

## 4. OpenCV Image Quality

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4.2. Actual effect display

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Parameter meaning:

`cv2.CV_IMWRITE_JPEG_QUALITY`: Set the image quality of the image format to .jpeg or .jpg, the value is 0---100 (the larger the value, the higher the quality), the default is 95

`cv2.CV_IMWRITE_WEBP_QUALITY`: Set the image quality of the image format to .webp format, the value is 0--100

`cv2.CV_IMWRITE_PNG_COMPRESSION`: Set the compression ratio of the .png format, the value is 0--9 (the larger the value, the greater the compression ratio), the default is 3

### 4.2. Actual effect display

Code path:

/home/pi/project\_demo/06.Open\_source\_cv\_fundamentals\_course/A.introduction/Introduction\_to\_OpenCV/04\_OpenCV\_Img\_Quality.ipynb

```
import cv2
img = cv2.imread('yahboom.jpg',1)
cv2.imwrite('yahboomTest.jpg', img, [cv2.IMWRITE_JPEG_QUALITY, 50])
#1M 100k 10k 0-100 lossy compression
```

```
# 1 lossless 2 transparency attribute
import cv2
img = cv2.imread('yahboom.jpg',1)
cv2.imwrite('yahboomTest.png', img, [cv2.IMWRITE_PNG_COMPRESSION,0]) # jpg 0
high compression ratio 0-100 png 0 low compression ratio 0-9 ``` ``python #bgr8
to jpeg format import enum import cv2 def bgr8_to_jpeg(value, quality=75): return
bytes(cv2.imencode('.jpg', value)[1]) ``` ``python import ipywidget s.widgets as
widgets image_widget1 = widgets.Image(format='jpg', ) image_widget2 =
widgets.Image(format='jpg', ) # create a horizontal box container to place the
image widget next to each other image_container = widgets.HBox([image_widget1,
image_widget2]) # display the container in this cell's output
display(image_container) img1 = cv2.imread('yahboomTest.jpg',1) img2 =
cv2.imread('yahboomTest.png',1) image_widget1.value = bgr8_to_jpeg(img1)
image_widget2.value = bgr8_to_jpeg(img2) ``` 
```

