4. Line drawing

4.1.OpenCV line drawing

When using OpenCV to process images, we sometimes need to draw line segments, rectangles, etc. on the image. In OpenCV, use the

cv2.line（dst，pt1，pt2，color，thickness=None，lineType=None，shift=None）function to draw line segments.

Parameter meaning:

dst: output image.

pt1，pt2: required parameters. The coordinate points of the line segment, indicating the starting point and the end point respectively

color: required parameter. Used to set the color of the line segment

thickness: optional parameter. Used to set the width of the line segment

lineType: optional parameter. Used to set the type of line segment, optional 8 (8 adjacent connecting lines - default), 4 (4 adjacent connecting lines) and cv2.LINE_AA for anti-aliasing

4.2. Actual effect display

Source code path:

/home/pi/project_demo/06.Open_source_cv_fundamentals_course/C.Image_Processing_Text_Drawing/04_Line_Drawing.ipynb

```
import cv2
import numpy as np
import matplotlib.pyplot as plt

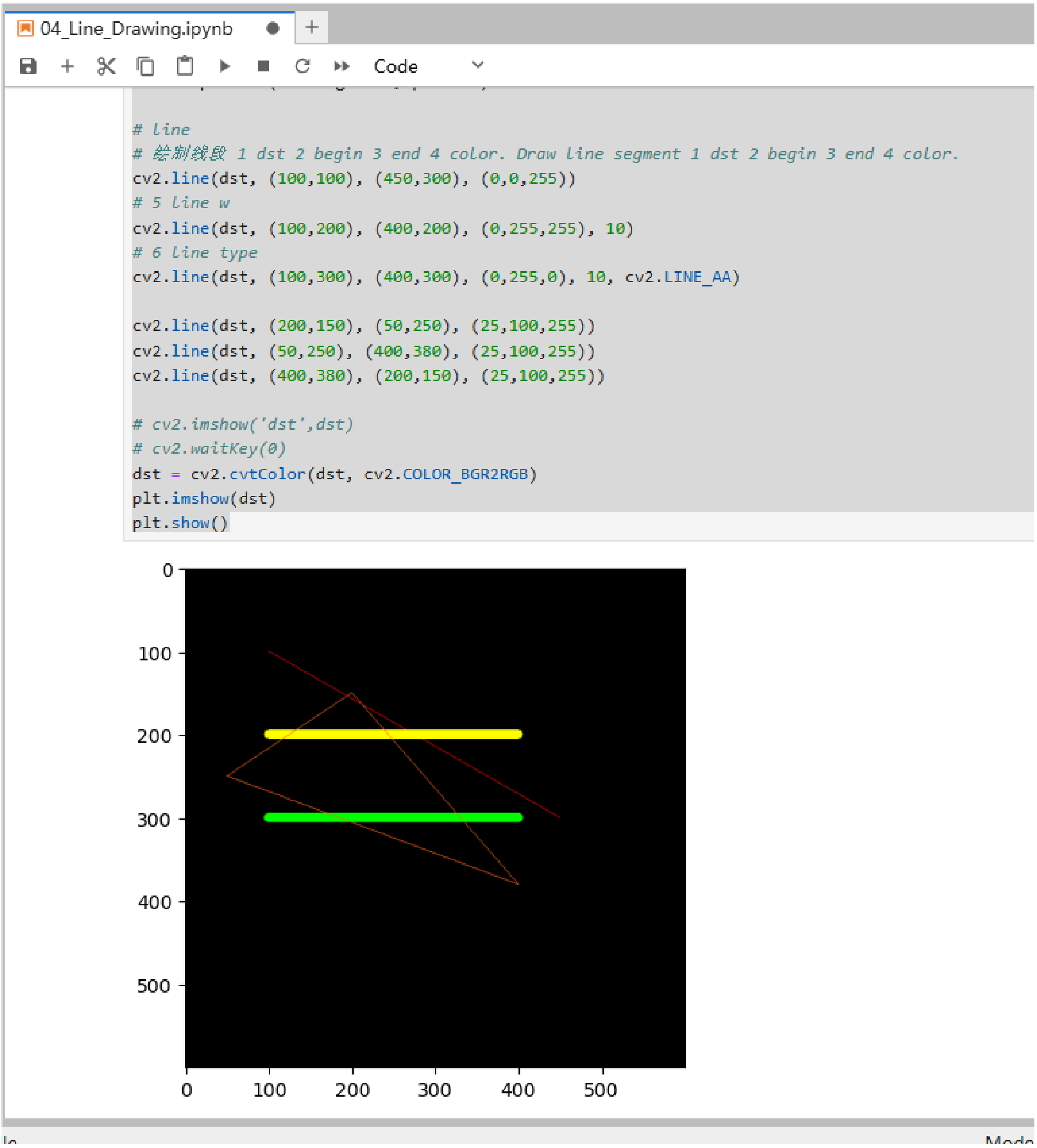
newImageInfo = (600, 600, 3)
dst = np.zeros(newImageInfo,np.uint8)

# line
# 绘制线段 1 dst 2 begin 3 end 4 color. Draw line segment 1 dst 2 begin 3 end 4 color.
cv2.line(dst, (100,100), (450,300), (0,0,255))
# 5 line w
cv2.line(dst, (100,200), (400,200), (0,255,255), 10)
# 6 line type
cv2.line(dst, (100,300), (400,300), (0,255,0), 10, cv2.LINE_AA)

cv2.line(dst, (200,150), (50,250), (25,100,255))
cv2.line(dst, (50,250), (400,380), (25,100,255))
```

```
cv2.line(dst, (400,380), (200,150), (25,100,255))

# cv2.imshow('dst',dst)
# cv2.waitKey(0)
dst = cv2.cvtColor(dst, cv2.COLOR_BGR2RGB)
plt.imshow(dst)
plt.show()
```



```
# line
# 绘制线段 1 dst 2 begin 3 end 4 color. Draw line segment 1 dst 2 begin 3 end 4 color.
cv2.line(dst, (100,100), (450,300), (0,0,255))
# 5 line w
cv2.line(dst, (100,200), (400,200), (0,255,255), 10)
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cv2.line(dst, (200,150), (50,250), (25,100,255))
cv2.line(dst, (50,250), (400,380), (25,100,255))
cv2.line(dst, (400,380), (200,150), (25,100,255))

# cv2.imshow('dst',dst)
# cv2.waitKey(0)
dst = cv2.cvtColor(dst, cv2.COLOR_BGR2RGB)
plt.imshow(dst)
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