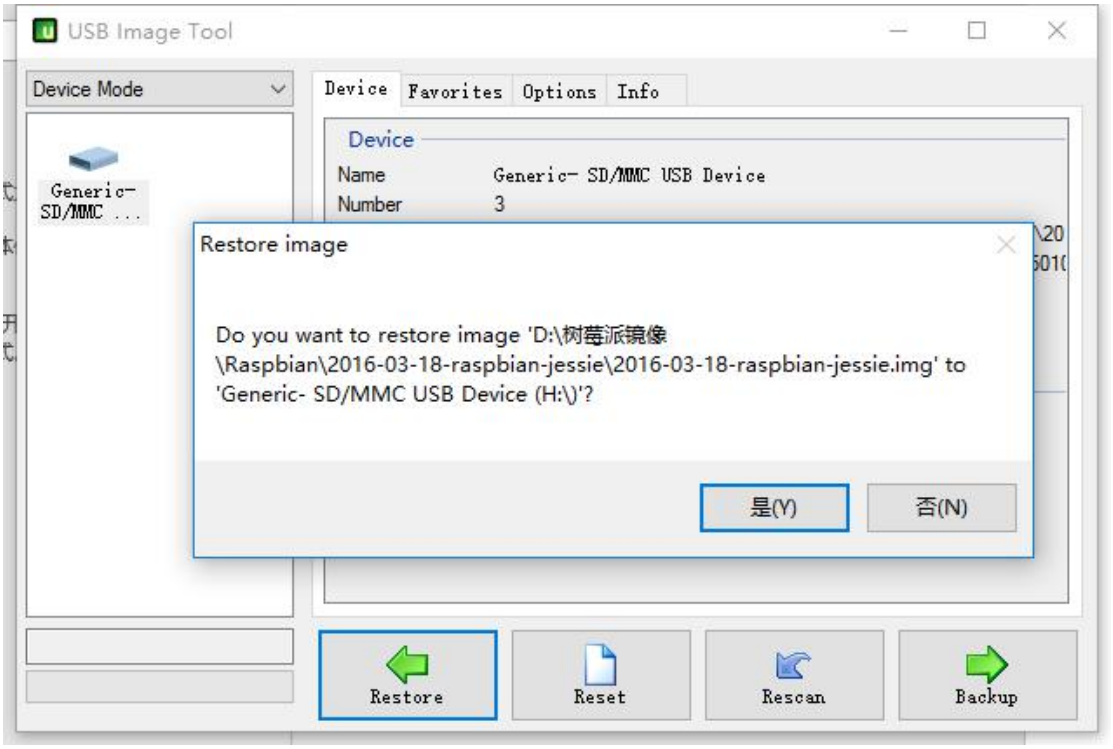
Raspbian TFT configuration& Tutorial

(Compatible with All Versions of Raspberry Pi)

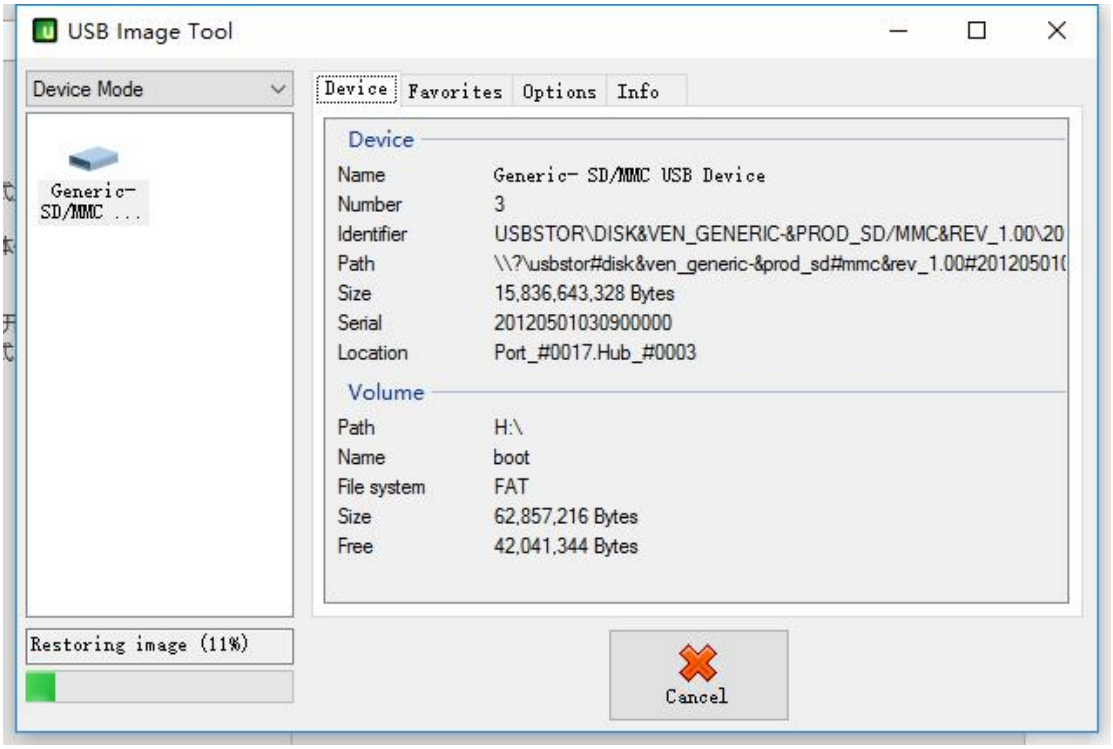
Attention: All resistive screens need to be calibrated due to the differences of screens and operating systems.

In this Tutorial, the latest image is used for demonstration. Its address is

2016-03-18-raspbian-jessie.img



1. Programming the system.



2, Modify config.txt configuration. Add or modify the following fields

a) For 800*480

```
# uncomment if hdmi display is not detected and composite is being output
hdmi_force_hotplug=1

# uncomment to force a specific HDMI mode (here we are forcing 800x480!)
hdmi_group=2
hdmi_mode=1
hdmi_mode=87
hdmi_cvt 800 480 60 6 0 0 0
```

b) For 1024*600

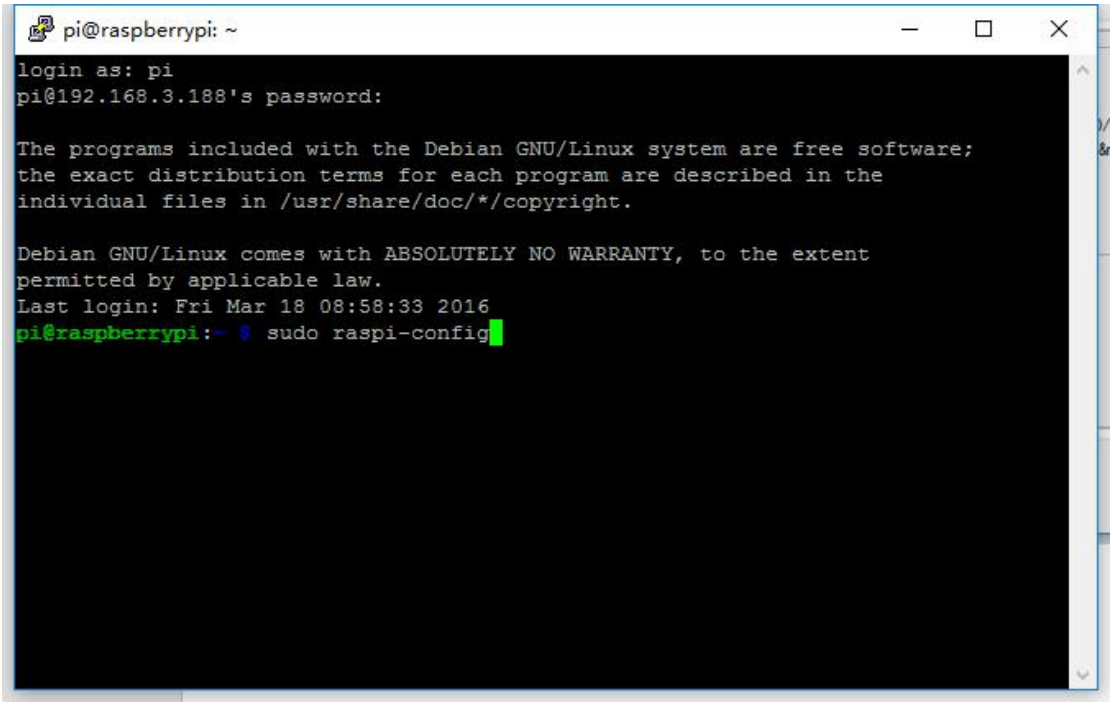
```
# uncomment if hdmi display is not detected and composite is being output
hdmi_force_hotplug=1

# uncomment to force a specific HDMI mode (here we are forcing 1024x600!)
hdmi_group=2
hdmi_mode=2
hdmi_mode=87
hdmi_cvt=1024 600 60 3 0 0 0
```

c) For 1280*800

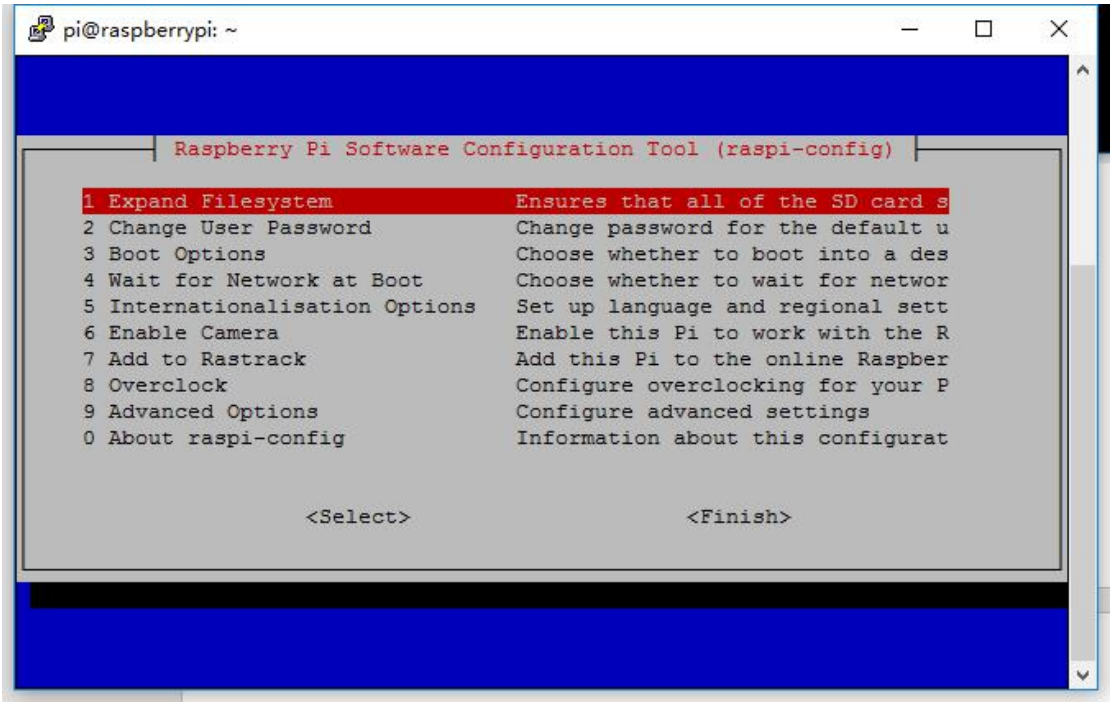
```
# uncomment if hdmi display is not detected and composite is being output
hdmi_force_hotplug=1

# uncomment to force a specific HDMI mode (here we are forcing 1280x800!)
hdmi_group=2
hdmi_mode=2
hdmi_mode=87
hdmi_cvt=1280 800 60 3 0 0 0
```

3, Extend Partition

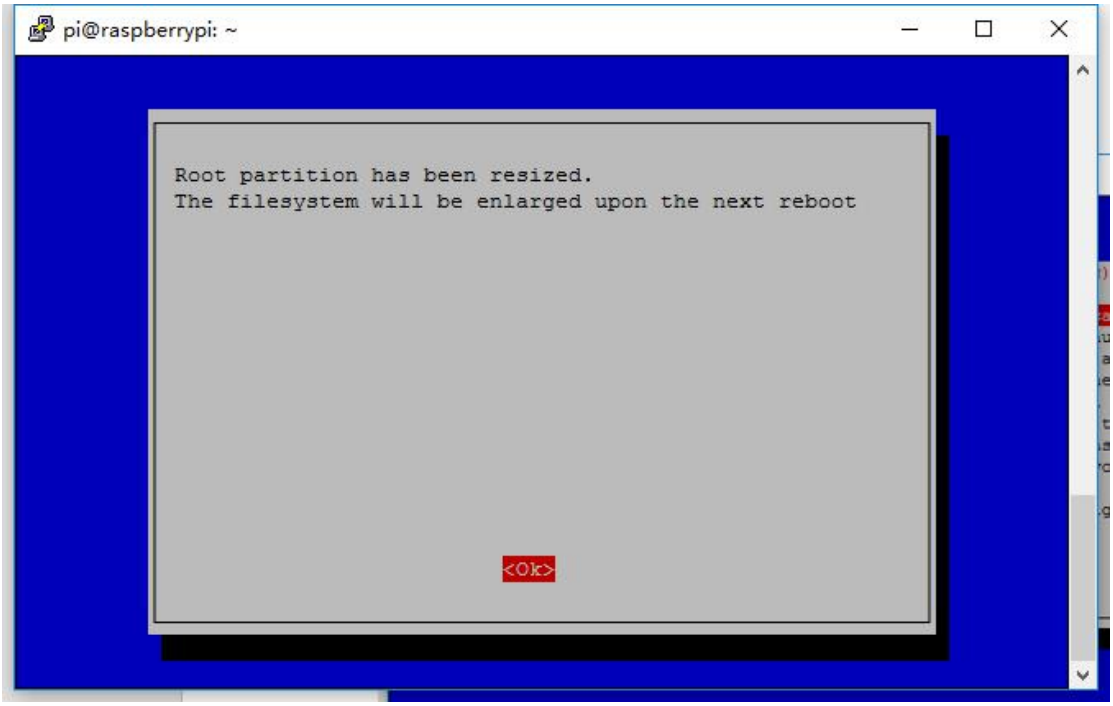
Step 1


pi@raspberrypi: ~
login as: pi
pi@192.168.3.188's password:
The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Fri Mar 18 08:58:33 2016
pi@raspberrypi:~ $ sudo raspi-config

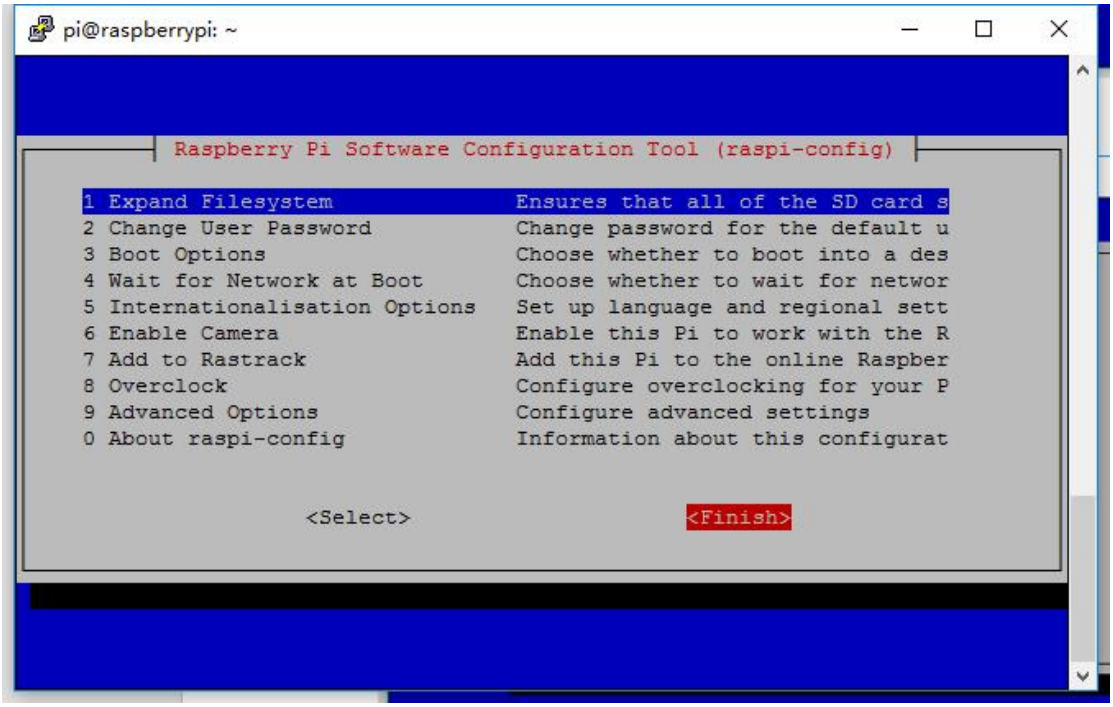
Step2


pi@raspberrypi: ~
Raspberry Pi Software Configuration Tool (raspi-config)
1 Expand Filesystem Ensures that all of the SD card s
2 Change User Password Change password for the default u
3 Boot Options Choose whether to boot into a des
4 Wait for Network at Boot Choose whether to wait for networ
5 Internationalisation Options Set up language and regional sett
6 Enable Camera Enable this Pi to work with the R
7 Add to Rastrack Add this Pi to the online Raspber
8 Overclock Configure overclocking for your P
9 Advanced Options Configure advanced settings
0 About raspi-config Information about this configurat
<Select>
<Finish>

Step3


pi@raspberrypi: ~
Root partition has been resized.
The filesystem will be enlarged upon the next reboot
<Ok>

Step4


pi@raspberrypi: ~
Raspberry Pi Software Configuration Tool (raspi-config)
1 Expand Filesystem Ensures that all of the SD card s
2 Change User Password Change password for the default u
3 Boot Options Choose whether to boot into a des
4 Wait for Network at Boot Choose whether to wait for networ
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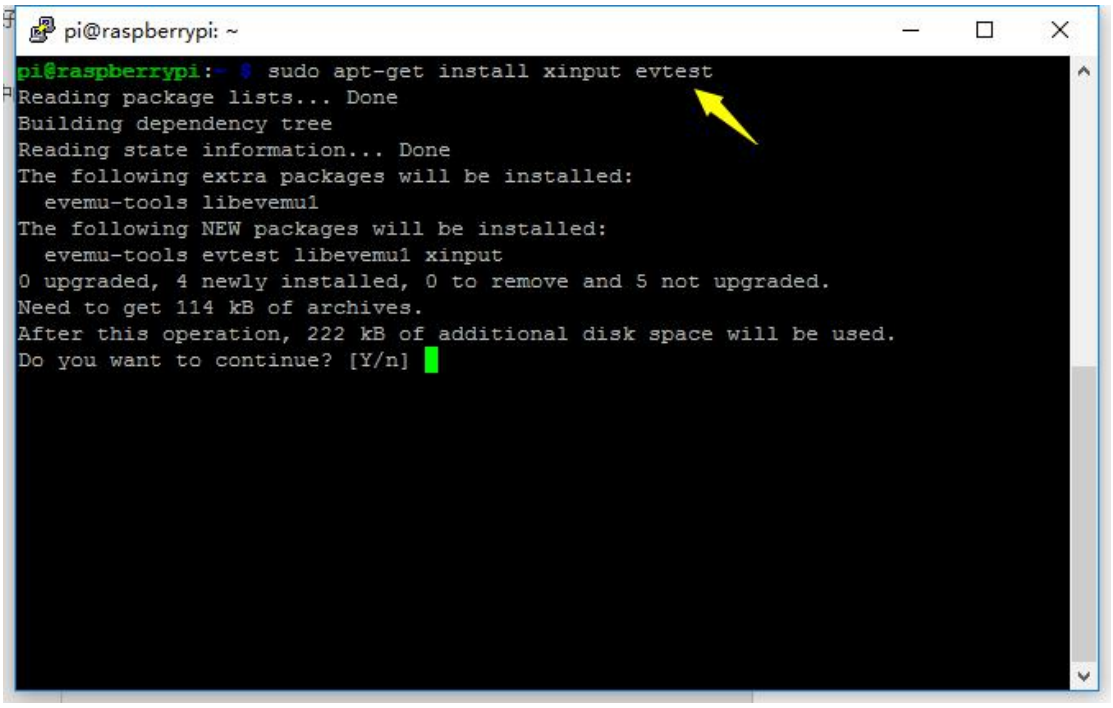
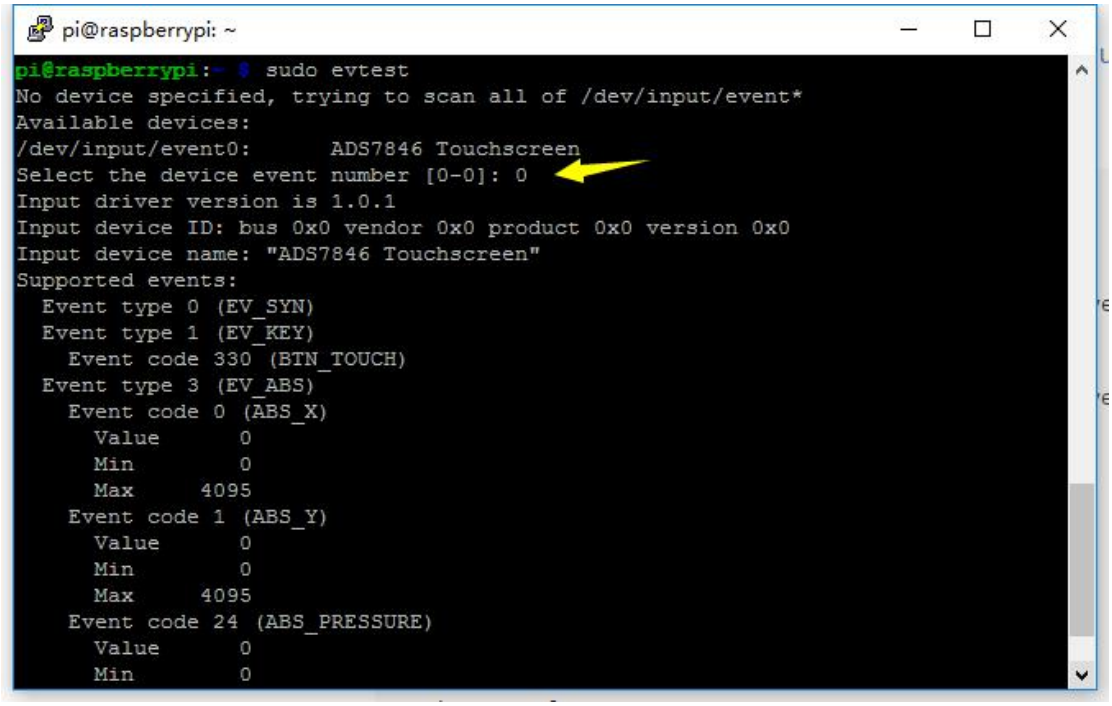
8 Overclock Configure overclocking for your P
9 Advanced Options Configure advanced settings
0 About raspi-config Information about this configurat
<Select>
<Finish>

Step5

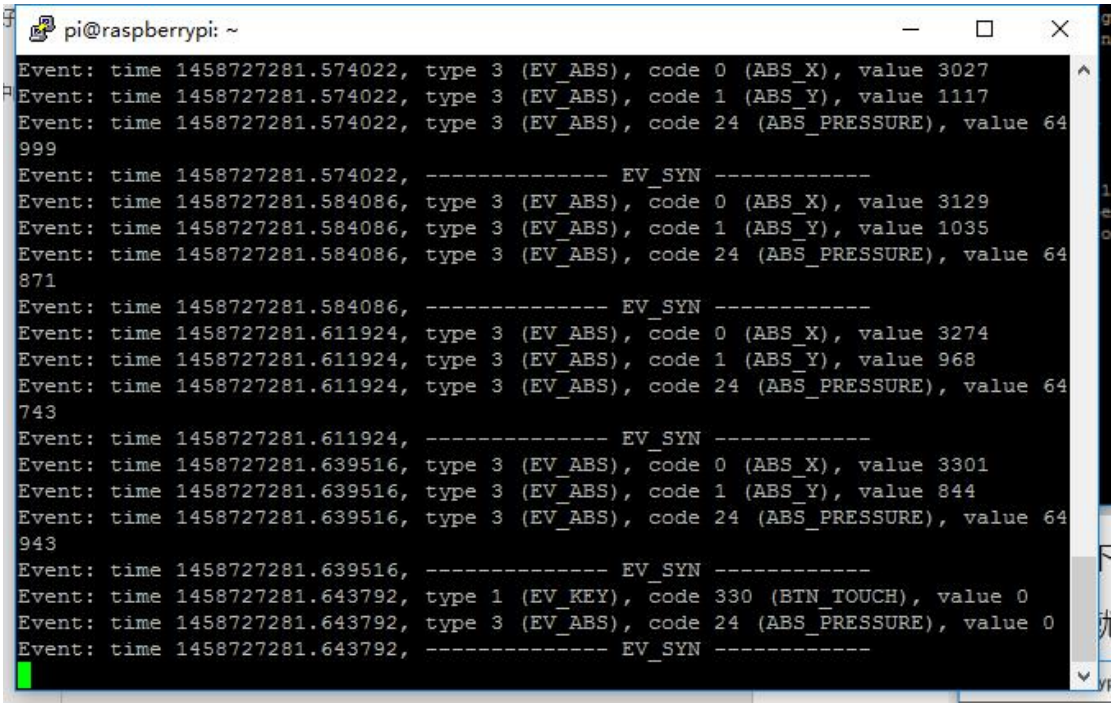
4, Installation of testing platforms (sudo apt-get install xinput evtest).



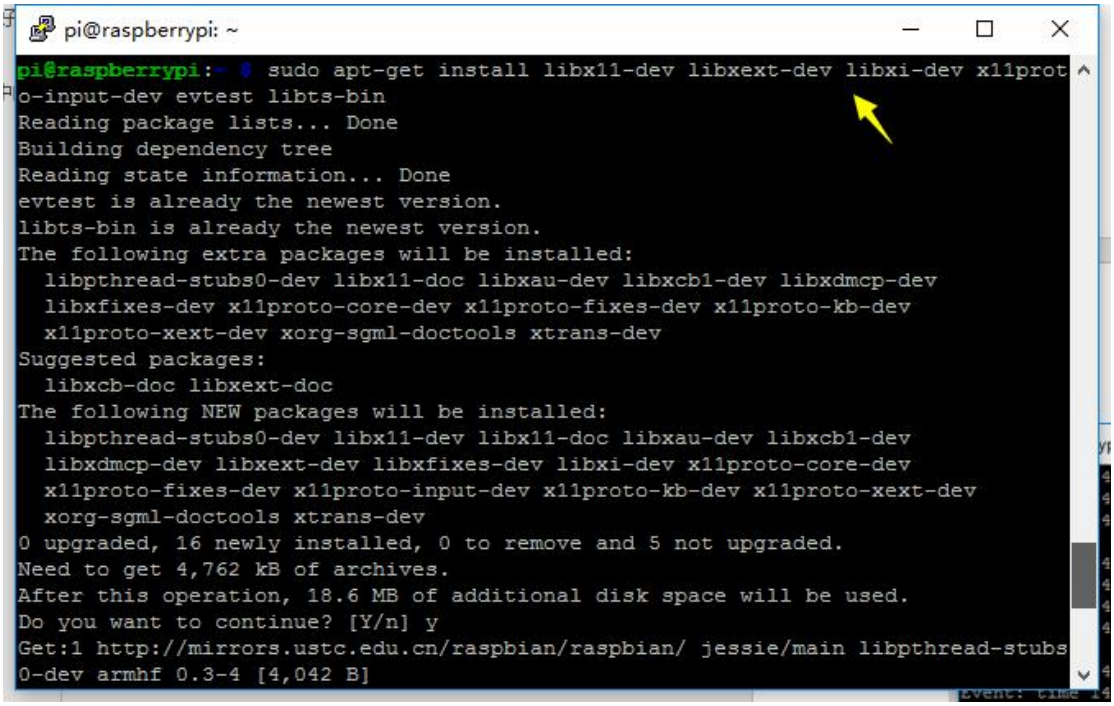
5, Execute the following command (sudo evtest) and select the touch device to start the test. There should be a response when the screen is touched during the test.



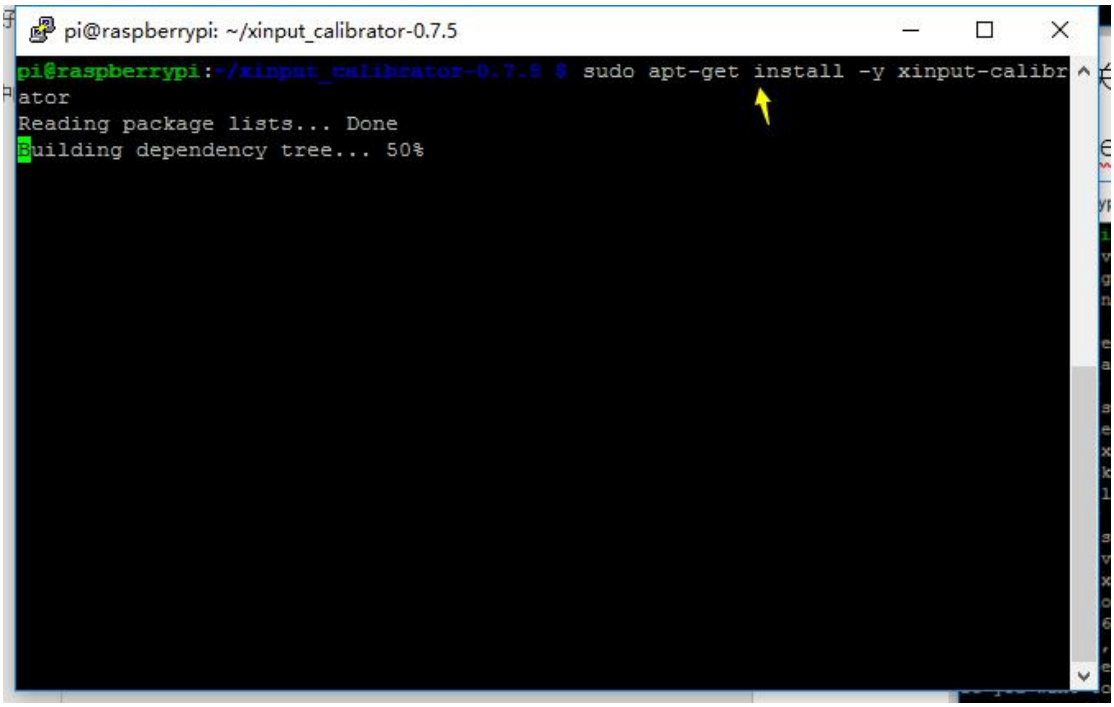
6, Touch Output



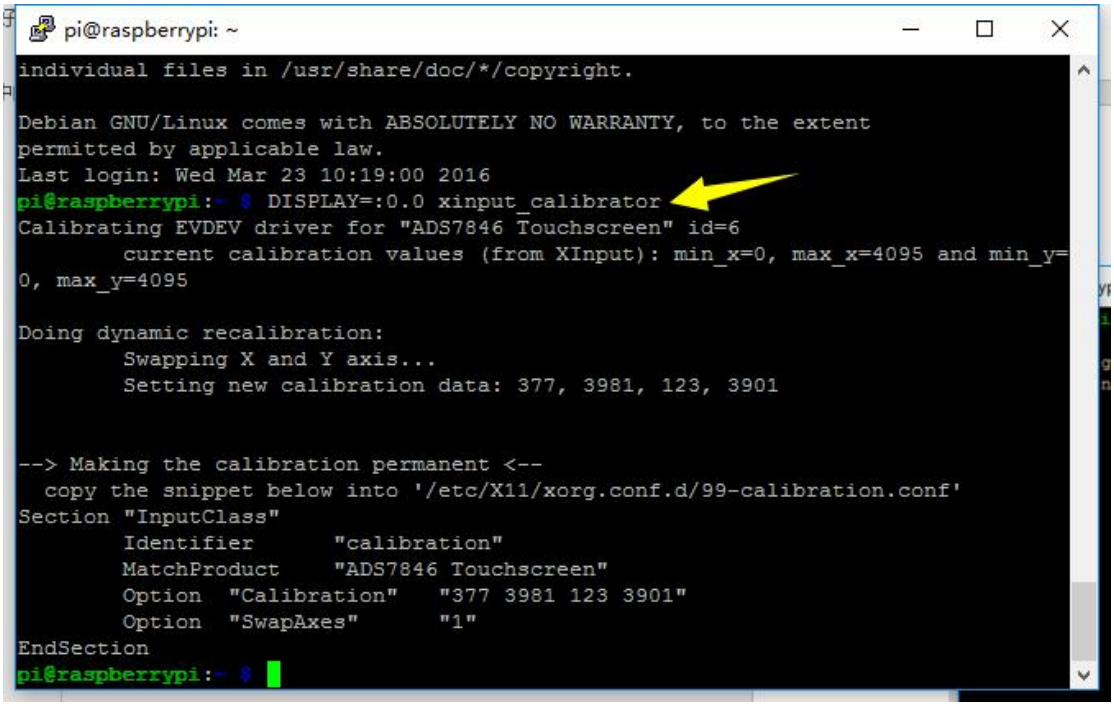
7. Install the related platforms for calibrating your touch device (sudo apt-get install libx11-dev libxext-dev libxi-dev x11proto-input-dev evtest libts-bin)



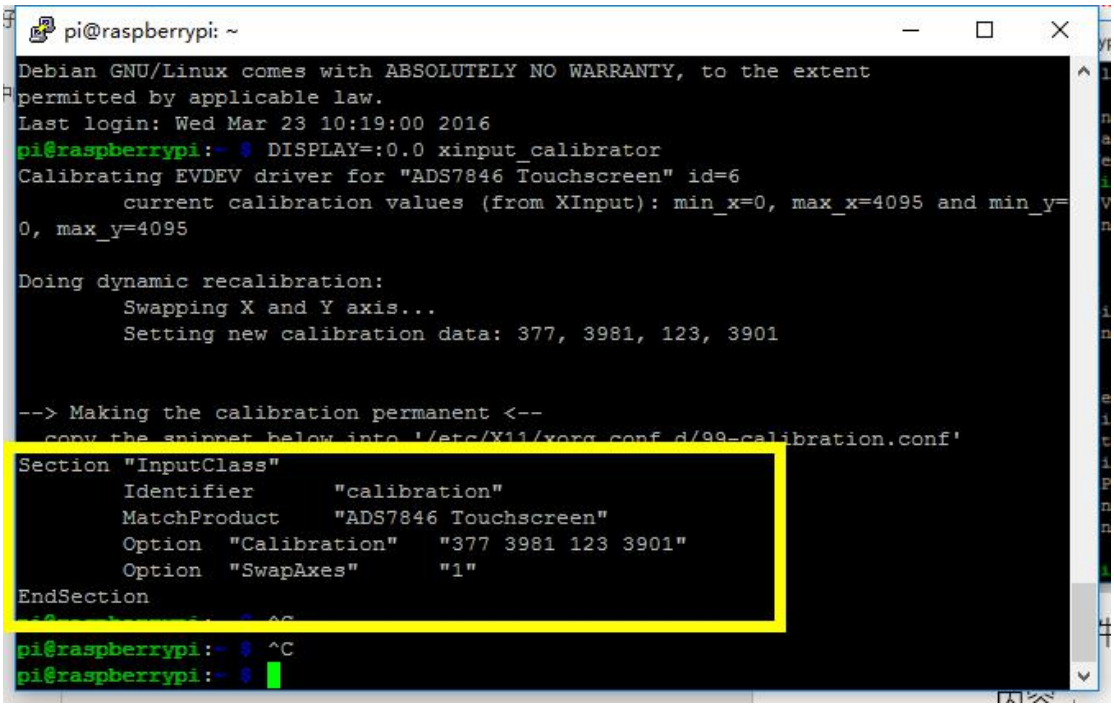
8, Get the touch calibration platform (sudo apt-get install -y xinput-calibrator).



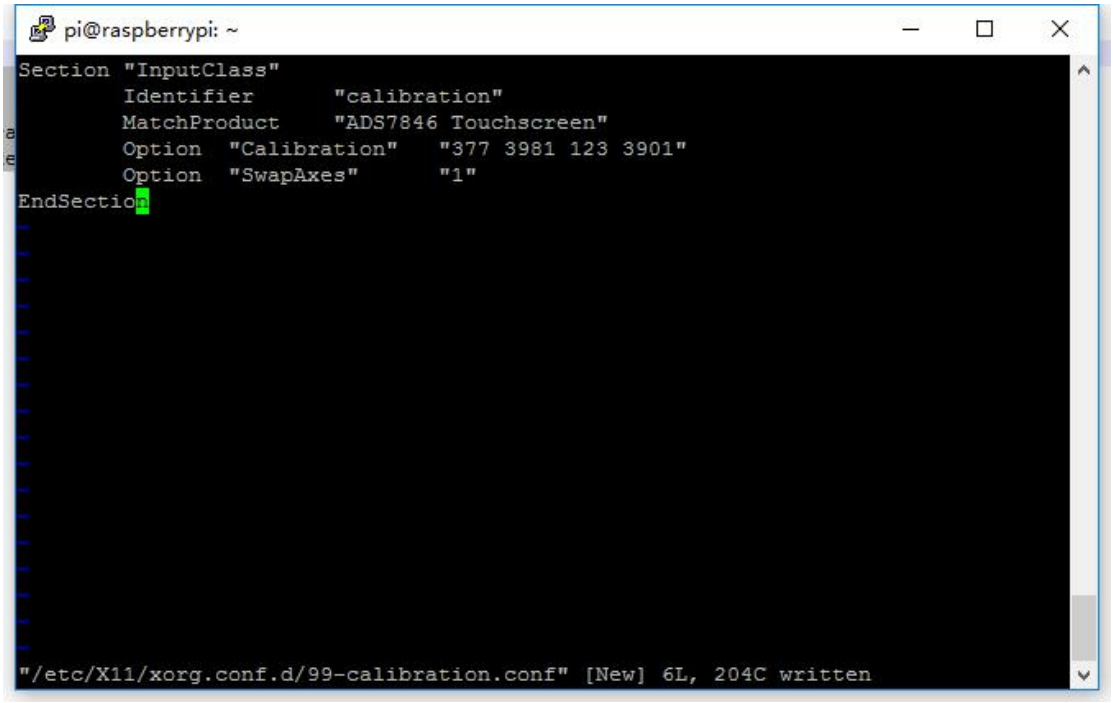
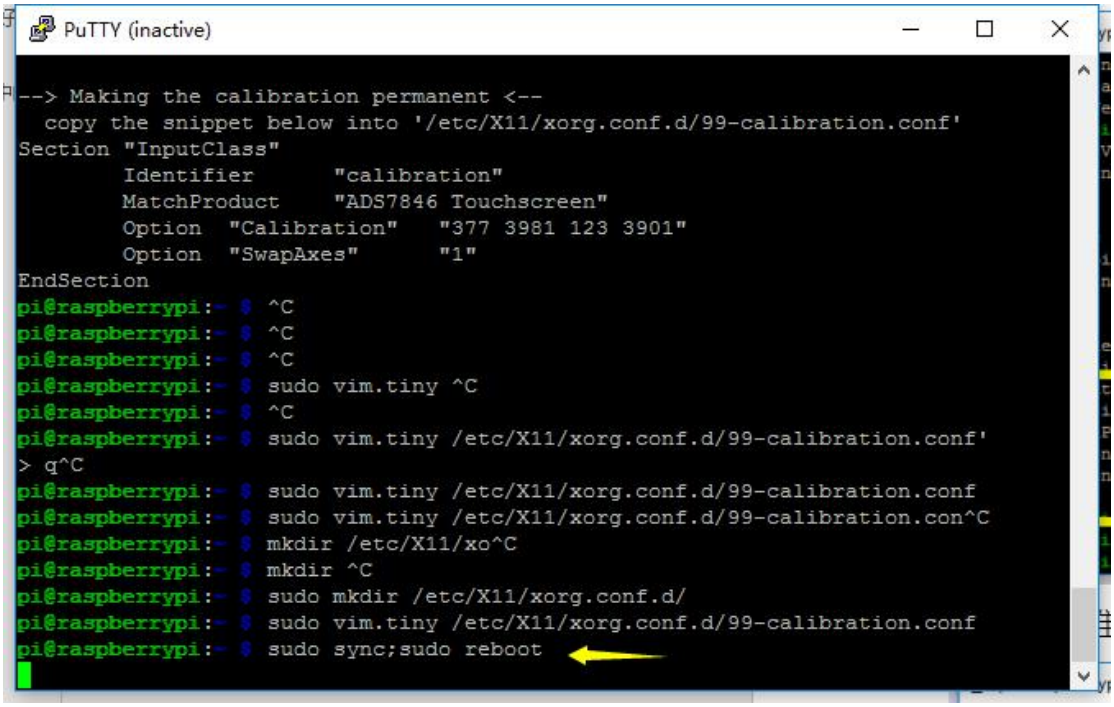
9, Restart your Raspberry Pi and then perform a calibration operation (DISPLAY=:0.0 xinput_calibrator).



10. Create a file (/etc/X11/xorg.conf.d/99-calibration.conf) and type in the what is shown below in the yellow box. Please refer to the actual context shown in your display.



11. Type in the calibration context and save it.



12, Restart your Raspberry Pi and it’s all set. (sudo reboot).