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CLASS: BE A(A1)

clc;

clear all;

close all;

A=imread('C:\Users\Public\Pictures\Sample Pictures\ao.jpg');

subplot(1,2,1);

imshow(A);

title('Original Image');

B=im2bw(A);

subplot(1,2,2);

imshow(B);

title('Binary Image');

[R,C]=size(B);

T=B;

%s1=[1 1 1;1 1 1;1 1 1]; Structuring element

%s2=[0 0 0;1 1 1;0 0 0];

for x=2:R-1

for y=2:C-1

a1=[1\*T(x-1,y-1) 1\*T(x-1,y) 1\*T(x-1,y+1) 1\*T(x,y-1) 1\*T(x,y) 1\*T(x,y+1) 1\*T(x+1,y-1) 1\*T(x+1,y) 1\*T(x+1,y+1)];

a2=[1\*T(x,y-1) 1\*T(x,y) 1\*T(x,y+1)];

D1(x,y)=min(a1);

E1(x,y)=max(a1);

end

end

%without function

figure;

subplot(1,3,1);

imshow(A);

title('Original Image');

subplot(1,3,2);

imshow(D1);

title('Dilation inbuilt');

subplot(1,3,3);

imshow(E1);

title('Erosion inbuilt');

%with function

figure;

subplot(1,4,1);

imshow(A);

title('Original Image');

D = imdilate(A,a1);

subplot(1,4,2);

imshow(D);

title('Dilation function');

E = imerode(A,a1);

subplot(1,4,3);

imshow(E);

title('Erosion function');

figure;

C = imclose(A,a1);

subplot(2,2,1);

imshow(C);

title('CLOSING');

O = imopen(A,a1);

subplot(2,2,2);

imshow(O);

title('opening');







