## 11. Capacity expansion and resource allocation

## 11.1 Question

After using TF to burn an image that is larger than the image memory, a part of the free memory will not be used, resulting in an error message indicating insufficient space, or failure to run large projects.

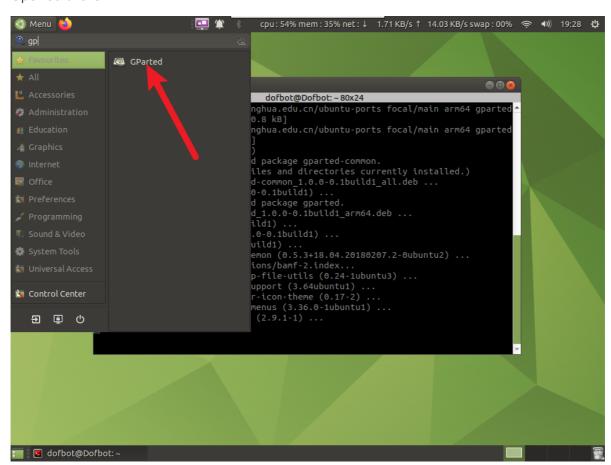
Note: If you are using the USB flash drive, SD card and system image file provided by Yahboom, you can skip this course. The expansion methods of U disk and SD card are the same. This section takes SD card as an example.

## 11.2 solution

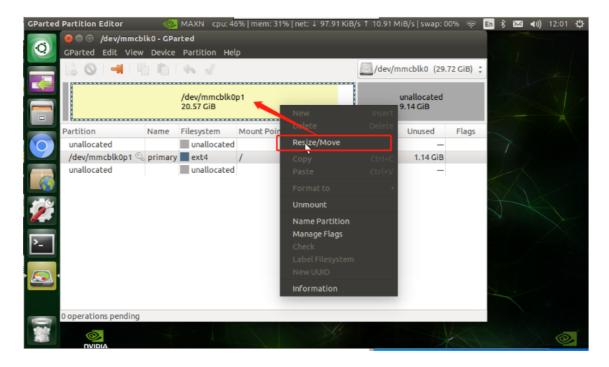
Install the expansion software and use the expansion software to expand the capacity.

```
sudo apt install gparted
```

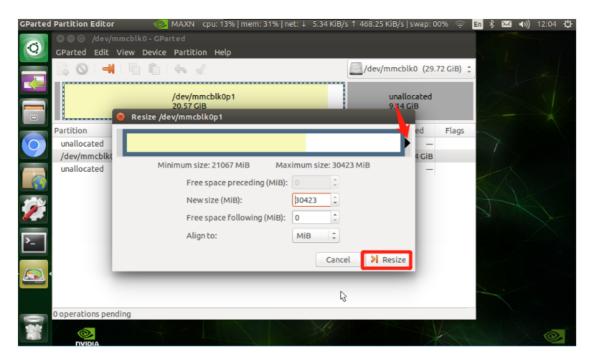
## Open software



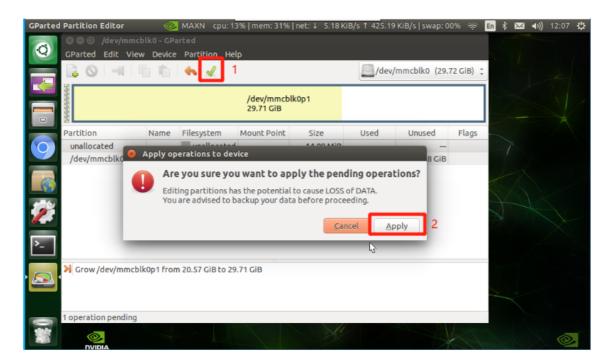
Click right key on mouse--> [/dev/mmcblk0p1] -->Resize/Move.



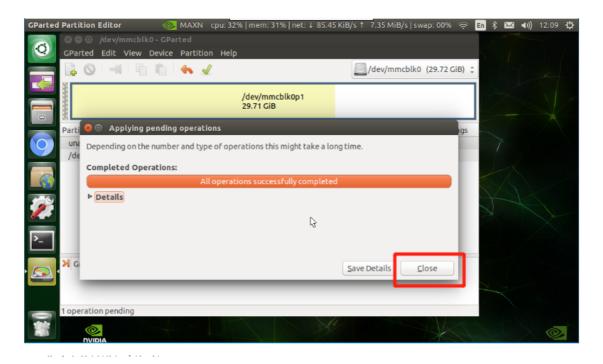
Pull the right frame to the top until the gray area becomes completely white->Resize



Click √ under the function bar -> Apply



Expansion completed!



Input the following command in the terminal to query and verify

```
df -h
```

Verify that the expansion is successful.

The 32G card expansion information is as follows.

```
dofbot@Dofbot: ~
                                  dofbot@Dofbot: ~ 80x24
Jnpacking gparted-common (1.0.0-0.1build1) ...
Selecting previously unselected package gparted.
Preparing to unpack .../gparted_1.0.0-0.1build1_arm64.deb ...
Jnpacking gparted (1.0.0-0.1build1) ...
Setting up gparted-common (1.0.0-0.1build1) ...
Setting up gparted (1.0.0-0.1build1) ...
Processing triggers for bamfdaemon (0.5.3+18.04.20180207.2-0ubuntu2) ...
Rebuilding /usr/share/applications/bamf-2.index...
Processing triggers for desktop-file-utils (0.24-1ubuntu3) ...
Processing triggers for mime-support (3.64ubuntu1) ...
Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu1) ...
Processing triggers for man-db (2.9.1-1) ...
dofbot@Dofbot:~$ df -h
                Size Used Avail Use% Mounted on
ilesystem
ıdev
                                    0% /dev
                1.8G
                       0 1.8G
tmpfs
                      4.4M 376M
                                    2% /run
                380M
                                   45% /
/dev/mmcblk0p2
                       13G
                            17G
                 29G
                                    0% /dev/shm
                1.9G
                        0 1.9G
cmpfs
                5.0M
cmpfs
                      4.0K 5.0M
                                    1% /run/lock
tmpfs
                1.9G
                         0 1.9G
                                   0% /sys/fs/cgroup
                                   47% /boot/firmware
/dev/mmcblk0p1
                255M
                      118M 138M
cmpfs
                380M
                       44K 380M
                                    1% /run/user/1000
```

ofbot@Dofbot:~S