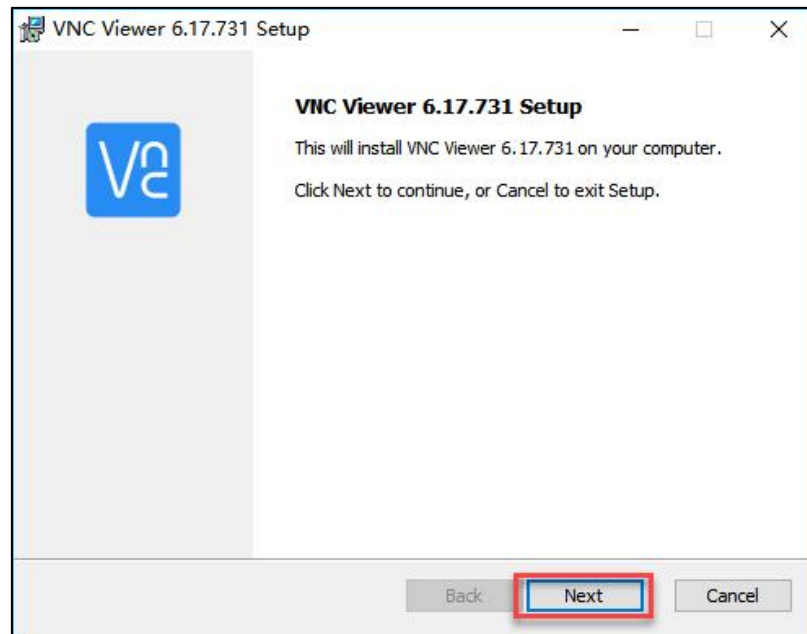
1.2 VNC Remote Control Tool Installation

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.

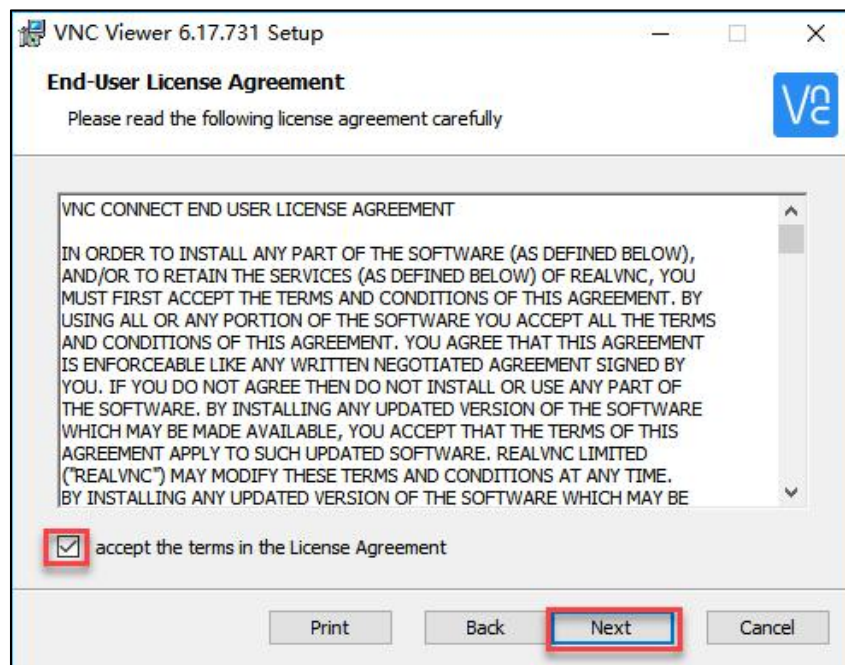
- 1) Double-click the "VNC-Viewer-6.17.731-Windows" file in this folder. In the pop-up dialogue box, select the installation language as English and then click the "OK" button.



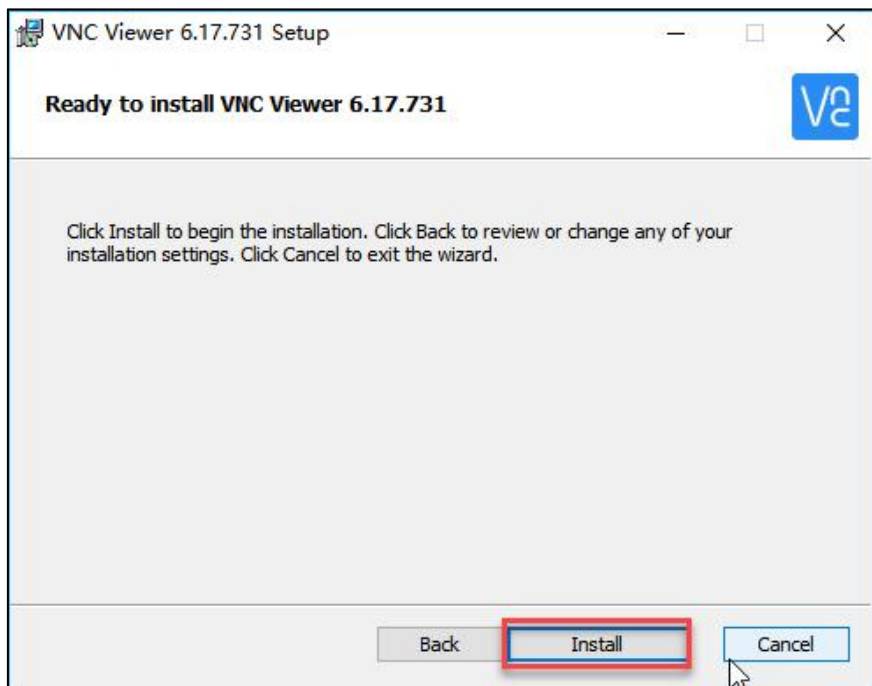
- 2) Then click the "Next" button on the pop-up interface.



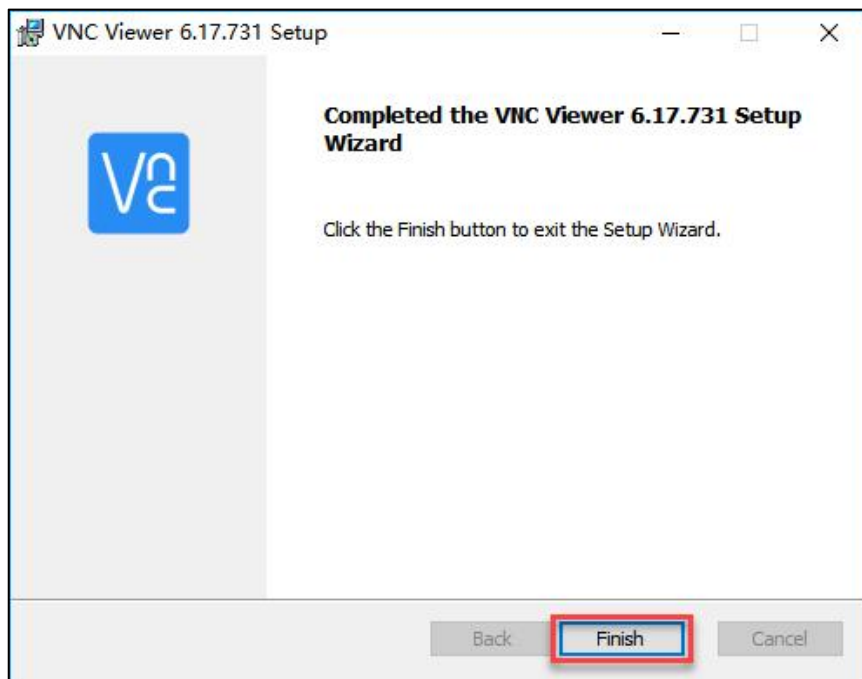
- 3) Then click "accept the terms in the License Agreement" in the prompt box, and click "Next" to enter the next step.




- 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.



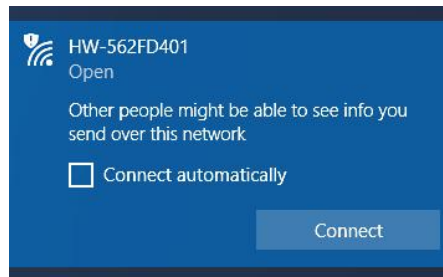
- 6) After successfully connecting, double click  to open (run).

1.3 Turn on MasterPi

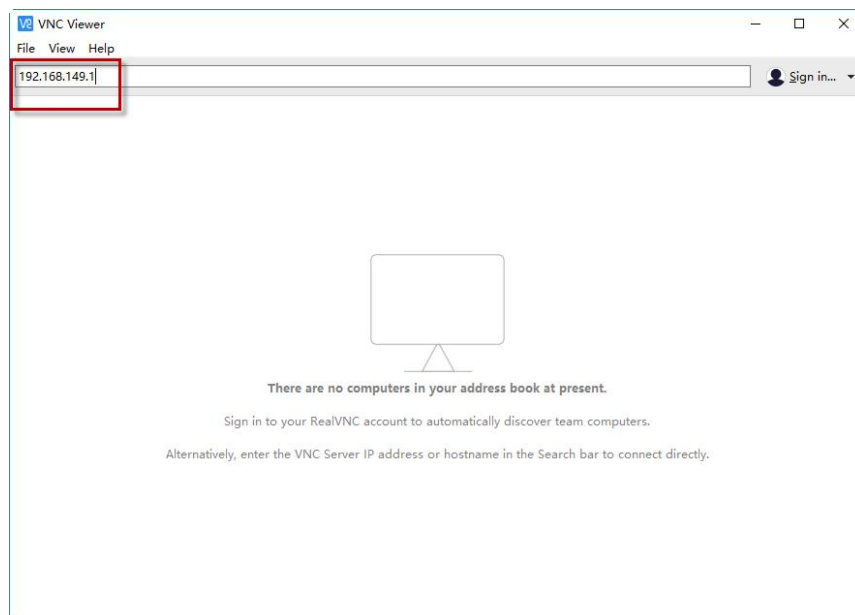
Switch on Raspberry Pi after powering. The LED1 and LED2 of the Raspberry Pi will be on firstly and then the LED2 will flash in every 2 seconds, which means the robot is turned on successfully.

2. Device Connection

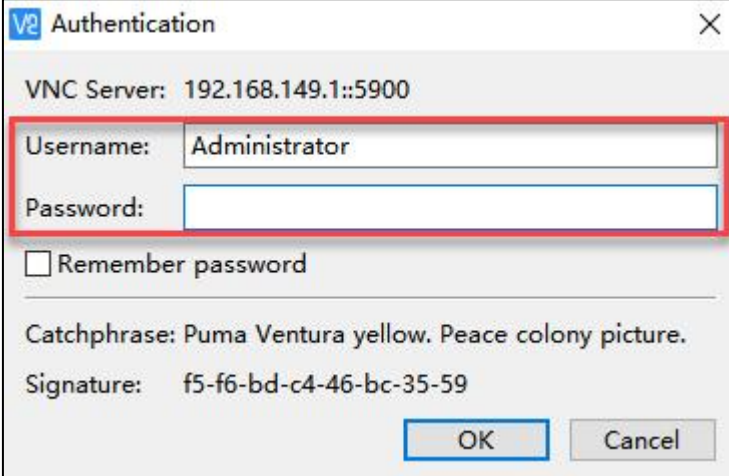
- 1) After turning on, Raspberry Pi will launch a Wi-Fi hotspot with a network named with “HW”. Click to connect.



- 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 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.



V2 Authentication

VNC Server: 192.168.149.1::5900

Username: Administrator

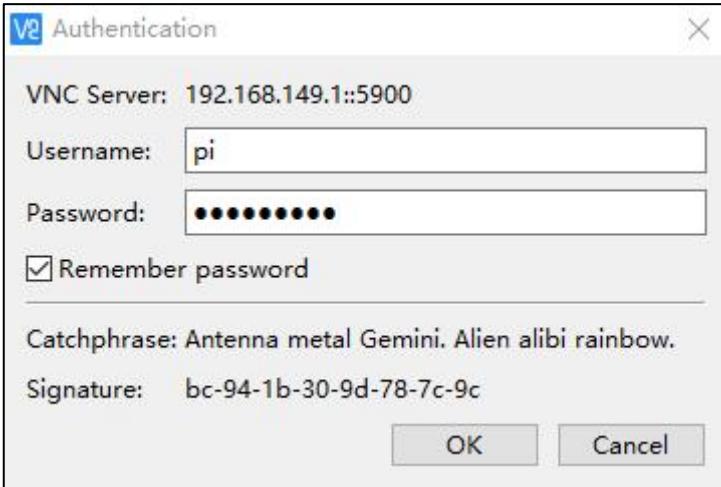
Password:

☐ Remember password

Catchphrase: Puma Ventura yellow. Peace colony picture.

Signature: f5-f6-bd-c4-46-bc-35-59

OK Cancel



V2 Authentication

VNC Server: 192.168.149.1::5900

Username: pi

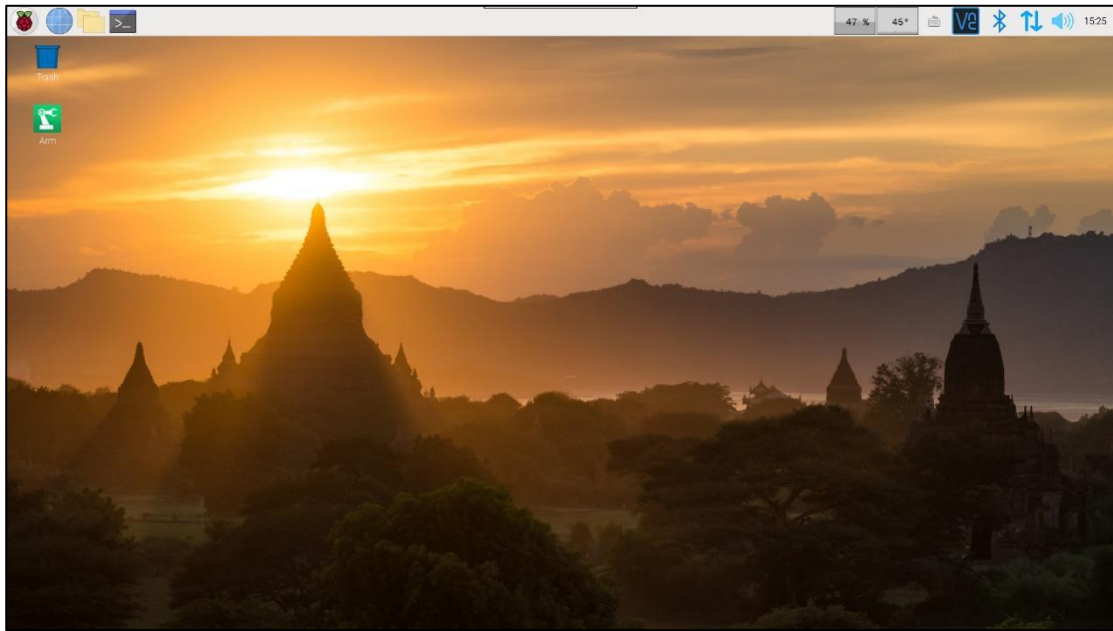
Password: ●●●●●●●●

☒ Remember password

Catchphrase: Antenna metal Gemini. Alien alibi rainbow.

Signature: bc-94-1b-30-9d-78-7c-9c

OK Cancel



- 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 following lessons.