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**Bsit 21043 7th Semester Morning**

**Assignment 5**

**Equalidian distance**

A = zeros(100, 100); % Initialize a 100x100 matrix with zeros

Cx = 50; % X-coordinate of the circle center

Cy = 50; % Y-coordinate of the circle center

Radius = 20; % Radius of the circle

for i = 1:100

for j = 1:100

% Calculate the Euclidean distance from (i, j) to the center (Cx, Cy)

distance = sqrt((Cx - i)^2 + (Cy - j)^2);

% If the distance is less than or equal to the radius, set pixel value to 255

if distance <= Radius

A(i, j) = 255;

end

end

end

% Display the matrix as an image

imshow(A, []);