

## 2. Cut the image

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Image cutting first reads the image, and then obtains the pixel area in the array. In the following code, select the shape area X: 300-500 Y: 500-700. Note that the image size is 800\*800, so the selected area should not exceed this resolution.

**The code is running on jupyter lab**

```
import cv2

img = cv2.imread('yahboom.jpg', 1)

dst = img[500:700,300:500] #select the rectangular area x: 300-500 y: 500-700

#cv2.imshow('image',dst)

#cv2.waitKey(0)
```

The following will display two compressed image comparison displays in the jupyterLab control.

```
#bgr8 to jpeg format

import enum

import cv2

def bgr8_to_jpeg(value, quality=75):

    return bytes(cv2.imencode('.jpg', value)[1])
```

Compare the before and after images below:

```
import ipywidgets.widgets as widgets

image_widget1 = widgets.Image(format='jpg', )

image_widget2 = widgets.Image(format='jpg', )

# display the container in this cell's output

display(image_widget1)

display(image_widget2)

img1 = cv2.imread('yahboom.jpg',1)
```

```
image_widget1.value = bgr8_to_jpeg(img1) #Original image
```

```
image_widget2.value = bgr8_to_jpeg(dst) #Cut image
```

