**Report 01: Histogram Equalization**

***[Problem 01]***

*(a) Write a computer program for computing the histogram of an image.*

*(b) Implement the histogram equalization technique.*

*(c) Your program must be general to allow any gray-level image as its input.*

*As a minimum, your report should include the original image, a plot of its histogram, a plot of the histogram-equalization, transformation function, the enhanced image, and a plot of its histogram.*

**[Solve]**

Program:

1. problem1.m.

Export ALL results in one figure for each input image.

Input:

(1) original\Fig1.jpg.

(2) original \Fig2.jpg.

Output:

Fig1-histogram and histogram equalization image.jpg (Figure 1)

Fig2-histogram and histogram equalization image.jpg (Figure 2)

Each figure consists 4 part:

(1) Original images

(2) Histogram of Original images. Use function bar.

(3) Images after Equalization

(4) Histogram of images after Equalization.

**Transformation Function:**



