4.Start up Raspberry Pi
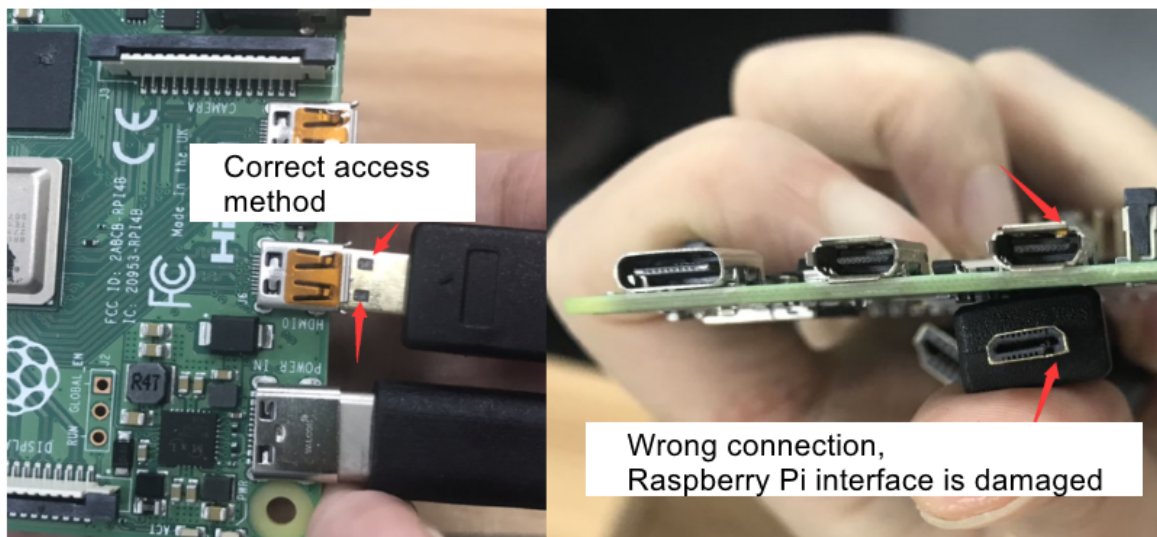
1. Powered supply

The Raspberry Pi development board has three power supply methods:

1. Use Type-C power supply: The parameter requirements of the power adpter are 5V, 3A.

2. Use the gray cable to directly connect the robot car expansion board for power supply.

3. Use POE power supply: You need to purchase an additional POE hat. After connecting, you can use the network cable POE power supply.
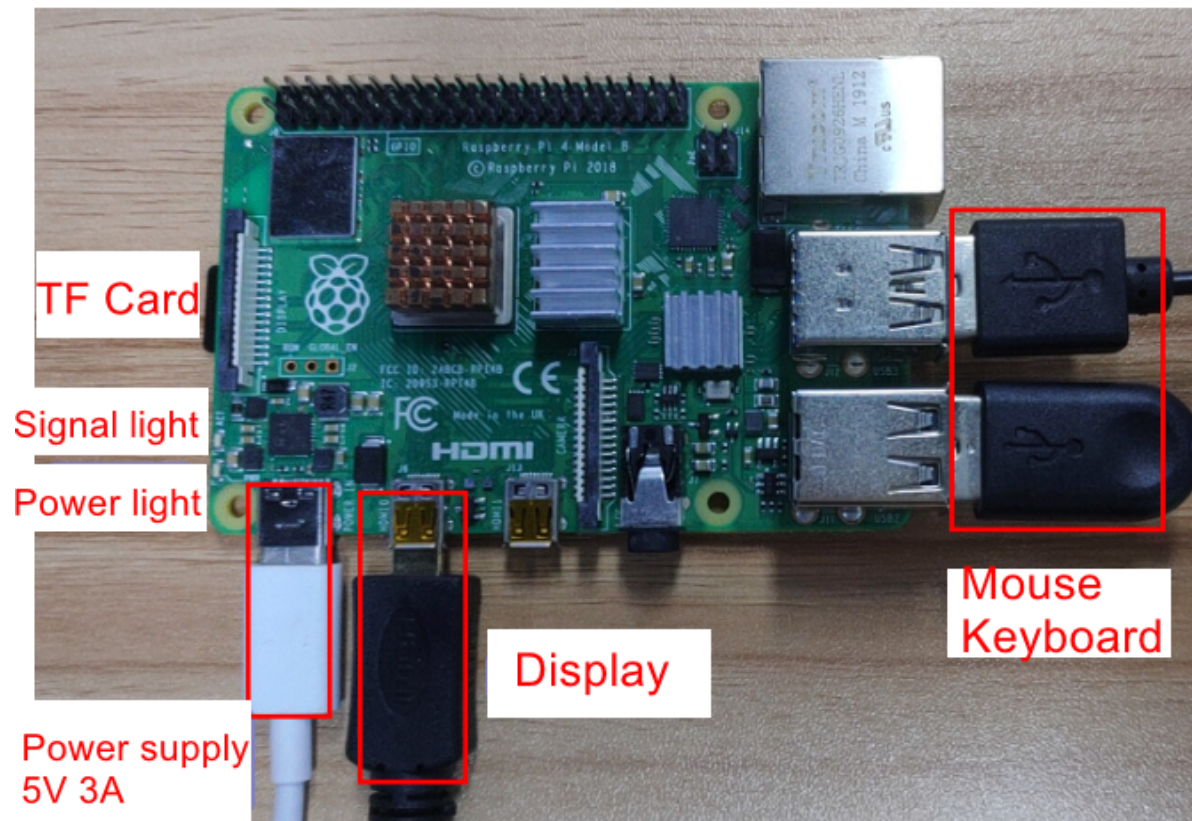
2. Start the Raspberry Pi (example powered by Type-C)

Note: Please make sure the HDMI cable is connected correctly, otherwise it will damage the HDMI interface on the Raspberry Pi board.

After the image is written, insert the MicroSD card directly into the MicroSD card slot of the Raspberry Pi.
Connect the monitor, power supply, mouse, and keyboard to the Raspberry Pi. After turning on the power switch on the data line, you can enter the Raspberry Pi system.

In normally, the red power light is always on and the green signal light flashes irregularly.
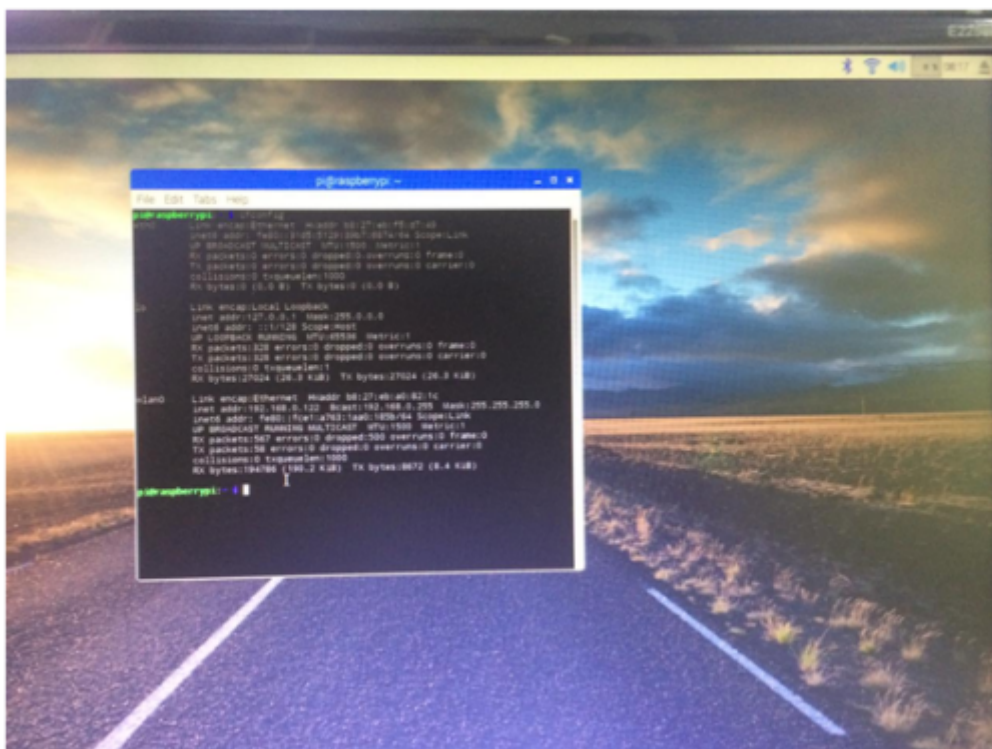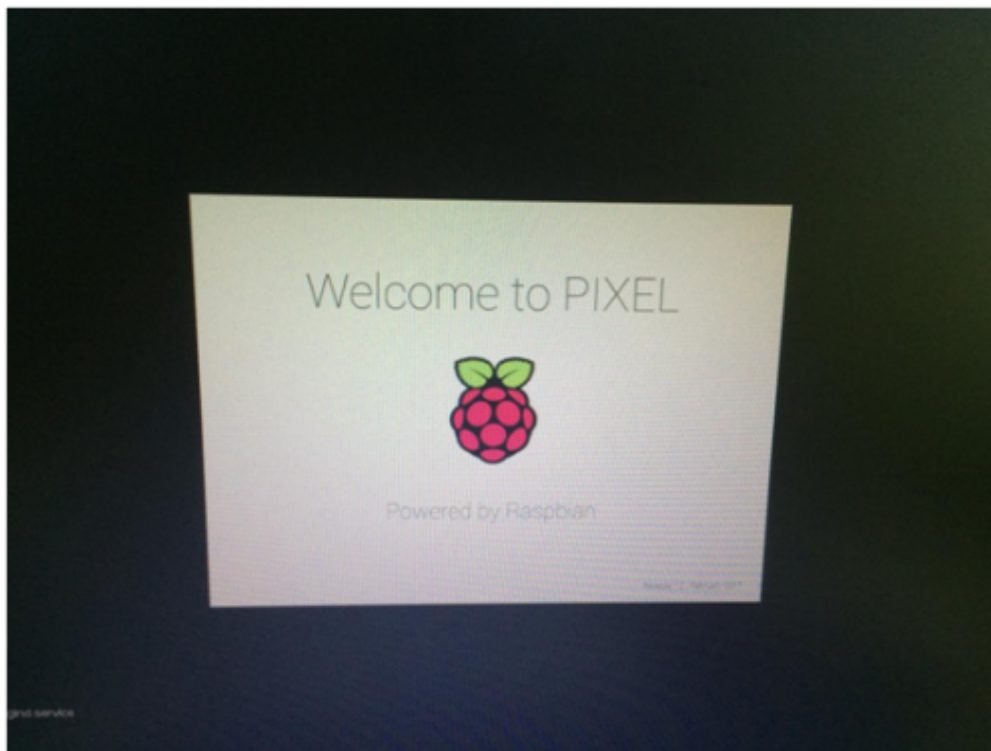
If the red light occasionally goes out, it may be due to insufficient power supply.

3.Remote login to Raspberry Pi system

Connect the Raspberry Pi to WiFi, open the command line terminal (Ctrl+Alt+T) in the Raspberry Pi system.

Input following command to view IP address.

```
ifconfig
```

Currently my Raspberry Pi IP address is 192.168.0.122.
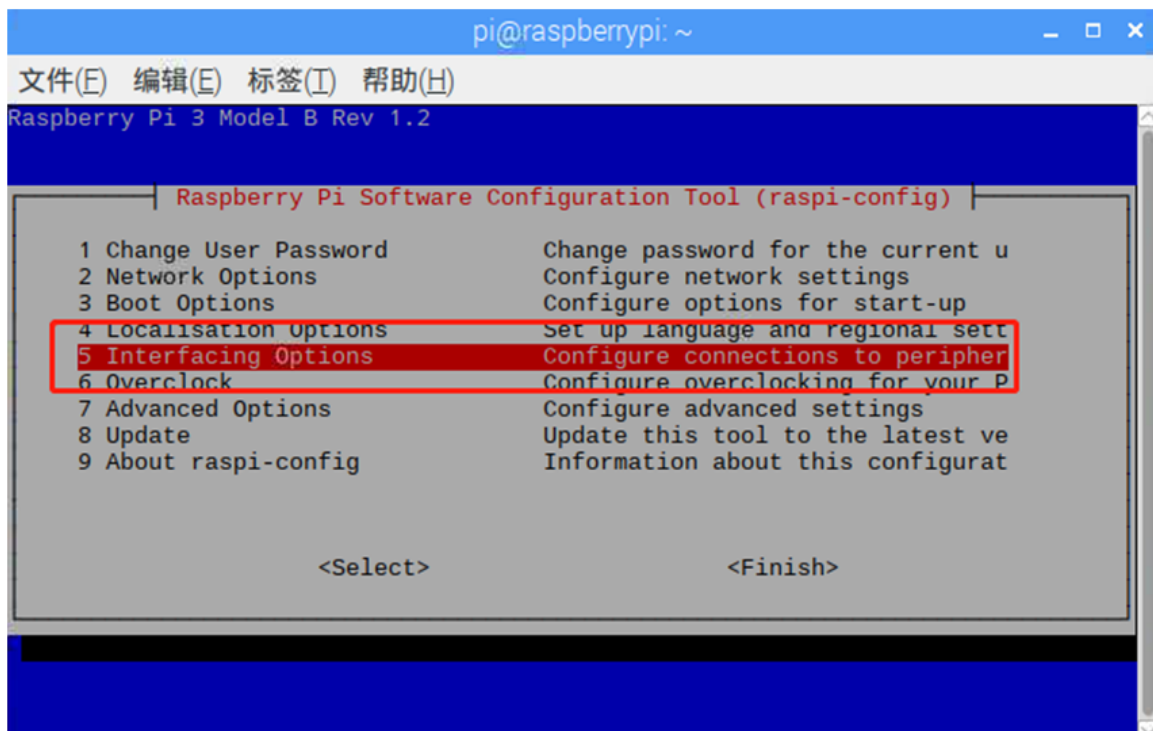
Enable SSH service

The official system image has the SSH service turned off by default, so you need to enable the SSH service before logging in remotely.
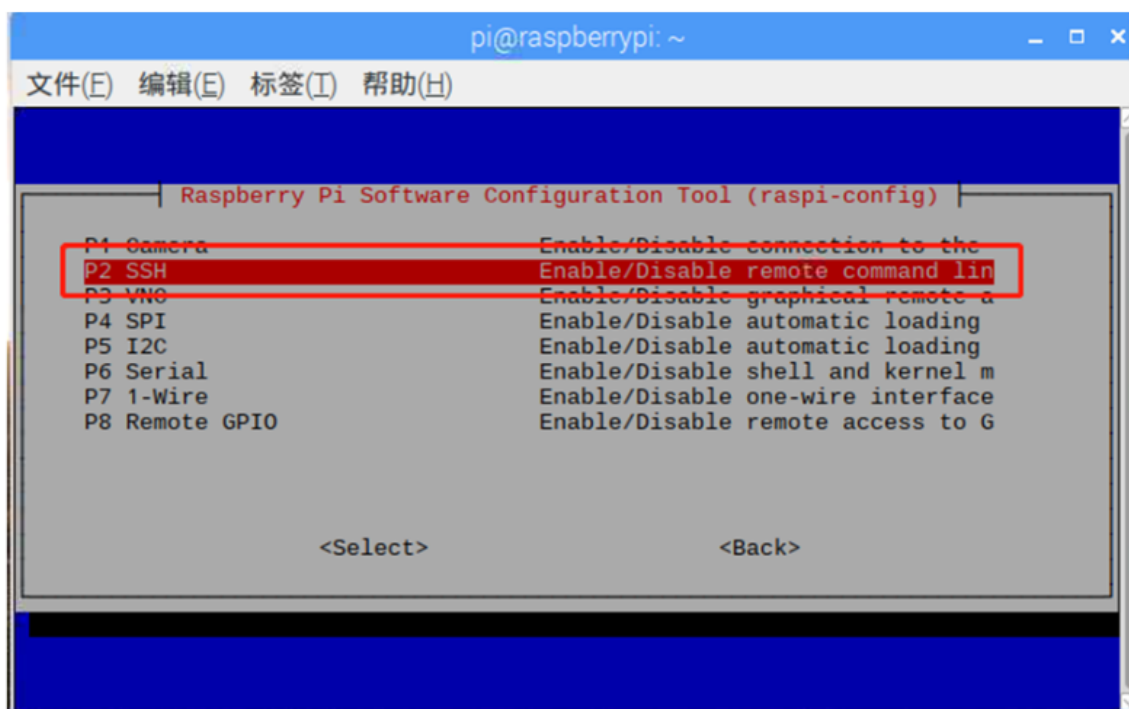
If you have a display:

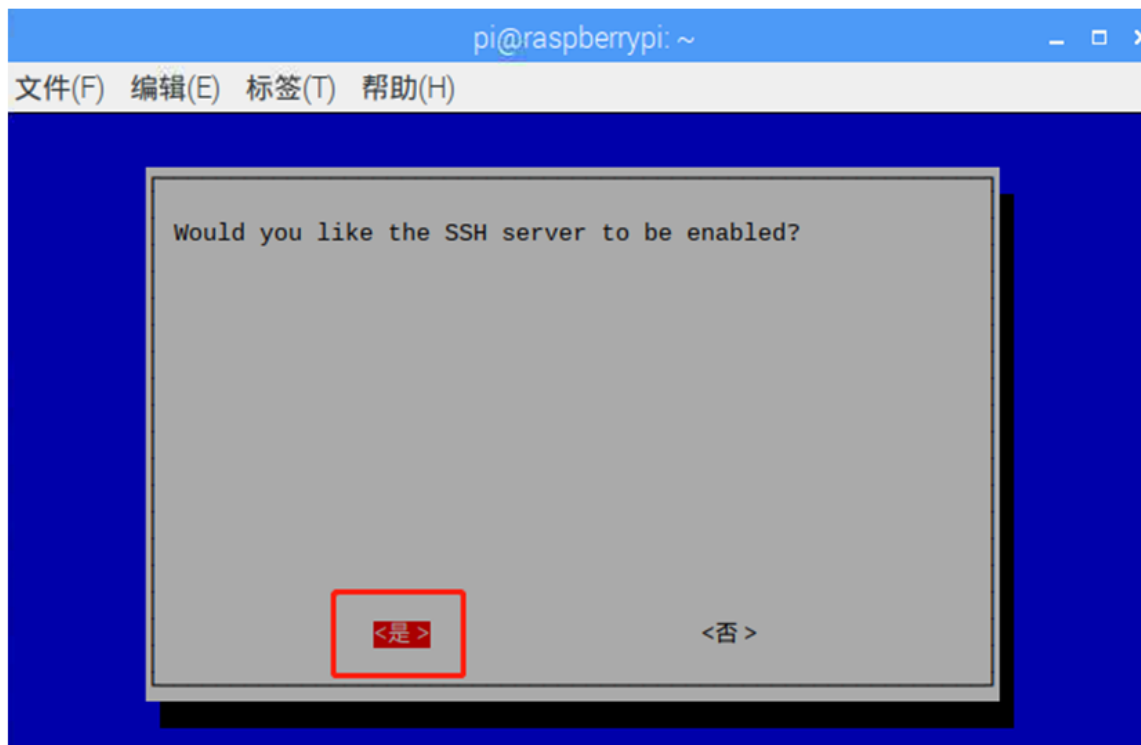Enter **sudo raspi-config** on the command line and press Enter, as shown in the figure below

Select 【5 Interfacing Options】 and press the 【Enter key】.

Select 【P2 SSH】 and press the 【Enter key】.

Select 【YES】 and press the 【Enter key】.

Finally, click 【Finish】 to complete and wait for the restart.

To start and access the Raspberry Pi, there are three method.

For Raspberry Pi raspbian system:

user name: pi

password: raspberry

root password: raspberry

Method-1: Directly connect an HDMI display, mouse and keyboard to the Raspberry Pi, and then power on and operate directly;

Method-2: Access the Raspberry Pi through SSH or serial port. We use the putty tool here;

Method-3: Remotely log in to the Raspberry Pi through the VNC service (configuration required).