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

img2 = cv.imread('cat1.jpg')
img2 = cv.cvtColor(img2, cv.COLOR_BGR2GRAY)
plt.figure(figsize=(20,5))
plt.subplot(1,2,1)
plt.title('input')
plt.imshow(img2, cmap='gray')
left = np.zeros((img2.shape[0],50))
img2 = np.concatenate((img2, left), axis=1)
img2 = np.concatenate((left, img2), axis=1)
up = np.zeros((50, img2.shape[1]))
img2 = np.concatenate((img2, up), axis=0)
img2 = np.concatenate((up, img2), axis=0)
plt.subplot(1,2,2)
plt.title('output')
plt.imshow(img2, cmap='gray')
plt.axis('off')
plt.show()

```

