# EXPERIMENT – 5

## Aim:

To perform Gray level slicing with and without background on an image.

## Software used:

MATLAB

## Theory:

One of the most valuable points for Gray-level image enhancement is that in this technique, the Gray-level image enhancement techniques are directly performed on the specific pixel of an image. One of the most valuable points for Gray-level image enhancement is that the process is directly performed on the particular pixel of an image in this technique. The modification value of every single pixel of the processed image is dependent on the original pixel value.

Processing the Gray-level image is comparatively more efficient than working on the true colour image, so it is more focused and striking for researchers, like point process, etc. In this experiment, the pixel we are looking at has a two-dimensional Gray image with 256 levels, ranging from 0 to 255. The horizontal axis will be from 0 to 255, but the vertical axis is reliant on the number of pixels and the distribution of Gray-level values of an image.

Text

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Code: -

clc; clear all;

i=imread('test1.jfif');

j=double(i);

k=double(i);

[row,col]=size(j);

T1=input('Enter the Lowest threshold value:');

T2=input('Enter the Highest threshold value:');

for x=1:row

for y=1:col

if((j(x,y)>T1) && (j(x,y)<T2))

j(x,y)=i(x,y);

k(x,y)=255;

else

j(x,y)=0;

k(x,y)=0;

end

end

end

subplot(311), imshow(i), title('Original image')

subplot(312), imshow(uint8(j)), title('Graylevel slicing with background')

subplot(313), imshow(uint8(k)), title('Graylevel slicing without background')

## Result:

Timeline

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