Raspberry Pi System Expansion

This document briefly describes how to expand the system.
Because the factory image only has 15G system, and the SD card system is 32G. If you want to use the remaining space, you can read this tutorial.

1. First enter the Raspberry Pi system. There are many methods, which are not described in this document.
2. Then enter the command to check the space

```
df -h
```

You can see the system space

```
pi@raspberrypi:~$ df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/root        15G   13G  1.8G  88% /
devtmpfs        642M     0  642M   0% /dev
tmpfs           900M     0  900M   0% /dev/shm
tmpfs           360M  1.1M  359M   1% /run
tmpfs           5.0M  4.0K  5.0M   1% /run/lock
/dev/mmcblk0p1  253M   31M  222M  13% /boot
tmpfs           180M   24K  180M   1% /run/user/1000
```

3. Enter the following command to expand

```
sudo raspi-config
```
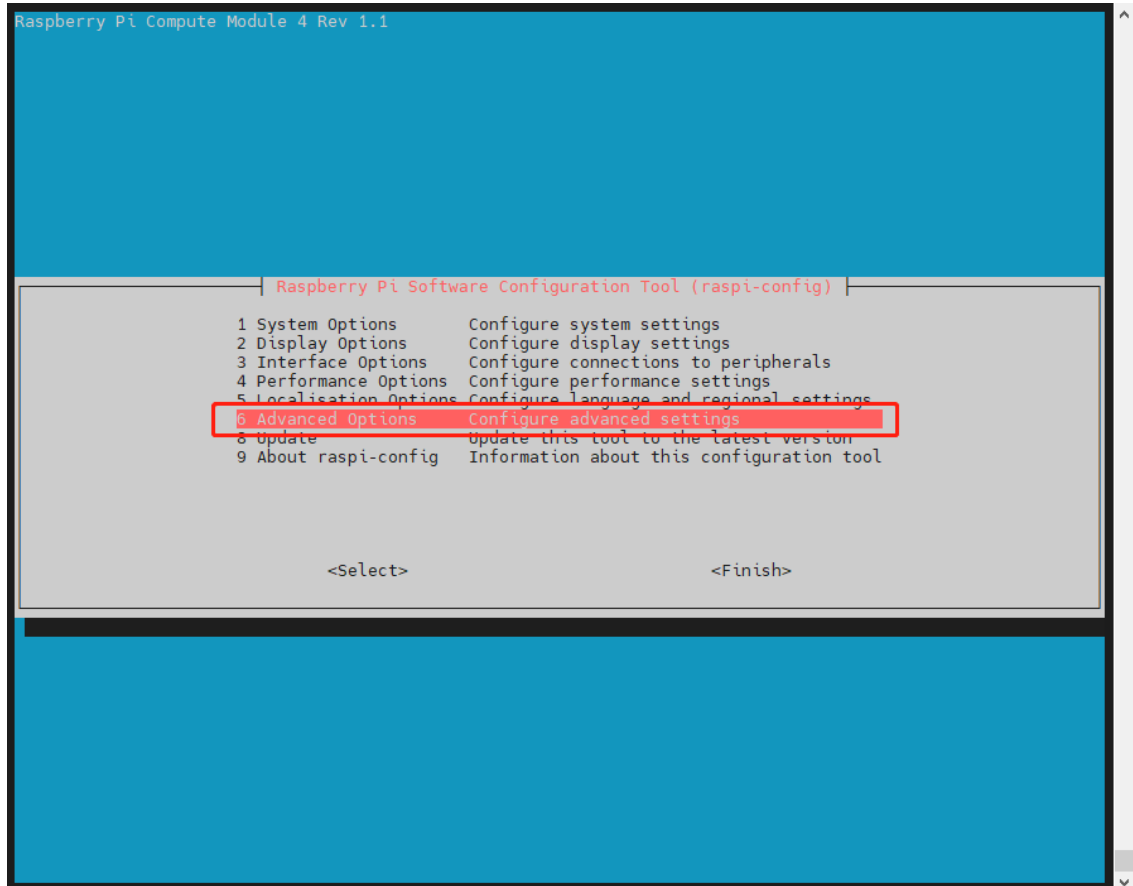
You will enter this interface

```
Raspberry Pi Compute Module 4 Rev 1.1




                ┤ Raspberry Pi Software Configuration Tool (raspi-config) ├
         1 System Options      Configure system settings
         2 Display Options     Configure display settings
         3 Interface Options   Configure connections to peripherals
         4 Performance Options Configure performance settings
         5 Localisation Options Configure language and regional settings
         6 Advanced Options    Configure advanced settings
         8 Update              Update this tool to the latest version
         9 About raspi-config  Information about this configuration tool



                    <Select>                          <Finish>
```
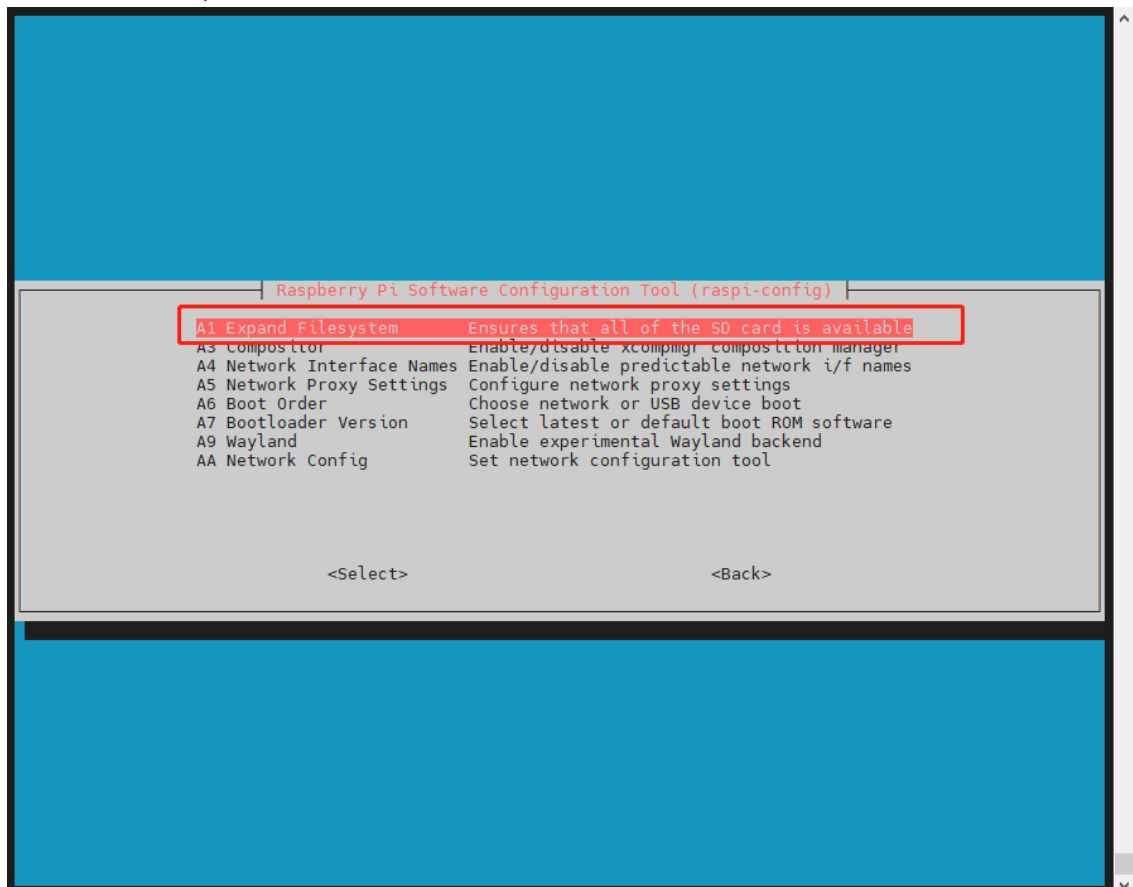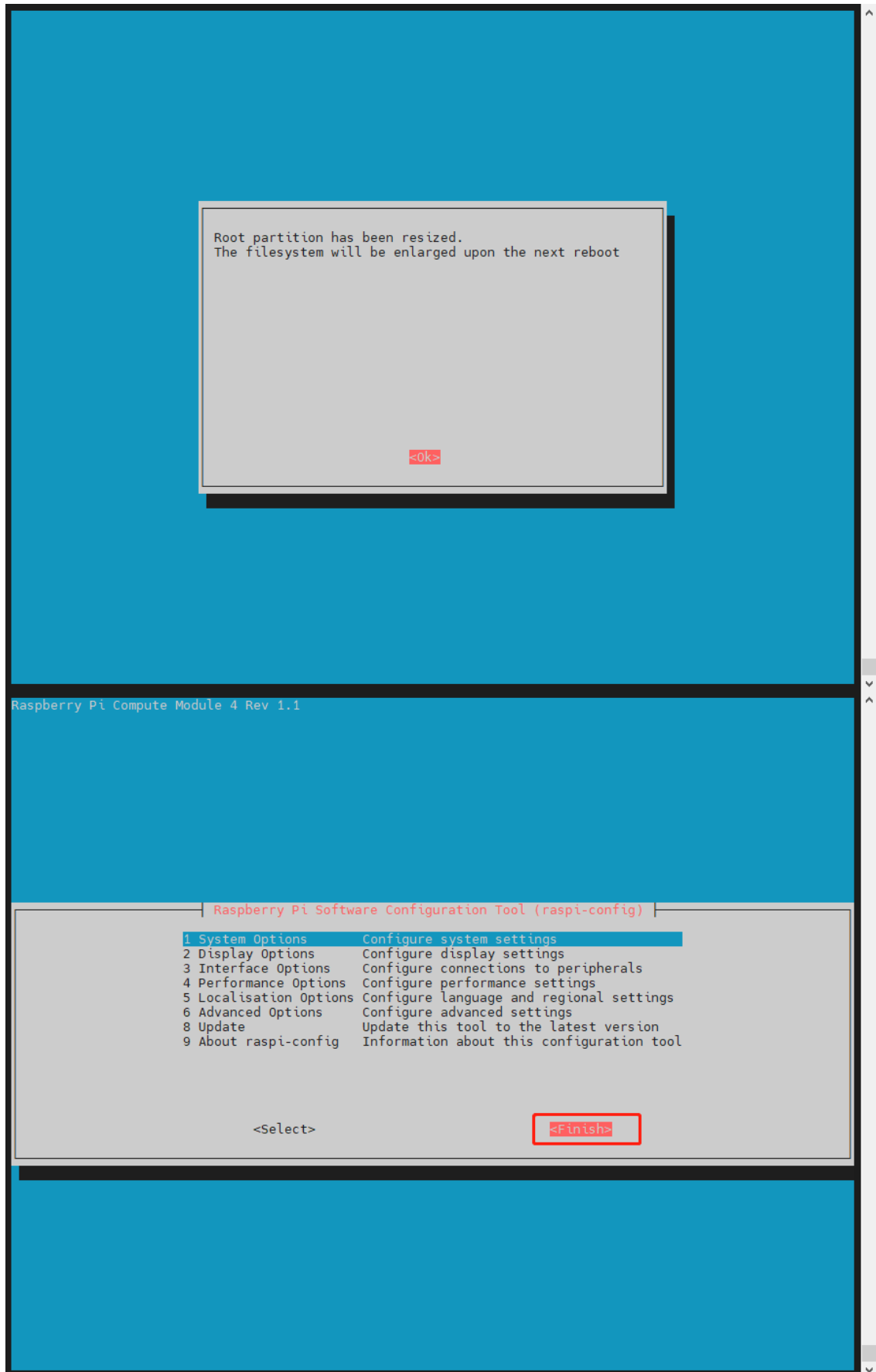
4. Select the 6th option and press Enter

5. Select the first option and select OK

6. Press Enter again on this interface, then select Finish. Then restart the car.

```
Root partition has been resized.
The filesystem will be enlarged upon the next reboot




                              <Ok>
```

```
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         <Select>                          <Finish>
```

7. Restart the car

Would you like to reboot now?

<Yes>   <No>

8. Query the space again.

```
df -h
```

Found that the expansion is complete

```
pi@raspberrypi:~$ df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/root        29G   13G   16G  44% /
devtmpfs        642M     0  642M   0% /dev
tmpfs           900M     0  900M   0% /dev/shm
tmpfs           360M  1.2M  359M   1% /run
tmpfs           5.0M  4.0K  5.0M   1% /run/lock
/dev/mmcblk0p1  253M   31M  222M  13% /boot
tmpfs           180M   24K  180M   1% /run/user/1000
pi@raspberrypi:~$
```