

### **Problem 1**

Load the grayscale image Image.bmp into Matlab.

- 1) Display the image
- 2) Thresholding
  - a. Select a threshold.
  - b. Perform thresholding on input image and display the resulting image.
- 3) Contrast stretching
  - a. Perform contrast stretching on input image and display the resulting image. The range of pixel intensities that is being stretched should include 90% of the pixels, except for 5% lowest valued and 5% highest valued ones. The target range is [0 255].
- 4) Gamma correction
  - a. Select a gamma.
  - b. Perform gamma correction on the input image and display the resulting image.
- 5) Histogram equalization
  - a. Perform histogram equalization on the input image and display the resulting image.