i = imread('image-slice055.jpg');

%imshow (i);

%Double thresholding

[m,n] = size(i);

i2 = zeros(size(i));

for y = 1:m

for x = 1:n

if i(y,x) >= 90 && i(y,x) <= 120

i2(y,x) = 1;

else

i2(y,x) = 0;

end

end

end

%imshow(i2), title('Double Thresholding Segmentation');

%dilated image

se2 = strel('disk', 15);

i3 = imdilate(i2, se2);

%figure,imshow(i3);

%opening method

se4 = strel('disk', 3);

i4 = imclose(i3, se3);

figure,imshow(i4);

%Closing method

se3 = strel('disk', 3);

i5 = imclose(i4, se3);

%figure,imshow(i4);

imwrite(i5, 'image-slice055.jpg');