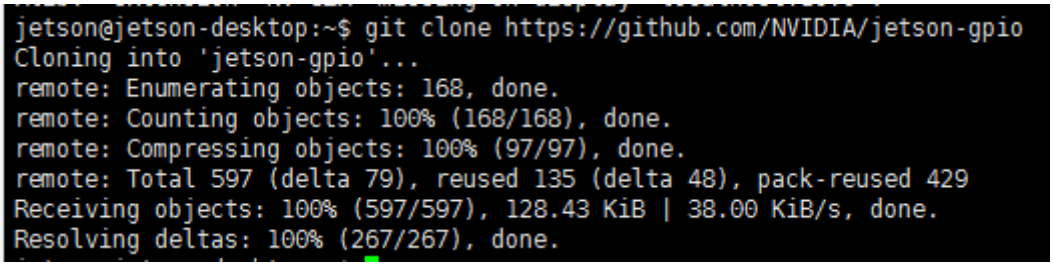
5.Hardware library configuration

You can check this link: https://pypi.org/project/Jetson.GPIO/ Or https://github.com/NVIDIA/jetson-gpio

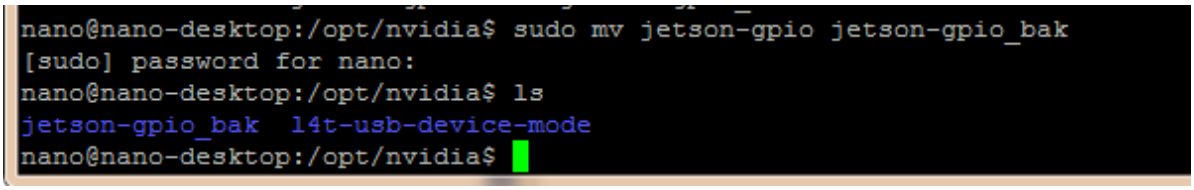
1.Environmental configuration

1. Download jetson-gpio：

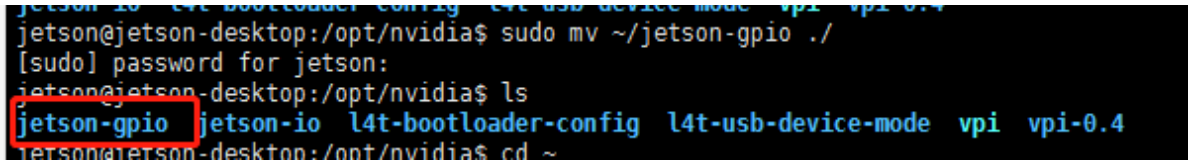
```
git clone https://github.com/NVIDIA/jetson-gpio
```



2.Move the downloaded files to the directory:/opt/nvidia. If this library exists in your directory, we need to backup the original directory as follows:



Then place the downloaded folder in the opt/nvidia/directory. Since I am placing the folder in the path~/and currently in opt/nvidia/, I can execute the following command to move the folder sudo mv~/jettson gpio/



3. Install pip3 tool

```
sudo apt-get install python3-pip
```

4. Enter the Jetson gpio library folder and install the library.

```
cd /opt/nvidia/jetson-gpio sudo python3 setup.py install
```

```
creating 'dist/Jetson.GPIO-2.0.12-py3.6.egg' and adding 'build/bdist.linux-aarc
removing 'build/bdist.linux-aarch64/egg' (and everything under it)
Processing Jetson.GPIO-2.0.12-py3.6.egg
Copying Jetson.GPIO-2.0.12-py3.6.egg to /usr/local/lib/python3.6/dist-packages
Adding Jetson.GPIO 2.0.12 to easy-install.pth file

Installed /usr/local/lib/python3.6/dist-packages/Jetson.GPIO-2.0.12-py3.6.egg
Processing dependencies for Jetson.GPIO==2.0.12
Finished processing dependencies for Jetson.GPIO==2.0.12
```

5. Before using, you also need to create a GPIO group, add your current account to this group, and grant usage permissions

```
sudo groupadd -f -r gpio
sudo usermod -a -G gpio user_name
```

```
nano@nano-desktop:/opt/nvidia/jetson-gpio$ sudo groupadd -f -r gpio
nano@nano-desktop:/opt/nvidia/jetson-gpio$ sudo usermod -a -G gpio nano
```

```
sudo cp /opt/nvidia/jetson-gpio/lib/python/Jetson/GPIO/99-gpio.rules
/etc/udev/rules.d/
```

In order for the new rule to take effect, you need to reboot or reload the udev rule by running the following command

```
sudo udevadm control --reload-rules && sudo udevadm trigger
```

Attention: user_ Name is the username you use, such as Jetson