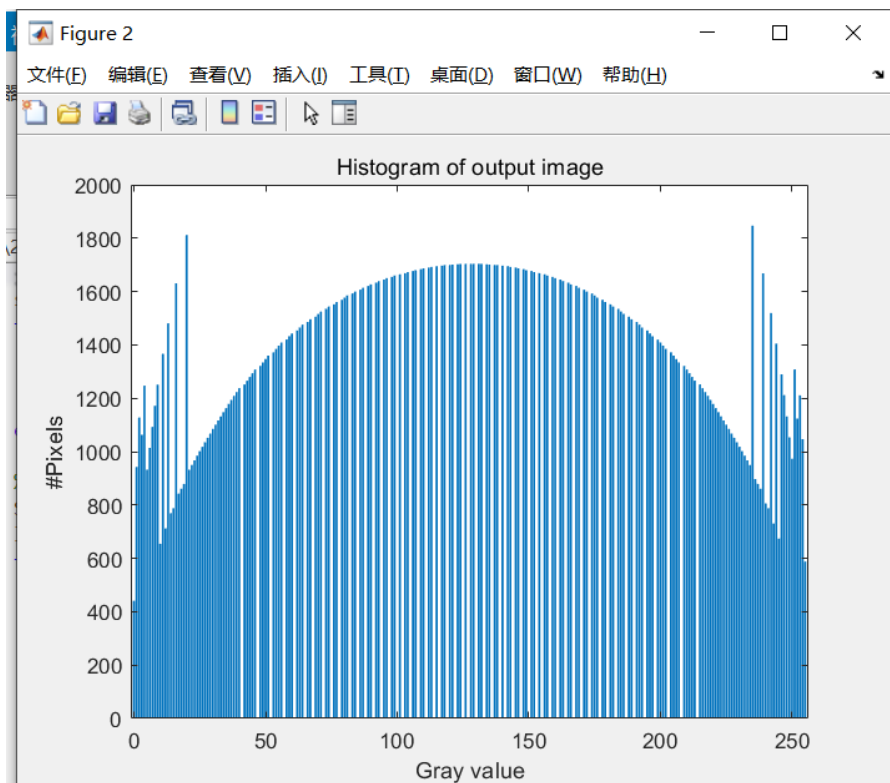
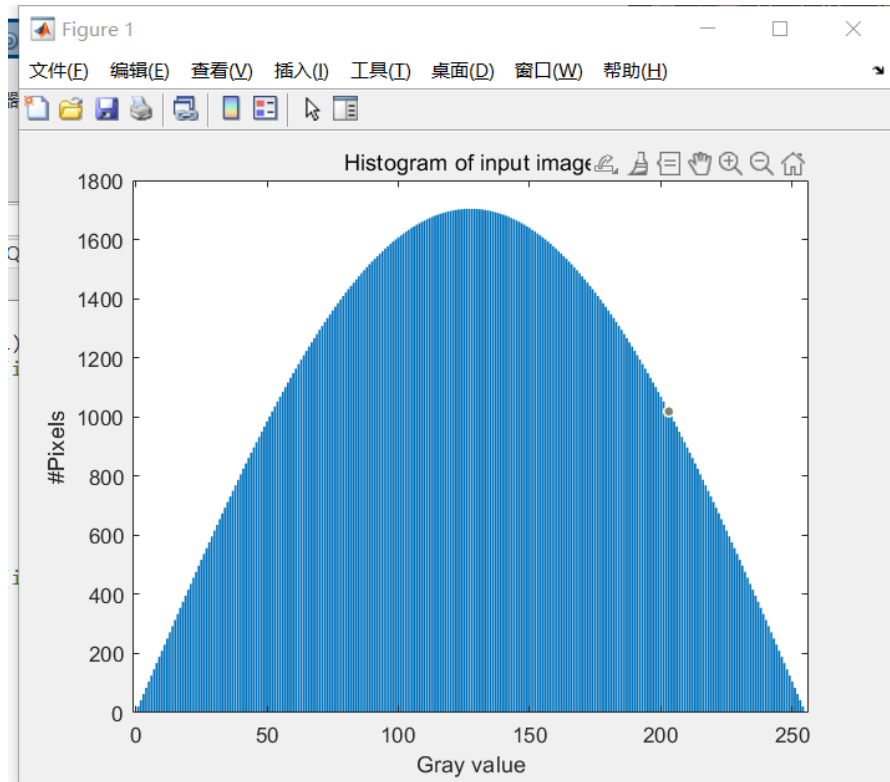
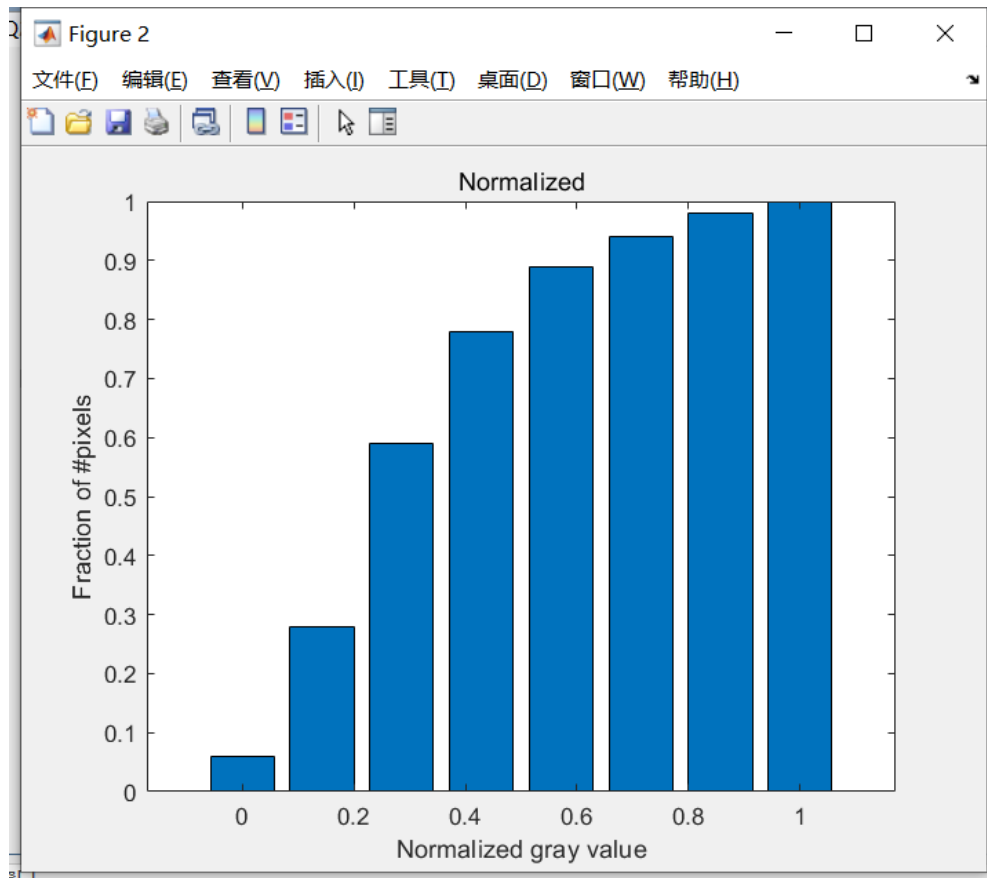
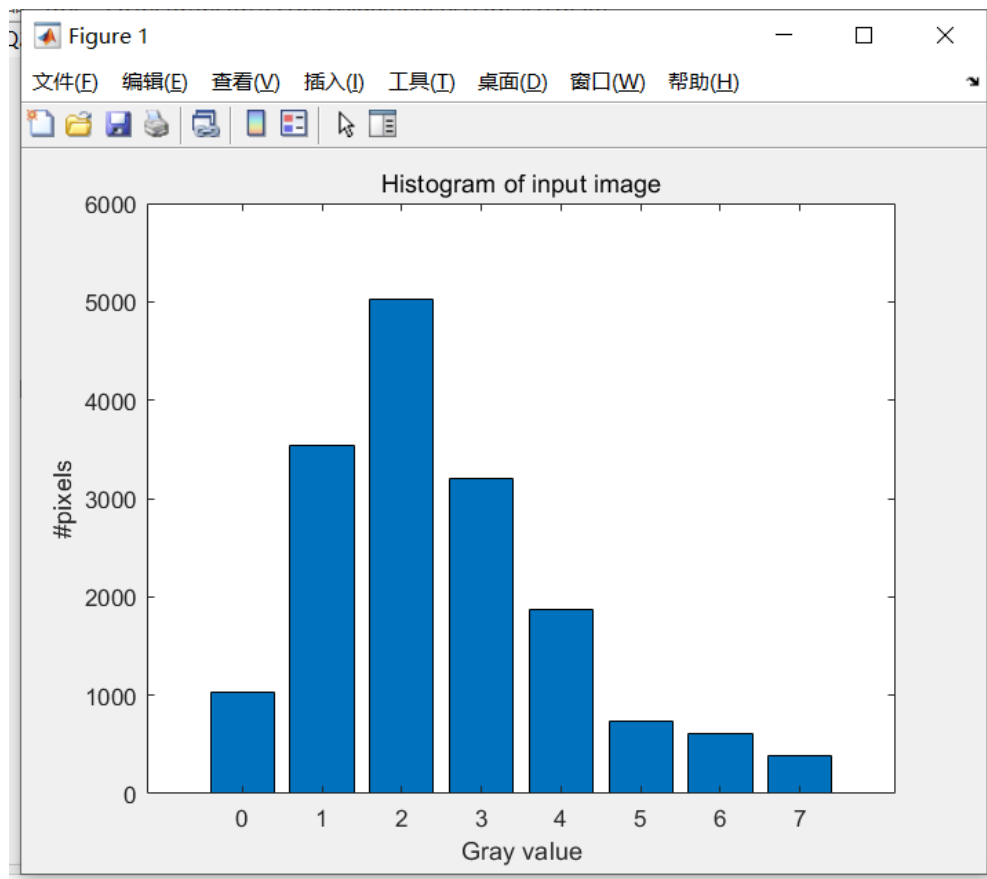


Note: All my work, I implemented by MATLAB, and I pushed them to my private repository on [Github](#), and [A1](#) under this repository to do version control. If there is any issue of assignment, I can give marker access to check my versions.

Q1.



Q2. Histograms of input image, normalized image and output image are shown below.



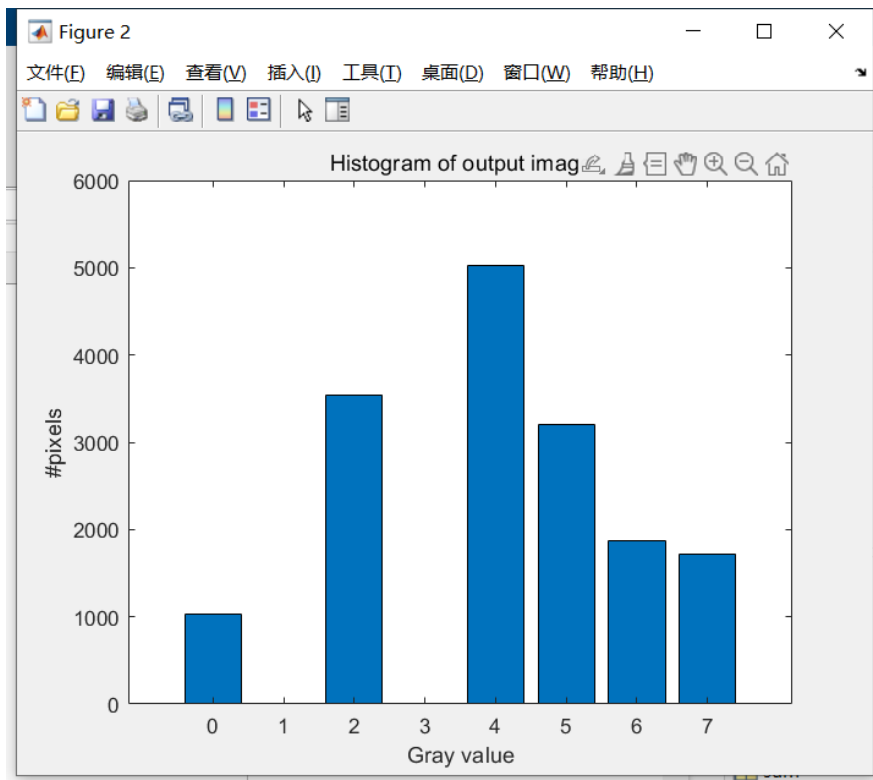
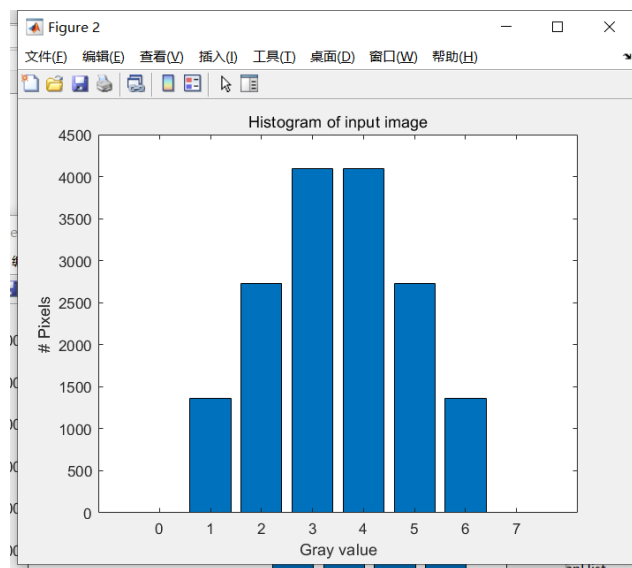
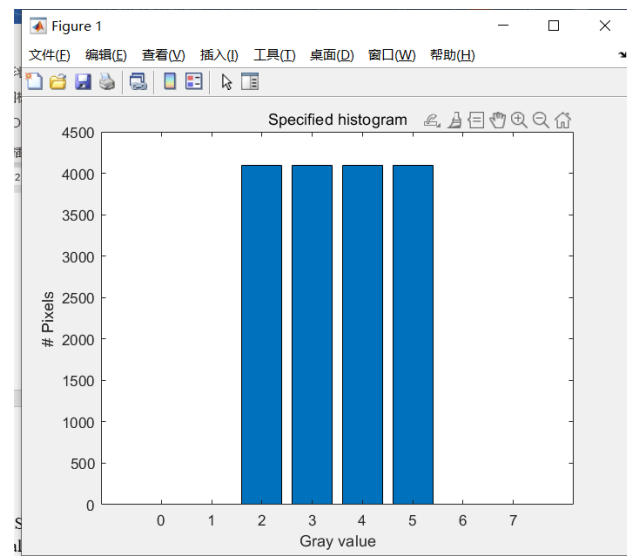


Table of output image

Figure 3 displays a table with 8 rows and 3 columns. The columns are labeled 'r', 'n', and an unlabeled column. The data is as follows:

	r	n	
1	0	1028	
2	1	0	
3	2	3544	
4	3	0	
5	4	5023	
6	5	3201	
7	6	1867	
8	7	1721	

Q3. Specified histogram, Histogram of input image and Histogram of output image by equalization as shown below. However, I didn't figure out how to do specification by MATLAB. I tried my best to implement.



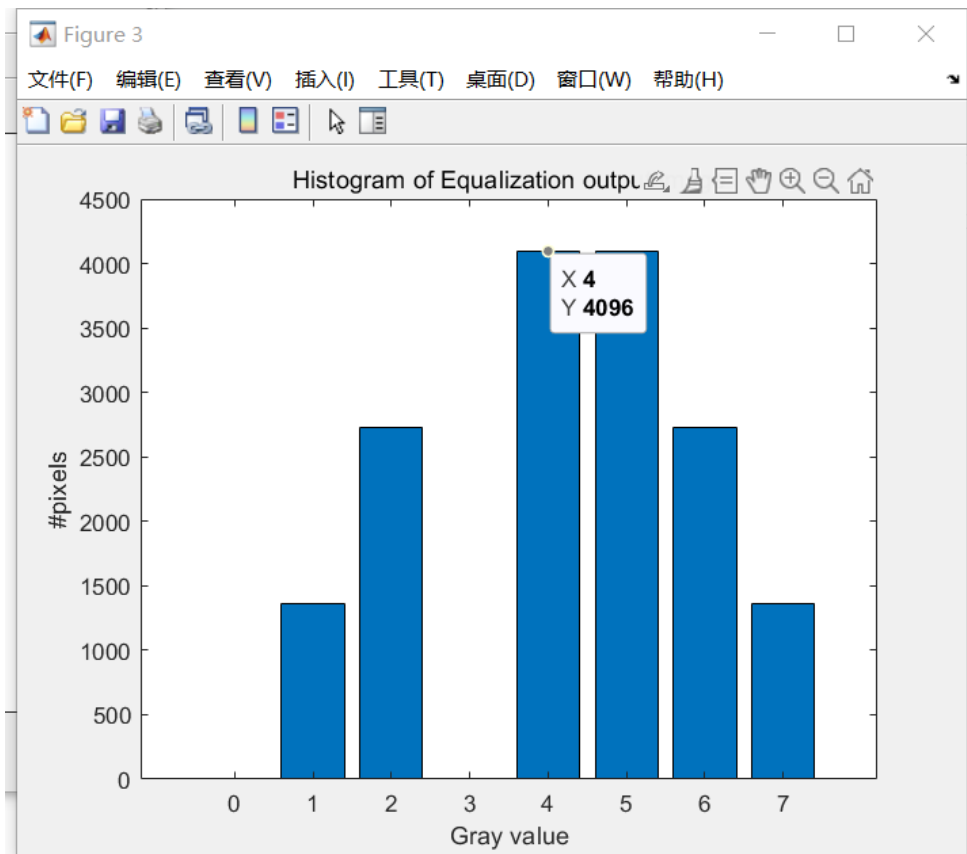
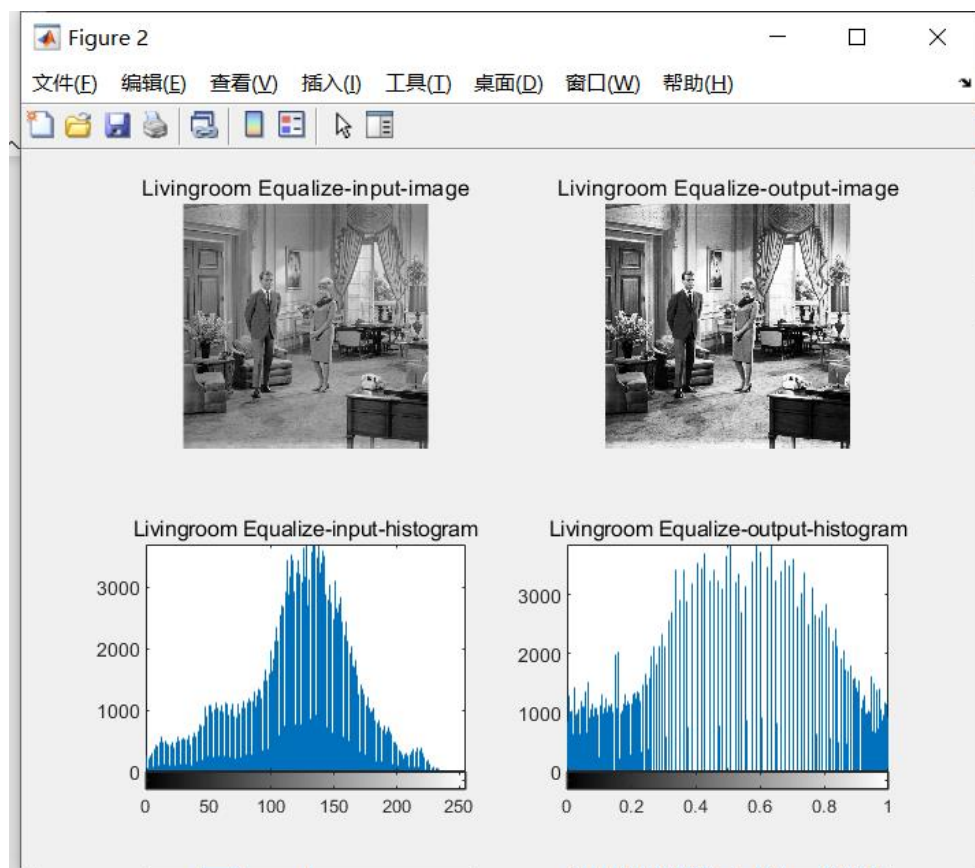
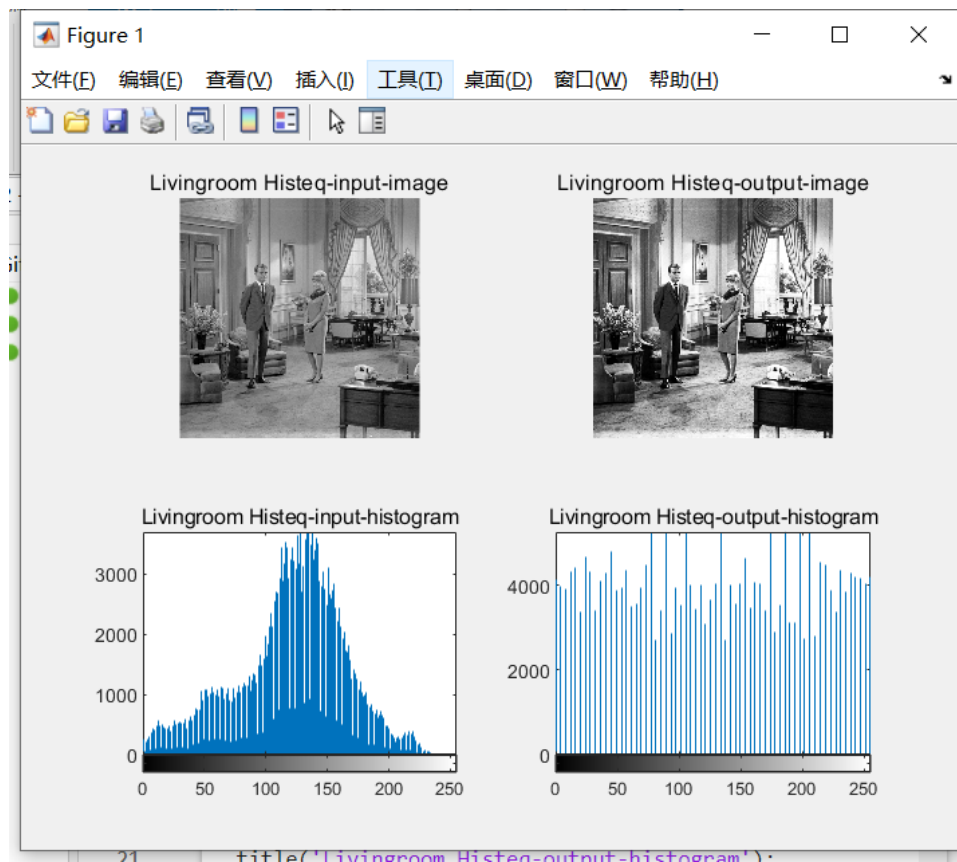


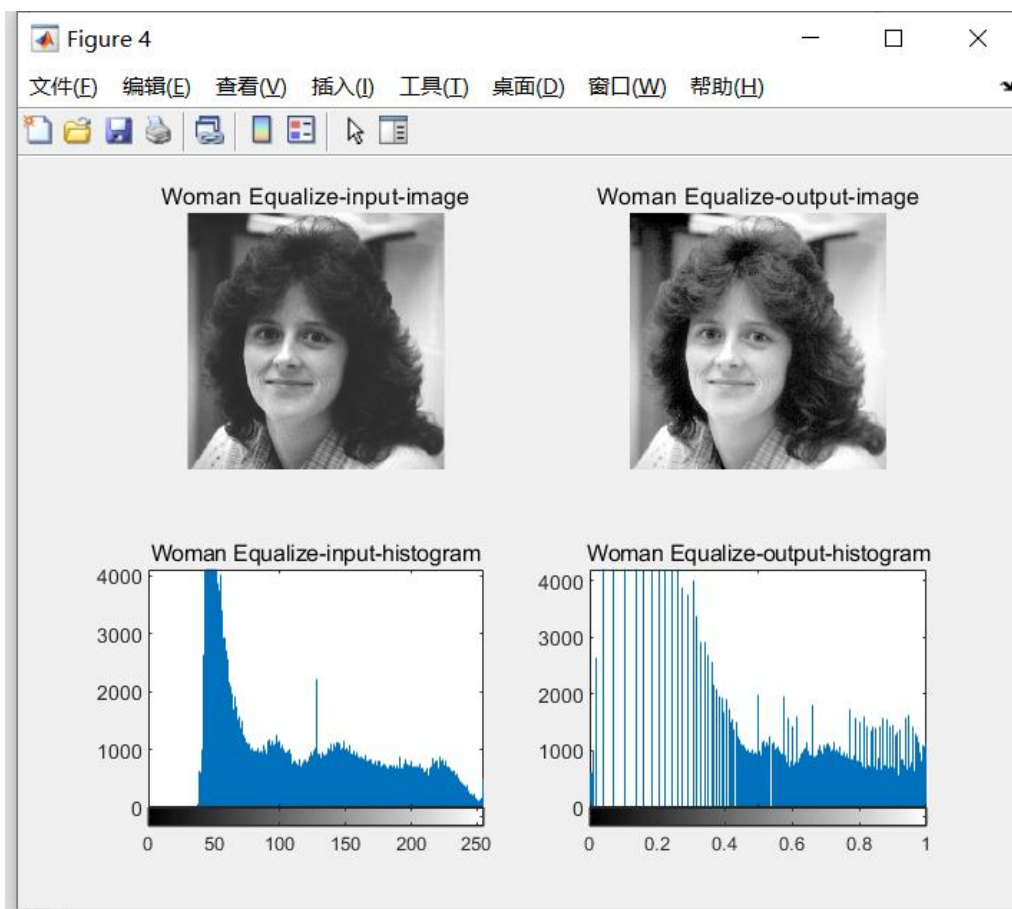
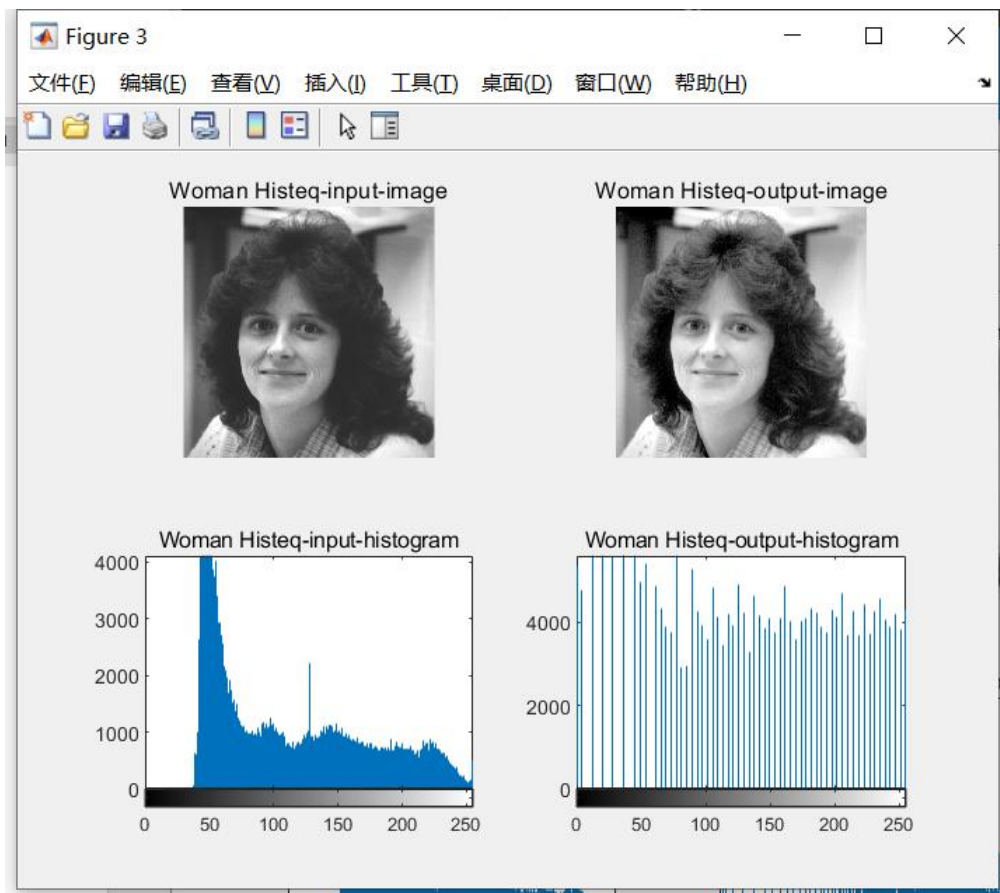
Figure 4

文件(F) 编辑(E) 查看(V) 插入(I) 工具(T) 桌面(D) 窗口(W) 帮助(H)

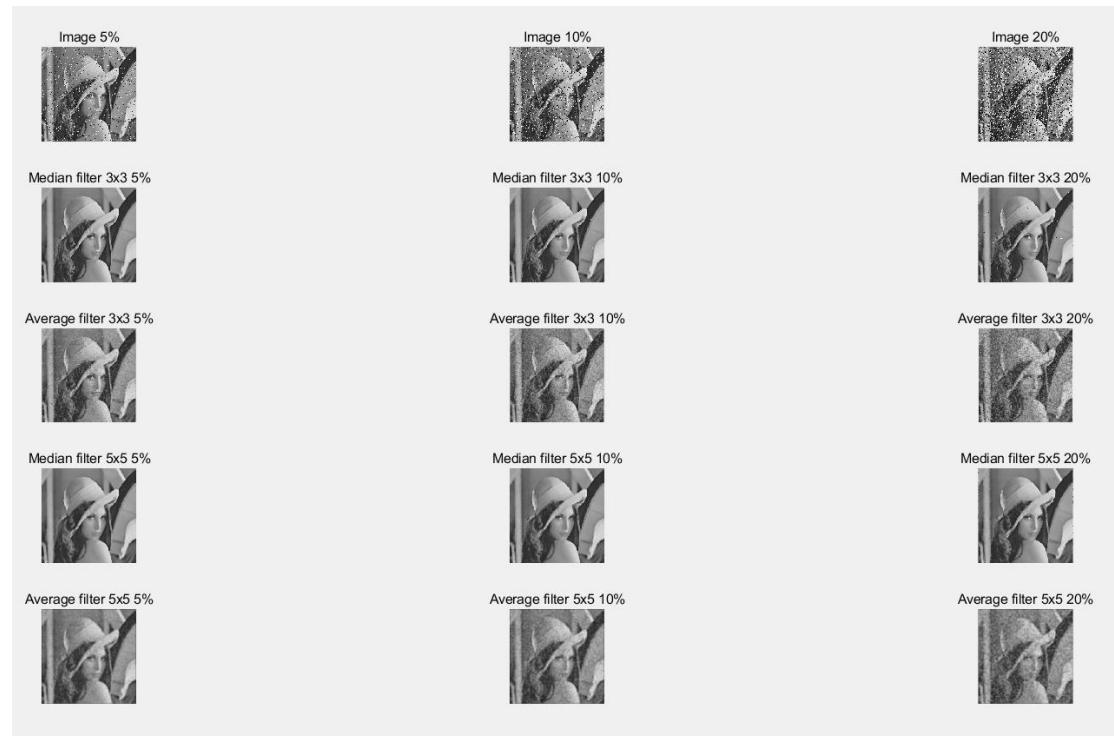
	r	n
1	0	0
2	1	1365
3	2	2731
4	3	0
5	4	4096
6	5	4096
7	6	2731
8	7	1365

Q4. Livingroom and woman_darkhair images and histograms are shown below. I have no clue histograms are different by two functions.





Q5. Comparison of 15 images in one figure, then I extracted and compared them in 3 groups by different densities.



5 %

Image 5%



Median filter 3x3 5%



Average filter 3x3 5%



Average filter 3x3 5%



Average filter 5x5 5%



10%

Image 10%



Median filter 3x3 10%



Average filter 3x3 10%



Median filter 5x5 10%



Average filter 5x5 10%



20 %

Image 20%



Median filter 3x3 20%



Average filter 3x3 20%



Average filter 3x3 20%



Average filter 5x5 20%

