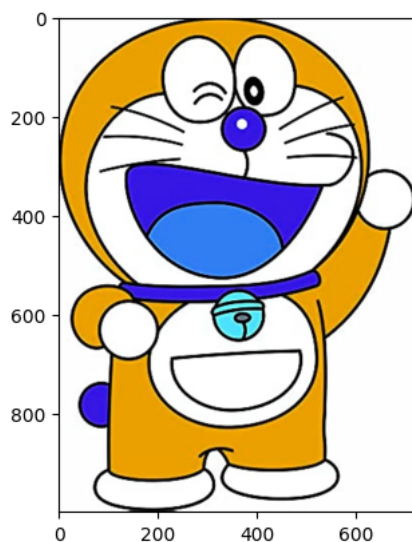


```
import cv2

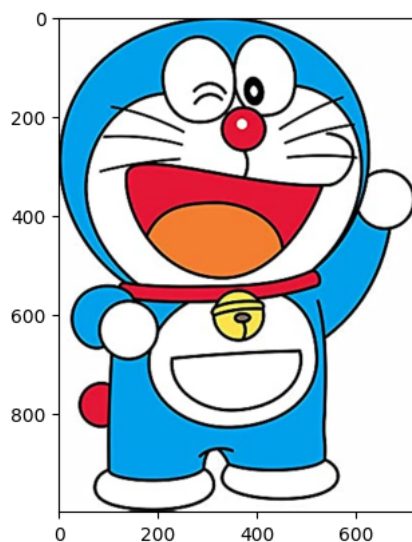
flags = [i for i in dir(cv2) if i.startswith('COLOR_')]

import matplotlib.pyplot as plt
import numpy as np

nemo = cv2.imread('/content/doraemon.jpg')
plt.imshow(nemo)
plt.show()
```



```
nemo = cv2.cvtColor(nemo, cv2.COLOR_BGR2RGB)
plt.imshow(nemo)
plt.show()
```



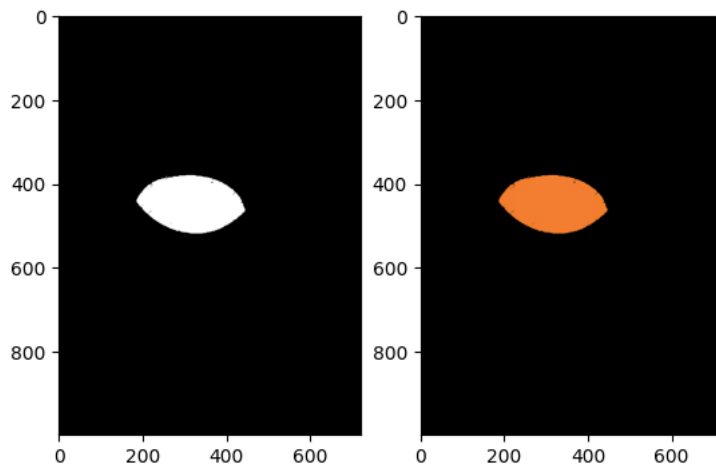
```
hsv_nemo = cv2.cvtColor(nemo, cv2.COLOR_RGB2HSV)

light_orange = (1, 190, 200)
dark_orange = (18, 255, 255)

mask = cv2.inRange(hsv_nemo, light_orange, dark_orange)

result = cv2.bitwise_and(nemo, nemo, mask=mask)
```

```
plt.subplot(1, 2, 1)
plt.imshow(mask, cmap="gray")
plt.subplot(1, 2, 2)
plt.imshow(result)
plt.show()
```



```
light_white = (0, 0, 200)
dark_white = (145, 60, 255)
```

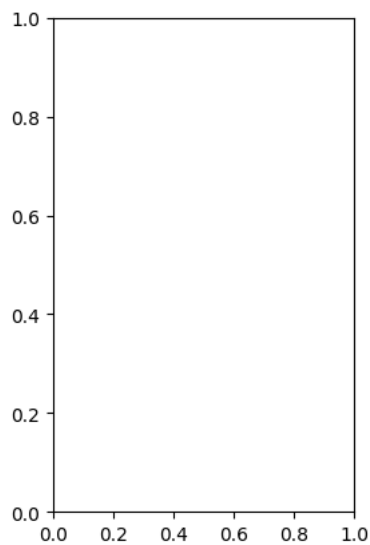
```
lw_square = np.full((10, 10, 3), light_white, dtype=np.uint8) / 255.0
dw_square = np.full((10, 10, 3), dark_white, dtype=np.uint8) / 255.0
```

```
plt.subplot(1, 2, 1)
plt.imshow(hsv_to_rgb(lw_square))
plt.subplot(1, 2, 2)
plt.imshow(hsv_to_rgb(dw_square))
plt.show()
```

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-13-ef94d57bee93> in <cell line: 5>()
      3
      4 plt.subplot(1, 2, 1)
----> 5 plt.imshow(hsv_to_rgb(lw_square))
      6 plt.subplot(1, 2, 2)
      7 plt.imshow(hsv_to_rgb(dw_square))
```

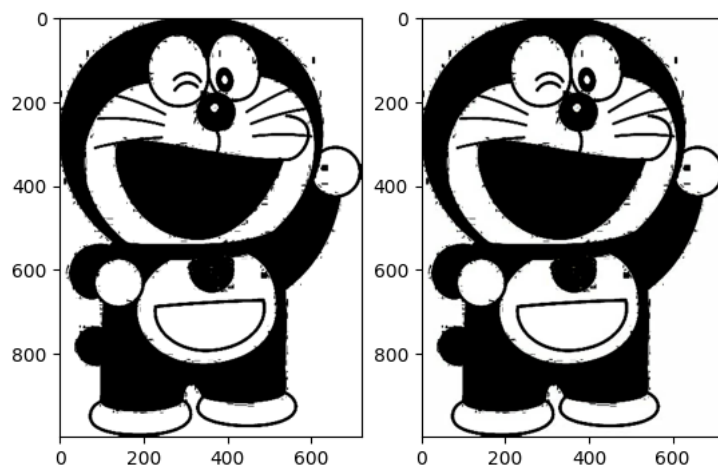
NameError: name 'hsv_to_rgb' is not defined

SEARCH STACK OVERFLOW



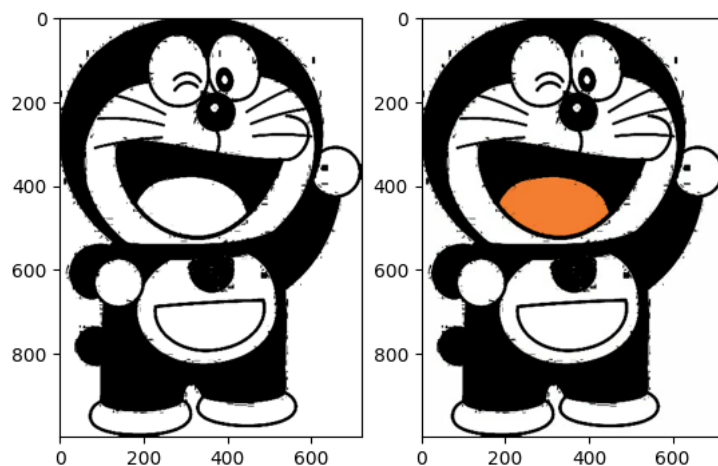
```
mask_white = cv2.inRange(hsv_nemo, light_white, dark_white)
result_white = cv2.bitwise_and(nemo, nemo, mask=mask_white)
```

```
plt.subplot(1, 2, 1)
plt.imshow(mask_white, cmap="gray")
plt.subplot(1, 2, 2)
plt.imshow(result_white)
plt.show()
```



```
final_mask = mask + mask_white
```

```
final_result = cv2.bitwise_and(nemo, nemo, mask=final_mask)
plt.subplot(1, 2, 1)
plt.imshow(final_mask, cmap="gray")
plt.subplot(1, 2, 2)
plt.imshow(final_result)
plt.show()
```



```
blur = cv2.GaussianBlur(final_result, (7, 7), 0)
plt.imshow(blur)
plt.show()
```



```
path = "/content/dora/doraemon.jpg"
```

```
nemos_friends = []
```

```
for i in range(6):
```

```
    friend = cv2.cvtColor(cv2.imread(path + str(i) + ".jpg"), cv2.COLOR_BGR2RGB)
```

```
    nemos_friends.append(friend)
```

```
-----
error                                Traceback (most recent call last)
```

```
<ipython-input-54-e626fa7f526f> in <cell line: 4>()
```

```
3 nemos_friends = []
```

```
4 for i in range(6):
```

```
----> 5     friend = cv2.cvtColor(cv2.imread(path + str(i) + ".jpg"), cv2.COLOR_BGR2RGB)
```

```
6     nemos_friends.append(friend)
```

```
error: OpenCV(4.7.0) /io/opencv/modules/imgproc/src/color.cpp:182: error: (-215:Assertion failed)
!_src.empty() in function 'cvtColor'
```

SEARCH STACK OVERFLOW

```
results = [segment_fish(friend) for friend in nemos_friends]
```