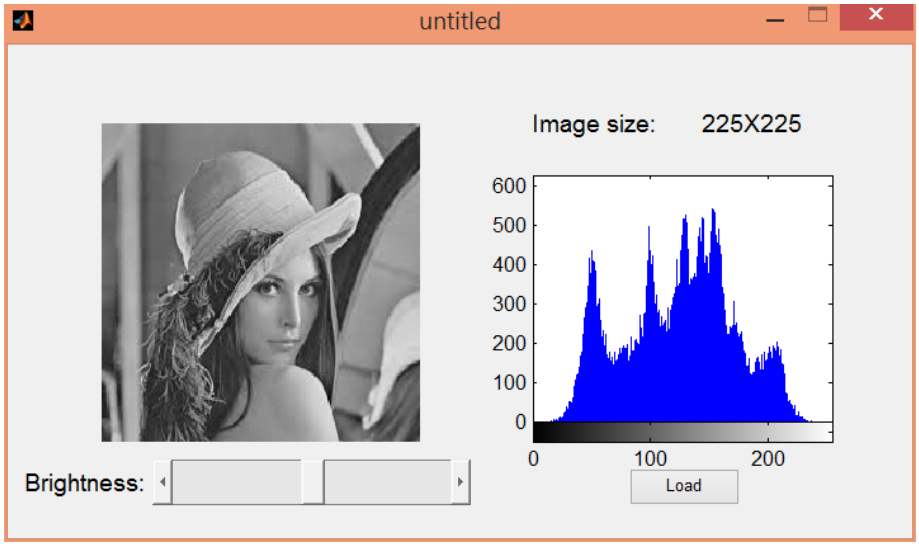
Lab 8

1. A grayscale or gray-level image is an image in which the value associated with each pixel represents its intensity (or brightness) in the image. Design a GUI program such that:
   (1) The user is able to load a gray-level image by using a `Push Button`
   (2) The program then automatically displays the size of the image
   (3) The program then automatically plots the histogram of the image
   (4) The user can adjust the brightness of the image by using a `Slider`
   Use "02Lena.png" from Lab 2 to test your program. The GUI program should look like this:



2. Design a GUI program to blend 2 images. The program needs to contain 3 `Axes`. Two of the `Axes` show two original images. The other `Axes` shows the blended image. The program need to contain a `Slider` with which the user can adjust the weights of the two original images to the blended image. Use "rice.png" and "cameraman.tif" to test your program. The GUI program should look like this:

3. Design a GUI program to rotate an image. The program needs to allow the user to load an image, to display the loaded image, to provide a rotation angle, and to display the rotated image. The user should be able to store the rotated image too. Do NOT use the built-in function `imrotate`.