```
import numpy as np
import matplotlib.pyplot as plt
import cv2 as cv
image = cv.imread("ErosionDilation.jpg",0)
for i in range(image.shape[0]):
    for j in range(image.shape[1]):
        if image[i][j]>200:
            image[i][j]=0
        else:
            image[i][j]=1
kernel = np.ones((5,5),np.uint8)
erode = cv.erode(image,kernel=kernel,iterations=1)
dilate = cv.dilate(image, kernel=kernel, iterations=1)
open = cv.dilate(erode, kernel=kernel, iterations=1)
plt.figure(figsize=(20,5))
plt.subplot(1,2,2)
plt.title("output")
plt.imshow(open,cmap="gray")
plt.axis(False)
plt.subplot(1,2,1)
plt.imshow(image,cmap="gray")
plt.title("input")
plt.axis(False)
plt.show()
```

input output



