

Exercise 1 – deadline: 14/1/1403

Geometrical spatial operations:

1- Perform the scaling (1.5×1.5), translation and rotation (90°) operations for Image 1 and plot the final image in each case.

Histogram equalization:

1- Apply histogram equalization for Image 2 and plot the histogram before and after equalization.

Filtering in Spatial Domain:

1- Apply each spatial filters to the image according to the below table and compare the original image and the image after using the filter.

section	Filter name	Size of Filter	Image
a	Average(Mean) filter	5×5	Image1
b	Median filter	5×5	Image2
c	Laplacian filter	5×5	Image3
d	Sobel(X and Y) filter	7×7	Image4

Write a report with description of steps in each number and each case and also put the screenshot of the original images and results in the report.

Attach the code.

Make HW1.zip