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import cv2
import numpy as np

B = np.array([[0, 1, 0], [1, 1, 1], [0, 1, 0]], dtype=np.uint8)

img = cv2.imread(r"D:\FCI\The 3 Level\The Second Term\New\Digital Image Processing\imgs\BonusTask\DilationInput.png", cv2.IMREAD_GRAYSCALE)

pad_size = B.shape[0] // 2
img_padded = cv2.copyMakeBorder(img, pad_size, pad_size, pad_size, pad_size, cv2.BORDER_CONSTANT, value=0)

img_dilated = np.zeros_like(img_padded)
for i in range(pad_size, img_padded.shape[0] - pad_size):
    for j in range(pad_size, img_padded.shape[1] - pad_size):
        if np.any(np.logical_and(B, img_padded[i-pad_size:i+pad_size+1, j-pad_size:j+pad_size+1])):
            img_dilated[i, j] = 255

img_dilated = img_dilated[pad_size:-pad_size, pad_size:-pad_size]

cv2.imshow("Input Image", img)
cv2.imshow("Dilated Image", img_dilated)
cv2.waitKey(0)
cv2.destroyAllWindows()

```