

QR code recognition

QR code recognition

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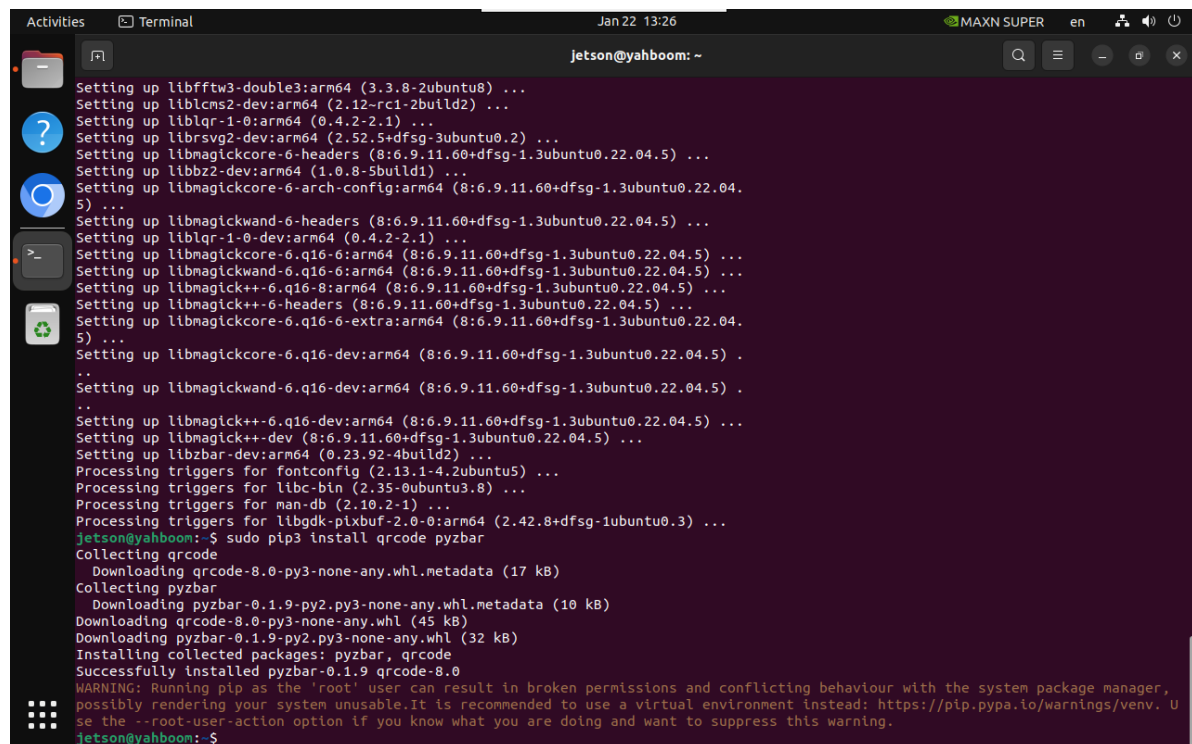
FAQ

'PIL.Image' has no attribute 'Resampling'

QR code (Quick Response Code) is a matrix barcode composed of squares that can be used to store various information.

1. Install dependencies

```
sudo apt install libzbar-dev -y
sudo pip3 install qrcode pyzbar
```



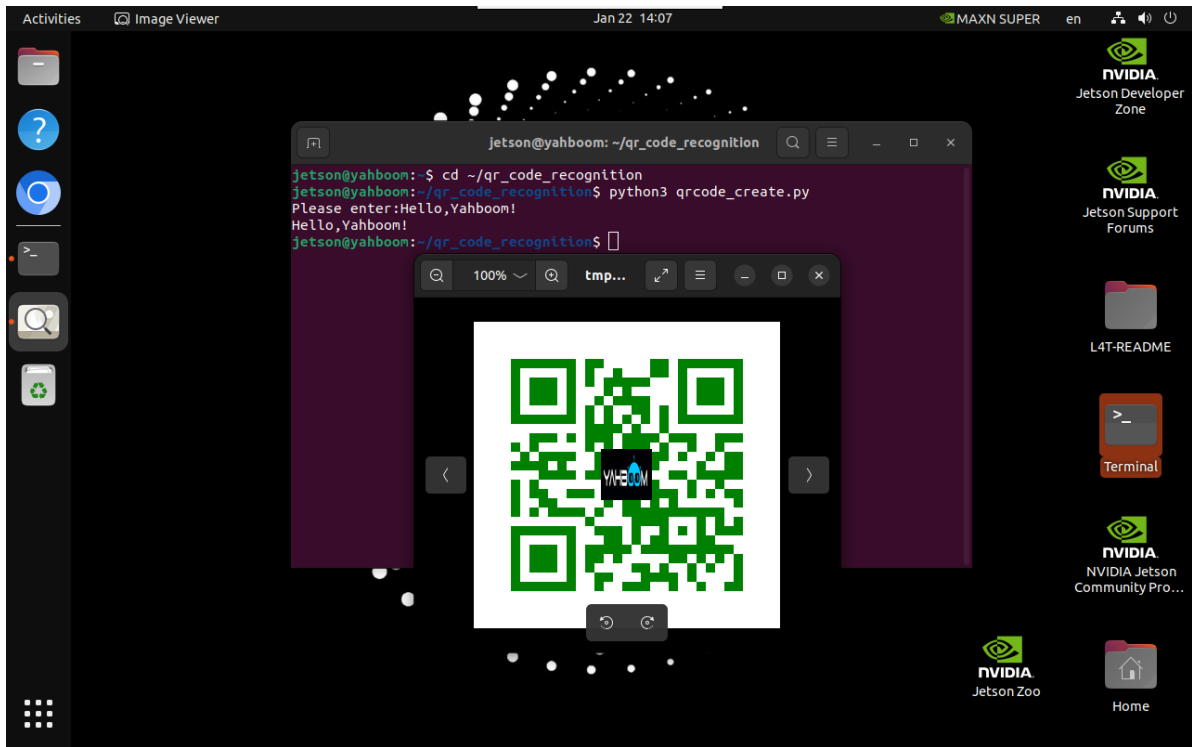
```
Activities  Terminal  Jan 22 13:26  MAXN SUPER  en  [icons]
jetson@yahboom: ~
Setting up libfftw3-double3:arm64 (3.3.8-2ubuntu8) ...
Setting up liblcms2-dev:arm64 (2.12-rc1-2build2) ...
Setting up liblqr-1-0:arm64 (0.4.2-2.1) ...
Setting up librsync2-dev:arm64 (2.52.5+dfsg-3ubuntu0.2) ...
Setting up libmagickcore-6-headers (8:6.9.11.60+dfsg-1.3ubuntu0.22.04.5) ...
Setting up libbz2-dev:arm64 (1.0.8-5build1) ...
Setting up libmagickcore-6-arch-config:arm64 (8:6.9.11.60+dfsg-1.3ubuntu0.22.04.5) ...
Setting up libmagickwand-6-headers (8:6.9.11.60+dfsg-1.3ubuntu0.22.04.5) ...
Setting up liblqr-1-0-dev:arm64 (0.4.2-2.1) ...
Setting up libmagickcore-6.q16-6:arm64 (8:6.9.11.60+dfsg-1.3ubuntu0.22.04.5) ...
Setting up libmagickwand-6.q16-6:arm64 (8:6.9.11.60+dfsg-1.3ubuntu0.22.04.5) ...
Setting up libmagick++-6.q16-8:arm64 (8:6.9.11.60+dfsg-1.3ubuntu0.22.04.5) ...
Setting up libmagick++-6-headers (8:6.9.11.60+dfsg-1.3ubuntu0.22.04.5) ...
Setting up libmagickcore-6.q16-6-extra:arm64 (8:6.9.11.60+dfsg-1.3ubuntu0.22.04.5) ...
Setting up libmagickcore-6.q16-dev:arm64 (8:6.9.11.60+dfsg-1.3ubuntu0.22.04.5) ...
Setting up libmagickwand-6.q16-dev:arm64 (8:6.9.11.60+dfsg-1.3ubuntu0.22.04.5) ...
Setting up libmagick++-6.q16-dev:arm64 (8:6.9.11.60+dfsg-1.3ubuntu0.22.04.5) ...
Setting up libmagick++-dev (8:6.9.11.60+dfsg-1.3ubuntu0.22.04.5) ...
Setting up libzbar-dev:arm64 (0.23.92-4build2) ...
Processing triggers for fontconfig (2.13.1-4.2ubuntu5) ...
Processing triggers for libc-bin (2.35-0ubuntu3.8) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libgdk-pixbuf-2.0-0:arm64 (2.42.8+dfsg-1ubuntu0.3) ...
jetson@yahboom:~$ sudo pip3 install qrcode pyzbar
Collecting qrcode
  Downloading qrcode-8.0-py3-none-any.whl.metadata (17 kB)
Collecting pyzbar
  Downloading pyzbar-0.1.9-py2.py3-none-any.whl.metadata (10 kB)
  Downloading qrcode-8.0-py3-none-any.whl (45 kB)
  Downloading pyzbar-0.1.9-py2.py3-none-any.whl (32 kB)
Installing collected packages: pyzbar, qrcode
Successfully installed pyzbar-0.1.9 qrcode-8.0
WARNING: Running pip as the 'root' user can result in broken permissions and conflicting behaviour with the system package manager, possibly rendering your system unusable. It is recommended to use a virtual environment instead: https://pip.pypa.io/warnings/venv. Use the --root-user-action option if you know what you are doing and want to suppress this warning.
jetson@yahboom:~$
```

2. Create QR code

```
cd ~/qr_code_recognition
```

```
python3 qrcode_create.py
```

After running the command, enter the hidden information of the QR code: The generated image is located in the /home/jetson/qr_code_recognition/figures folder

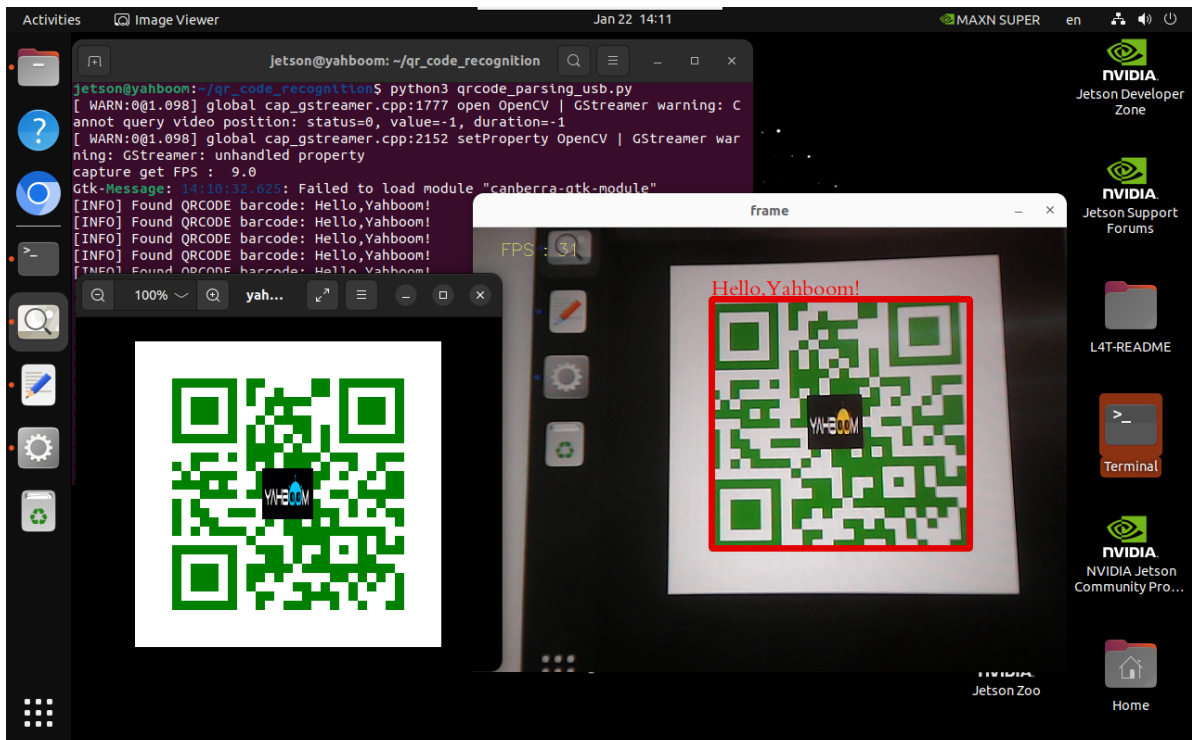


3. Parse QR code

3.1. USB camera

```
cd ~/qr_code_recognition
```

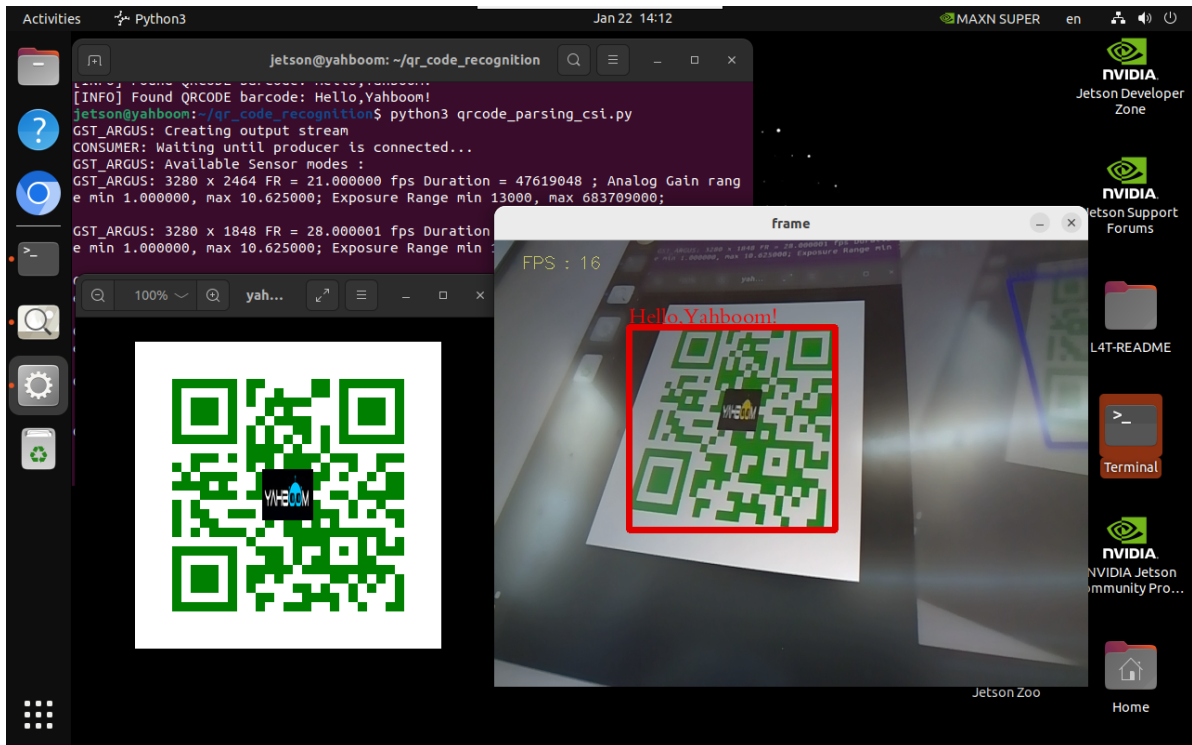
```
python3 qrcode_parsing_usb.py
```



3.2, CSI camera

```
cd ~/qr_code_recognition
```

```
python3 qrcode_parsing_csi.py
```



FAQ

'PIL.Image' has no attribute 'Resampling'

```
sudo pip3 install --upgrade pillow
```