2. Cut the image

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

Code path: /home/pi/Yahboom_Project/1.OpenCV course/02Geometric transformation/02_Picture cutting.ipynb

```
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
```