

myerosion() and mydilation() function used in below program are not inbuilt function

These function are defined by me and source code is present in my Github repository

<https://github.com/amardeep09/Computer-vision-and-Image-processing>

Q. Implement opening and closing as given in Figure 9.11 (3rd Edition, Gonzalez)



CODE:

```
img = imread("Fig_9.11.tif");

SE = [1 1 1; 1 1 1; 1 1 1]; %SE of 3 x 3 size

a1 = myerosion(img,SE); %erosion of given image
a2 = mydilation(myerosion(img,SE),SE); %opening of image
a3 = mydilation(a2,SE); %dilation of opened image using my own function
a4 = myerosion(mydilation(a2,SE),SE); % closing of a2(opening of img)
figure, %to display in new window
subplot(2,3,1); % display image in 2 rows and 6 columns
imshow(img);
```

```

title("original"); %display original image
subplot(2,3,2);
imshow(a1); %display erosion of given image
title("erosion of img");
subplot(2,3,3);
imshow(a2); %display open of given image
title("open of img");
subplot(2,3,4);
imshow(a3); %display dilation of open image
title("dilation of a2");
subplot(2,3,5);
imshow(a4); %display closing of open image
title("closing of a2");

```

output:

rive > morphology

