

# OpenCV image writing

Function method: `cv2.imwrite('yahboom1.jpg', img)`.

The first parameter is the saved filename and the second parameter is the saved image.

Below we demonstrate the method of image writing. First, read an image `yahboom.jpg`, and then write `yahboom1.jpg`.

- Start Docker

After entering the Raspberry Pi 5 desktop, open a terminal and run the following command to start the container corresponding to Dofbot:

```
./Docker_Ros.sh
```

Access Jupyter Lab within Docker:

```
IP:9999 // Example: 192.168.1.11:9999
```

Code path: `/root/Dofbot/4.opencv/1.OpenCV_basic/02_write_pic.ipynb`

```
import cv2
# 1 Reading of files 2 Encapsulation format analysis 3 Data decoding 4 Data
loading
img = cv2.imread('yahboom.jpg', 1)
# cv2.imshow('yahboom, img) #See the explanation below
cv2.imwrite('yahboom1.jpg', img) # 1 name 2 dat
```

The `cv2.imshow('yahboom, img)` function in jupyLab cannot be executed. If you need to use this sentence to display the read image, you need to execute the python file through the command, command: `python3 XX.py`

```
#bgr8 to jpeg format
import enum
import cv2
def bgr8_to_jpeg(value, quality=75):
    return bytes(cv2.imencode('.jpg', value)[1])
```

```
import ipywidgets.widgets as widgets
image_widget = widgets.Image(format='jpg', width=320, height=240)
display(image_widget)
img = cv2.imread('yahboom1.jpg',1)
image_widget.value = bgr8_to_jpeg(img)
```

When the code block finishes running, you can see that the `yahboom.jpg` image is written to `yahboom1.jpg`.

