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import cv2

import numpy as np


# Load the original color image

image = cv2.imread(r"C:\Users\SAIL\Downloads\CV\rainflower.jpg")

if image is None:

    print("Error: Image not found or path is incorrect.")

    exit()


# Define kernel

kernel = np.ones((5, 5), np.uint8)


# Split the image into color channels

b, g, r = cv2.split(image)


# Apply Opening to each channel

b_opened = cv2.morphologyEx(b, cv2.MORPH_OPEN, kernel)

g_opened = cv2.morphologyEx(g, cv2.MORPH_OPEN, kernel)

r_opened = cv2.morphologyEx(r, cv2.MORPH_OPEN, kernel)


# Merge back the channels

opened_color = cv2.merge((b_opened, g_opened, r_opened))


# Display results

cv2.imshow('Original', image)

cv2.imshow('Opened (Color)', opened_color)
```

`cv2.waitKey(0)`

`cv2.destroyAllWindows()`

