

ImgCusto

**Demo Image customizer application implementing most known
image processing algorithms.**

By

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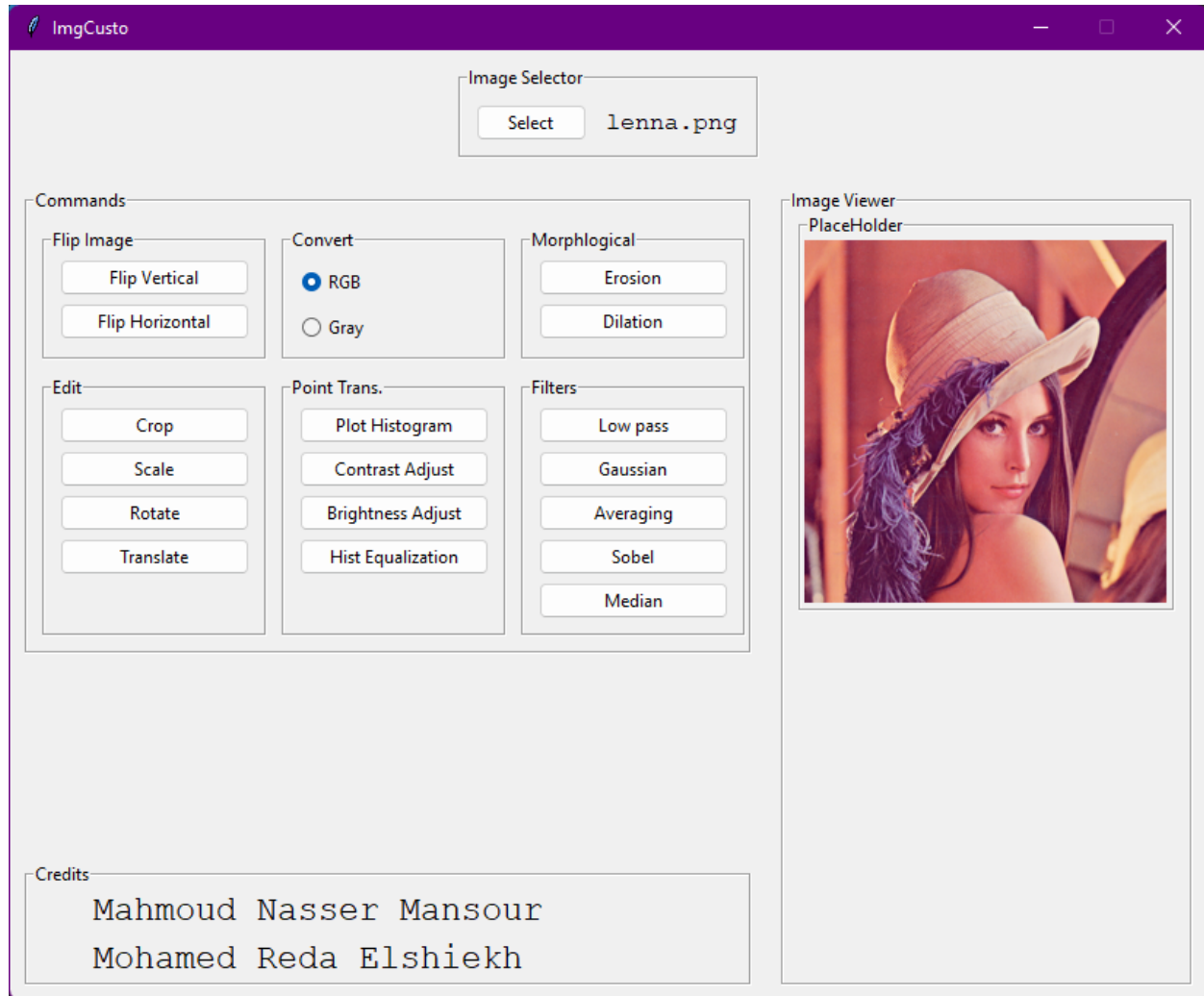
Mohamed Reda Elshaikh

Tabel of content

- 00. Main Application Interface**
- 01. Read the image.**
- 02. Convert the image to a gray-scale image.**
- 03. Convert the image to RGB image.**
- 04. Flip the image vertically.**
- 05. Flip the image horizontally.**
- 06. Crop the image.**
- 07. Plot histogram for the image.**
- 08. Brightness and contrast.**
- 09. Adaptive threshold and histogram equalization.**
- 10. Scaling, translation, and rotation on the image.**
- 11. Smooth the image using low pass filter.**
- 12. Gaussian filter and averaging filter on the image.**
- 13. Sobel edge detector.**
- 14. Median Filtering.**
- 15. Erosion and dilation on the image.**

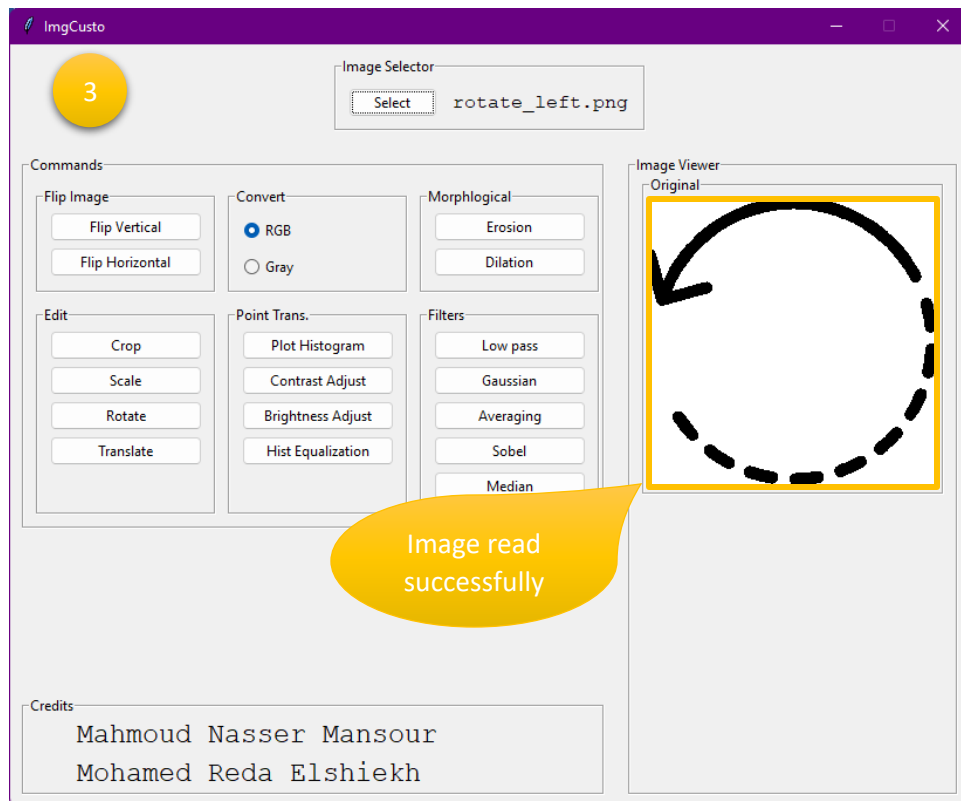
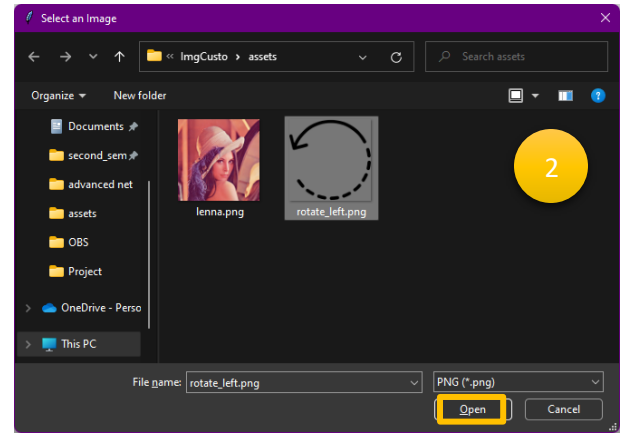
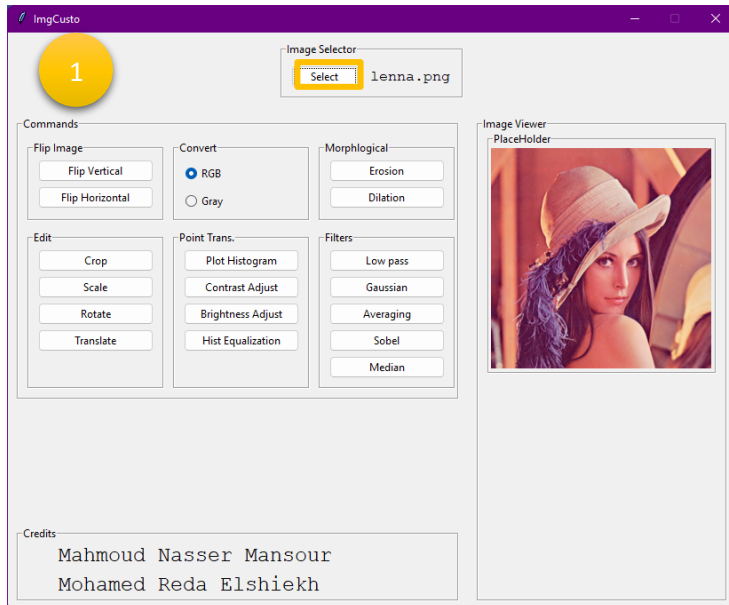
00. Main Application interface

application interface shown below with “lenna.png” loaded by default

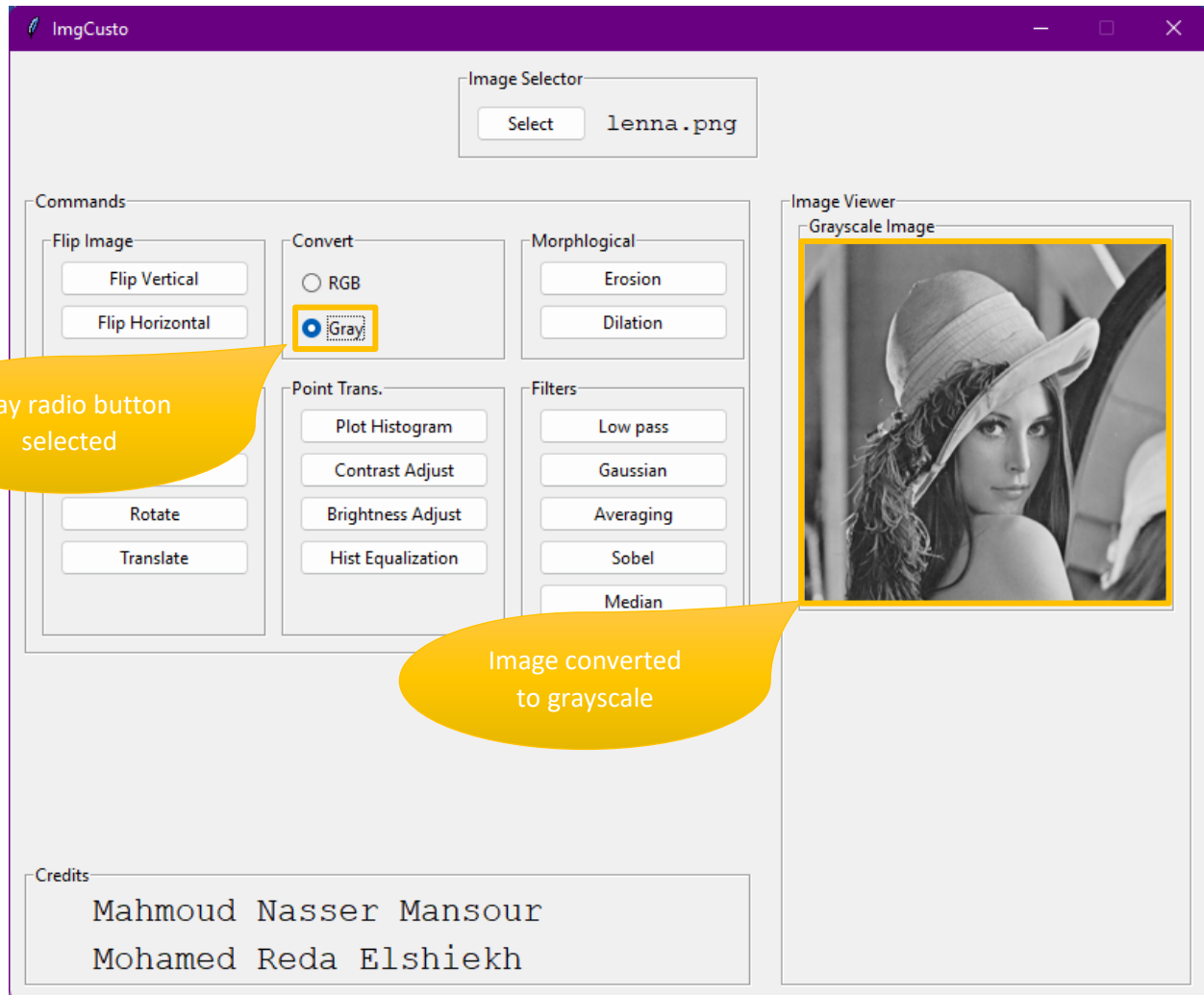


01. Read the image.

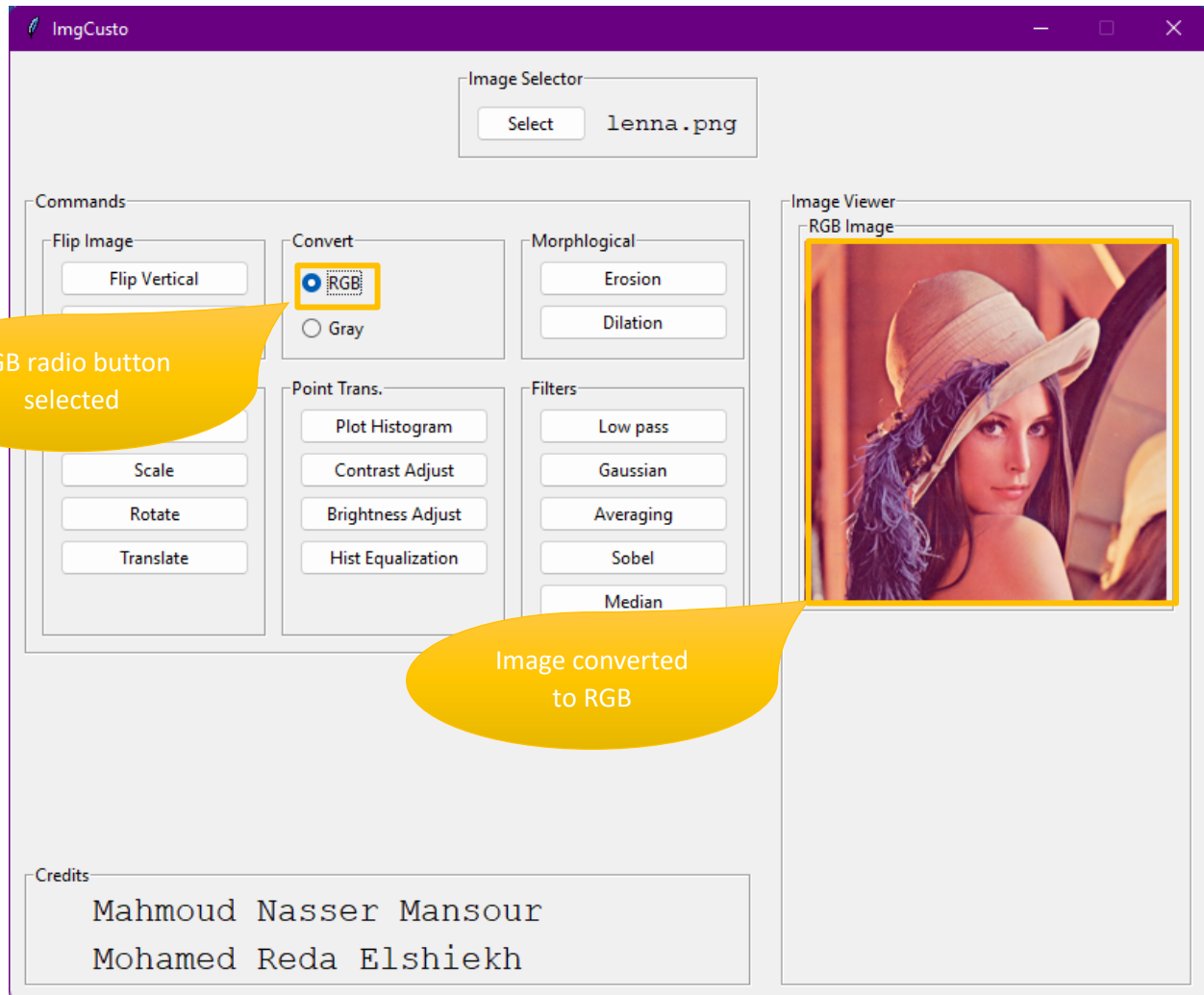
reading a different image can be done as following



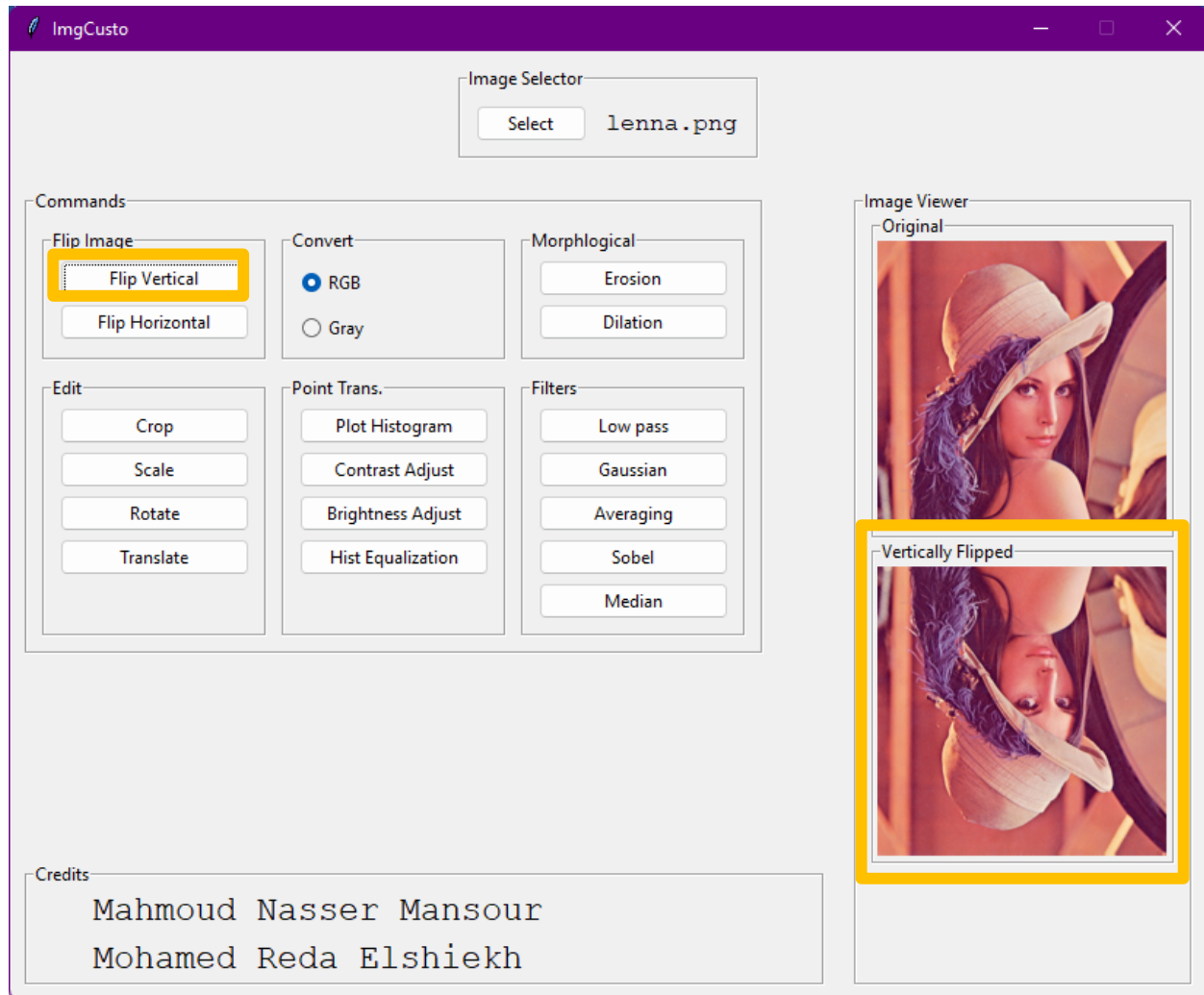
02. Convert the image to a gray-scale image.



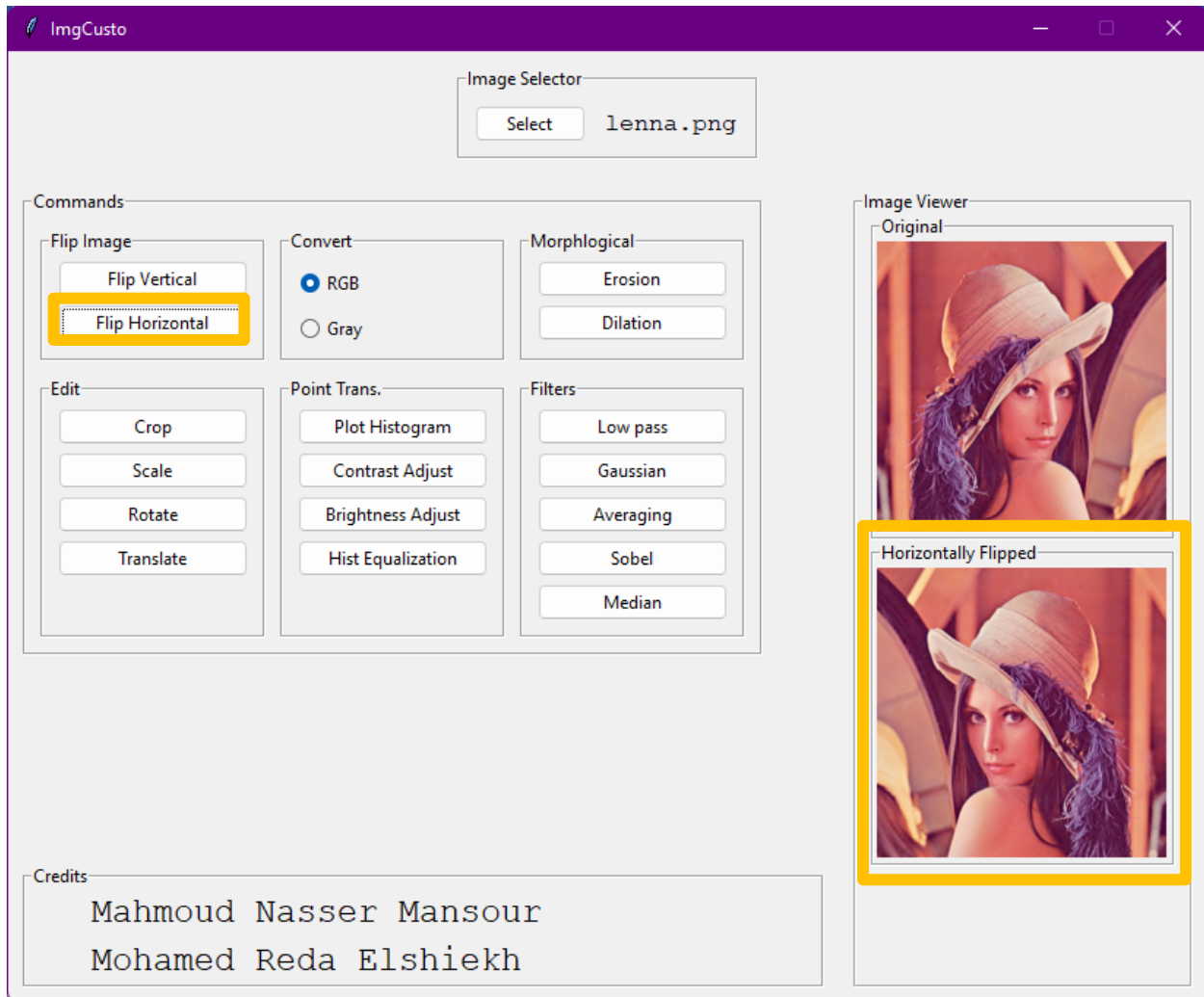
03. Convert the image to RGB image.



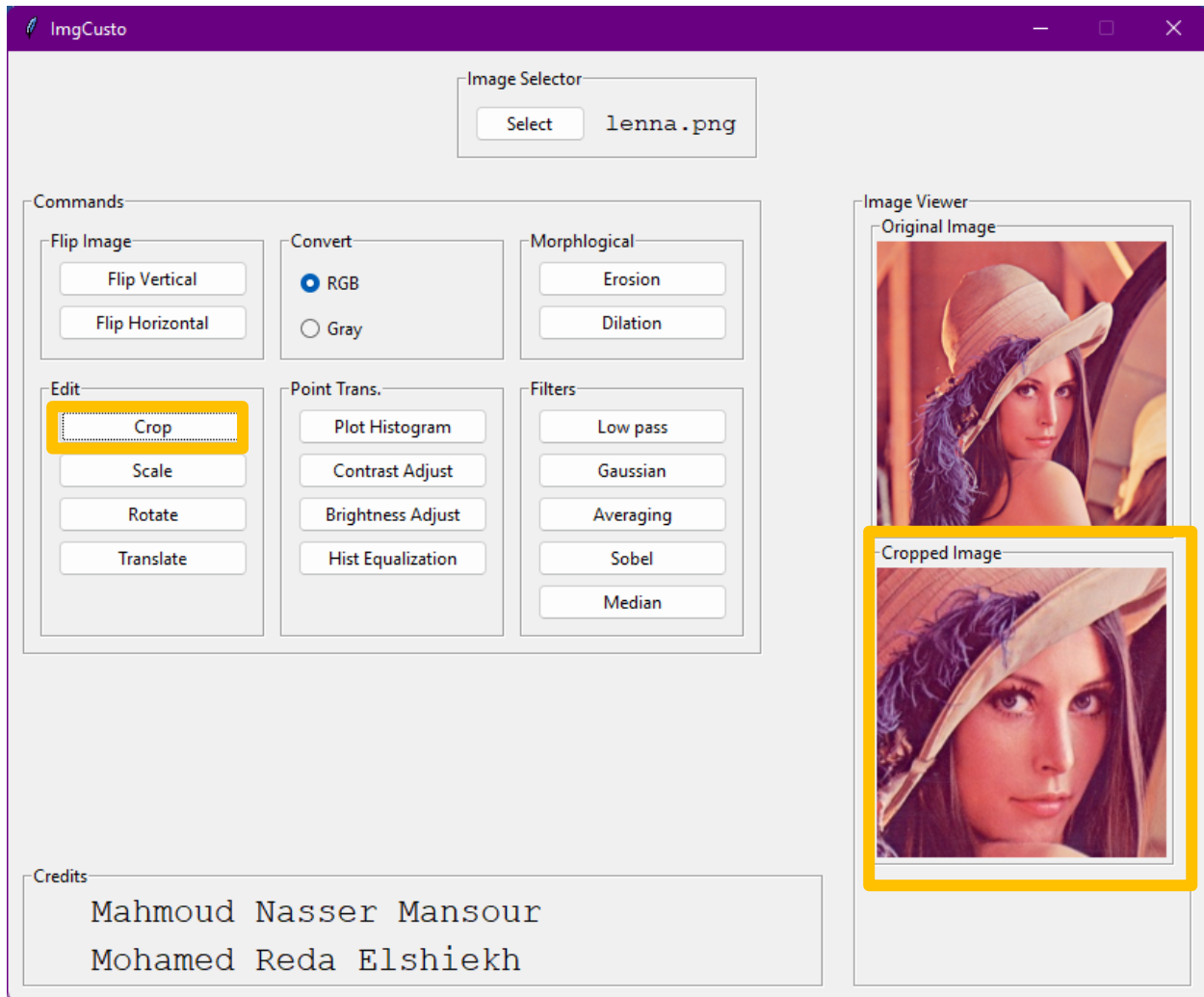
04. Flip the image vertically.



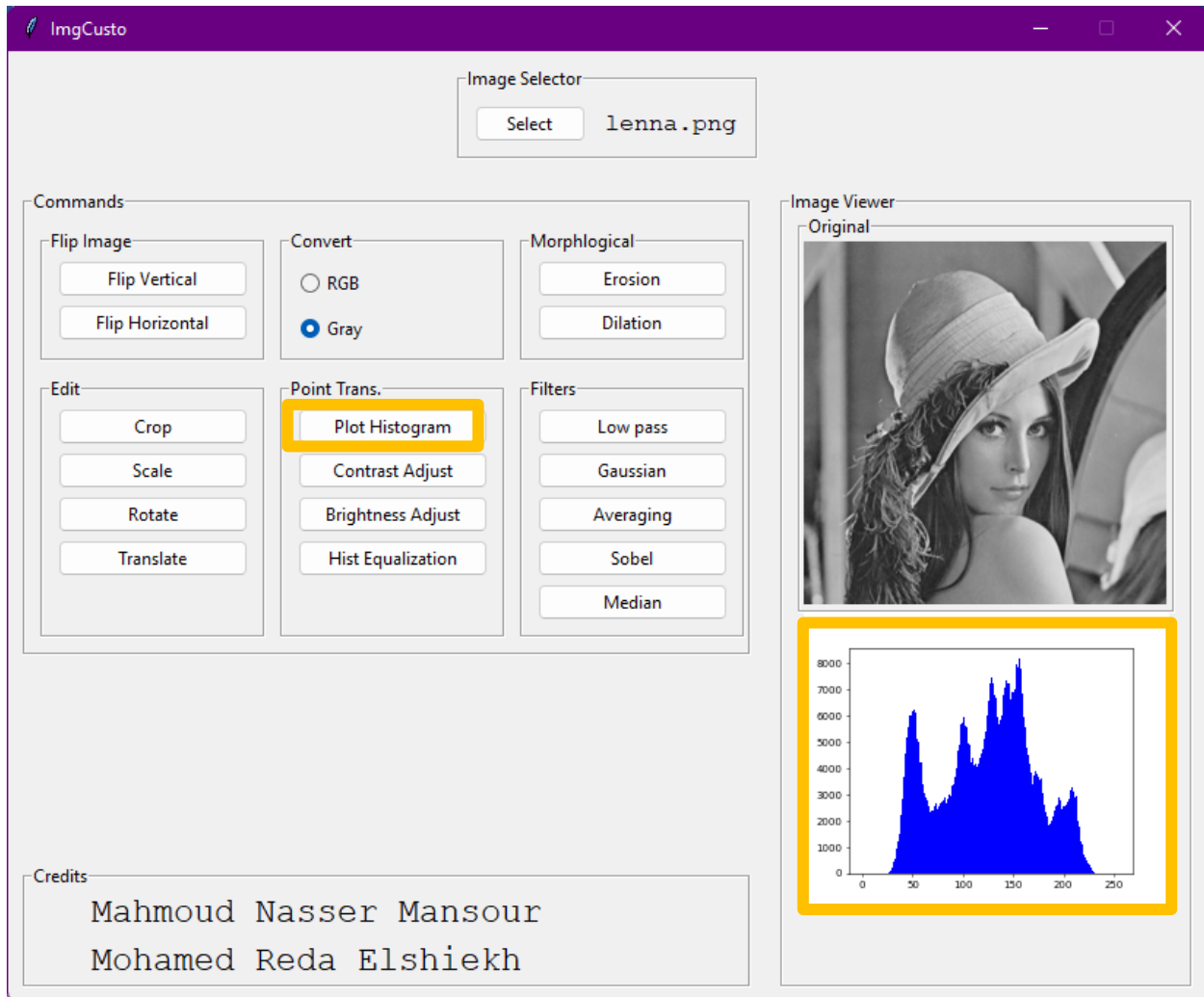
05. Flip the image horizontally.



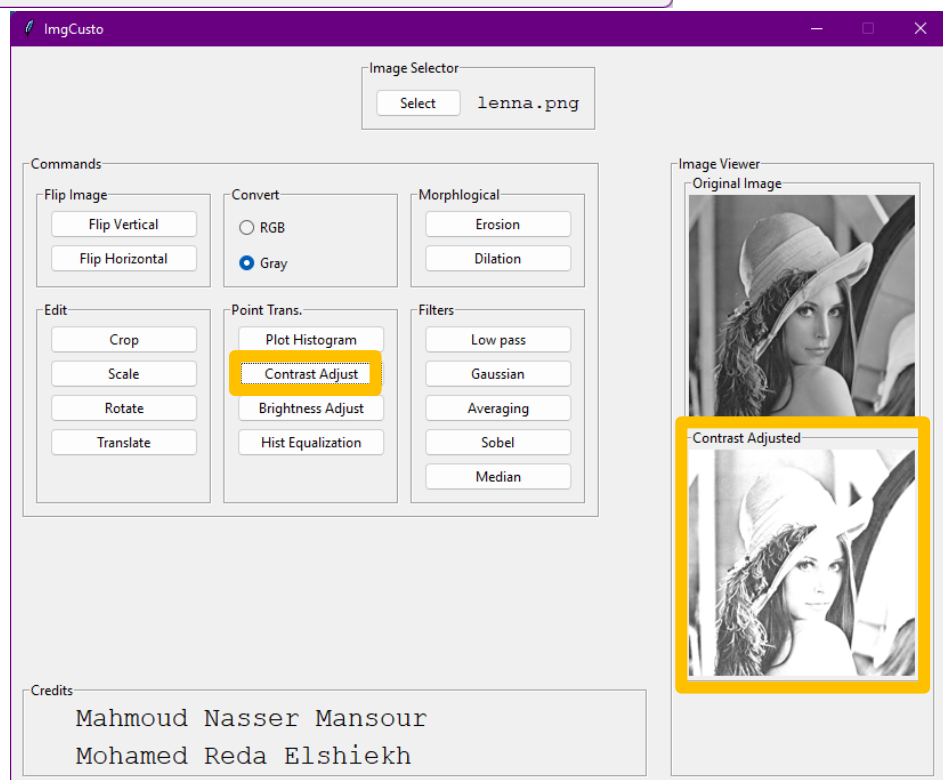
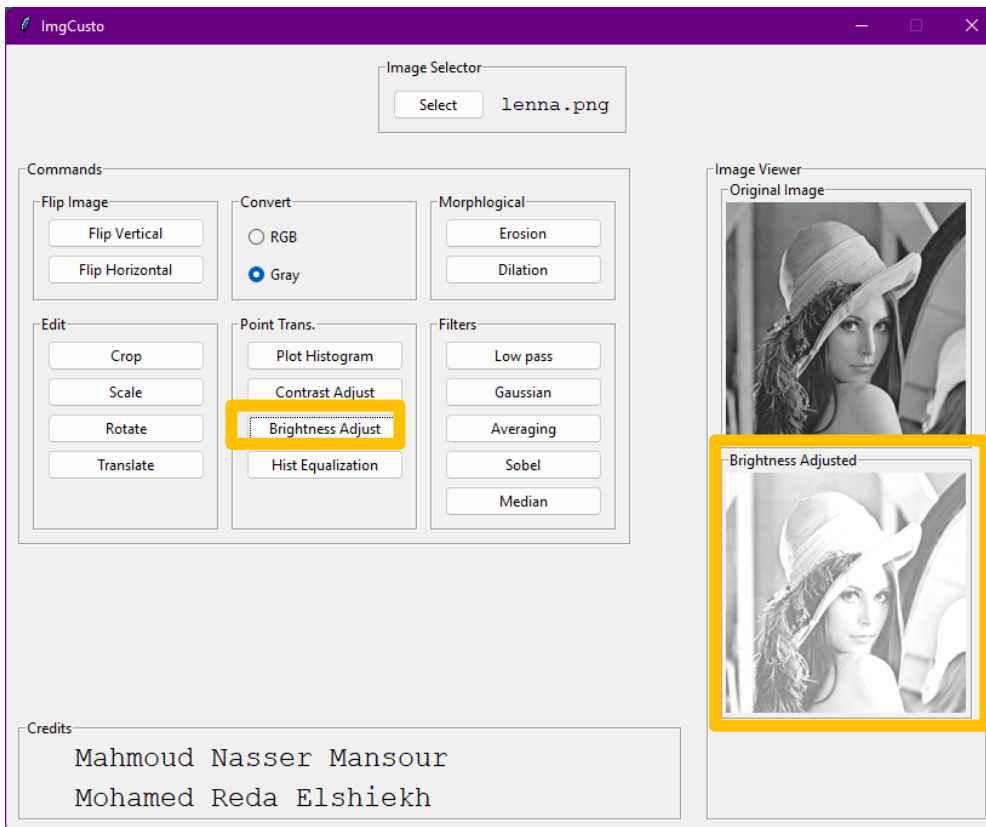
06. Crop the image.



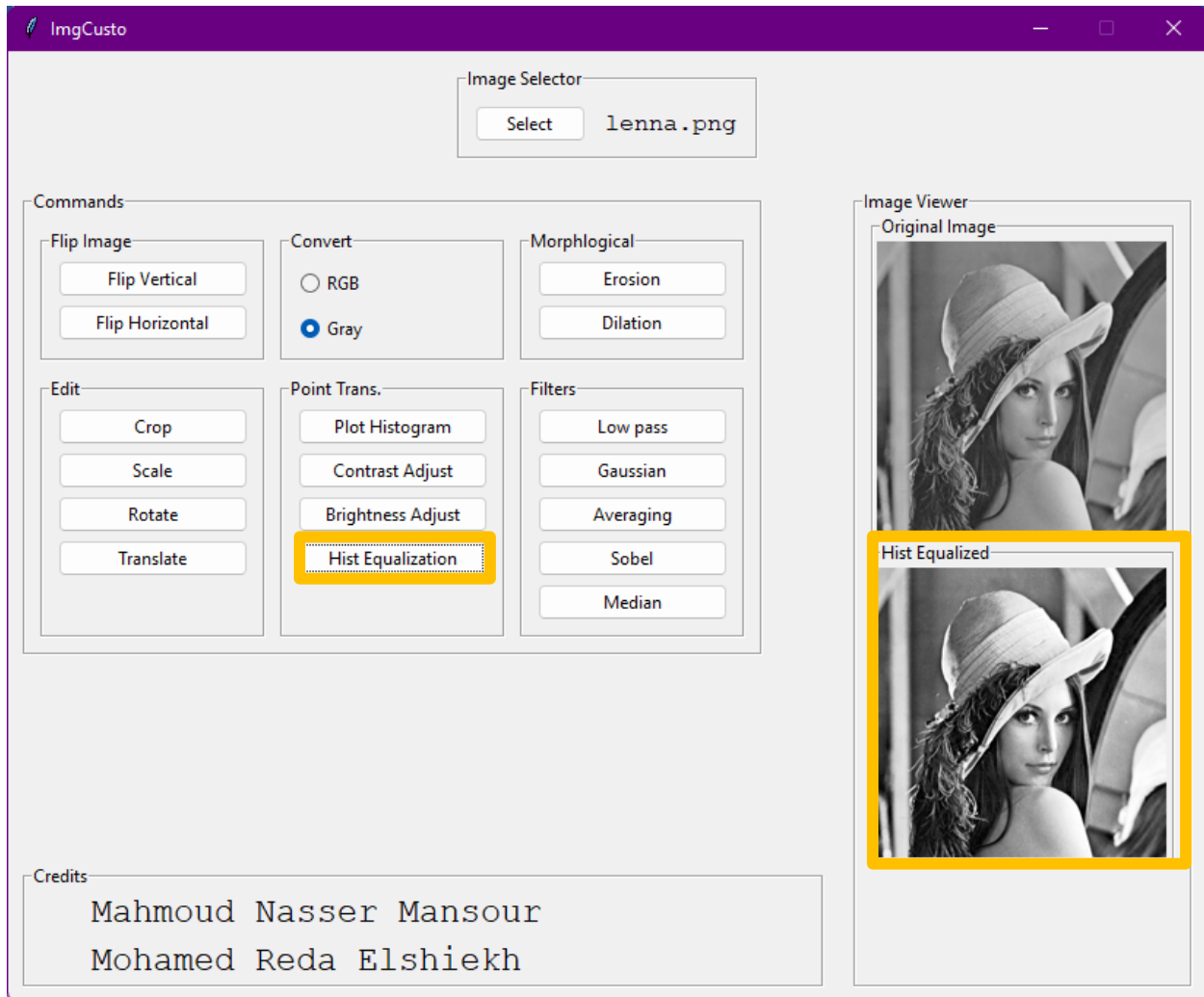
07. Plot histogram for the image.



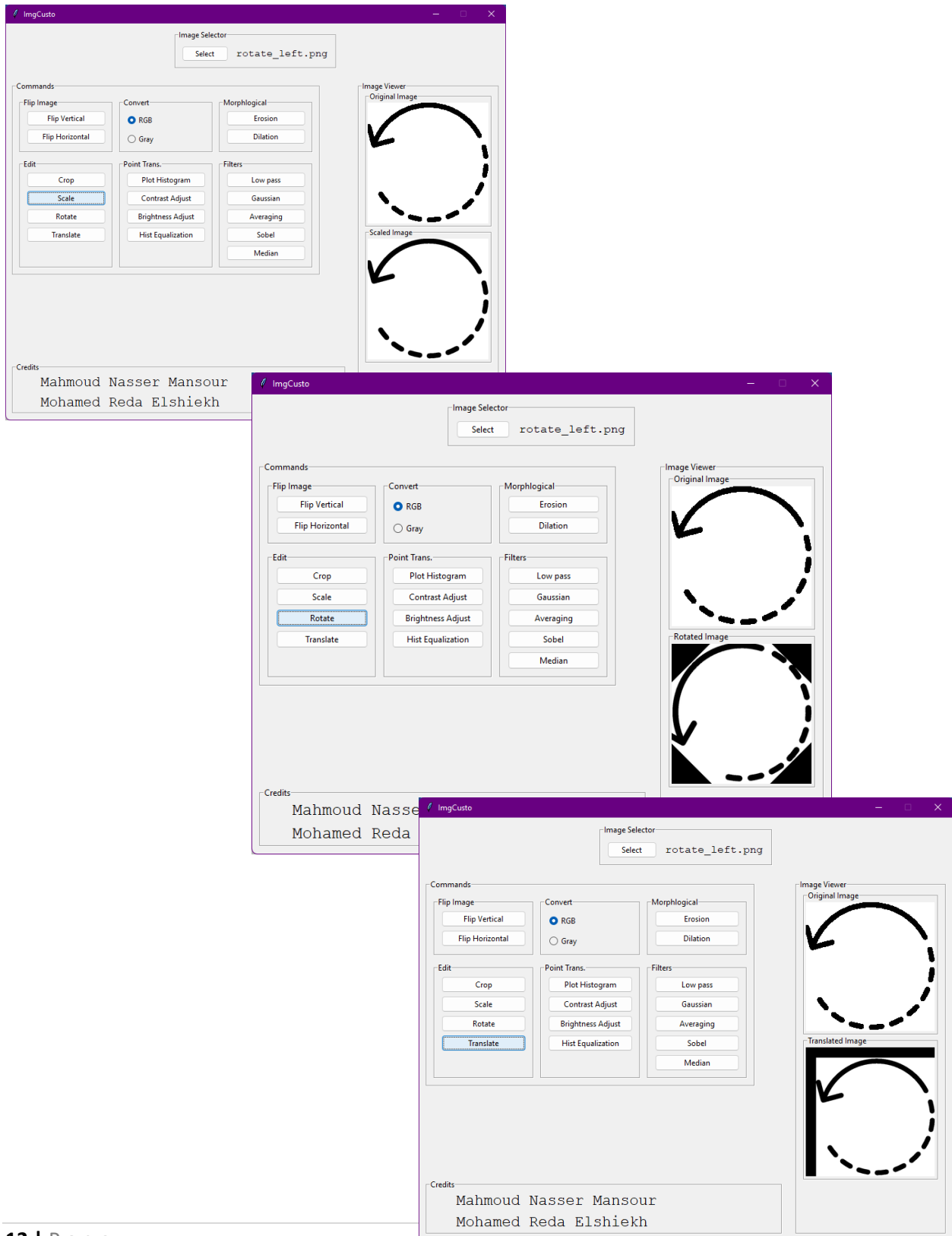
08. Brightness and contrast.



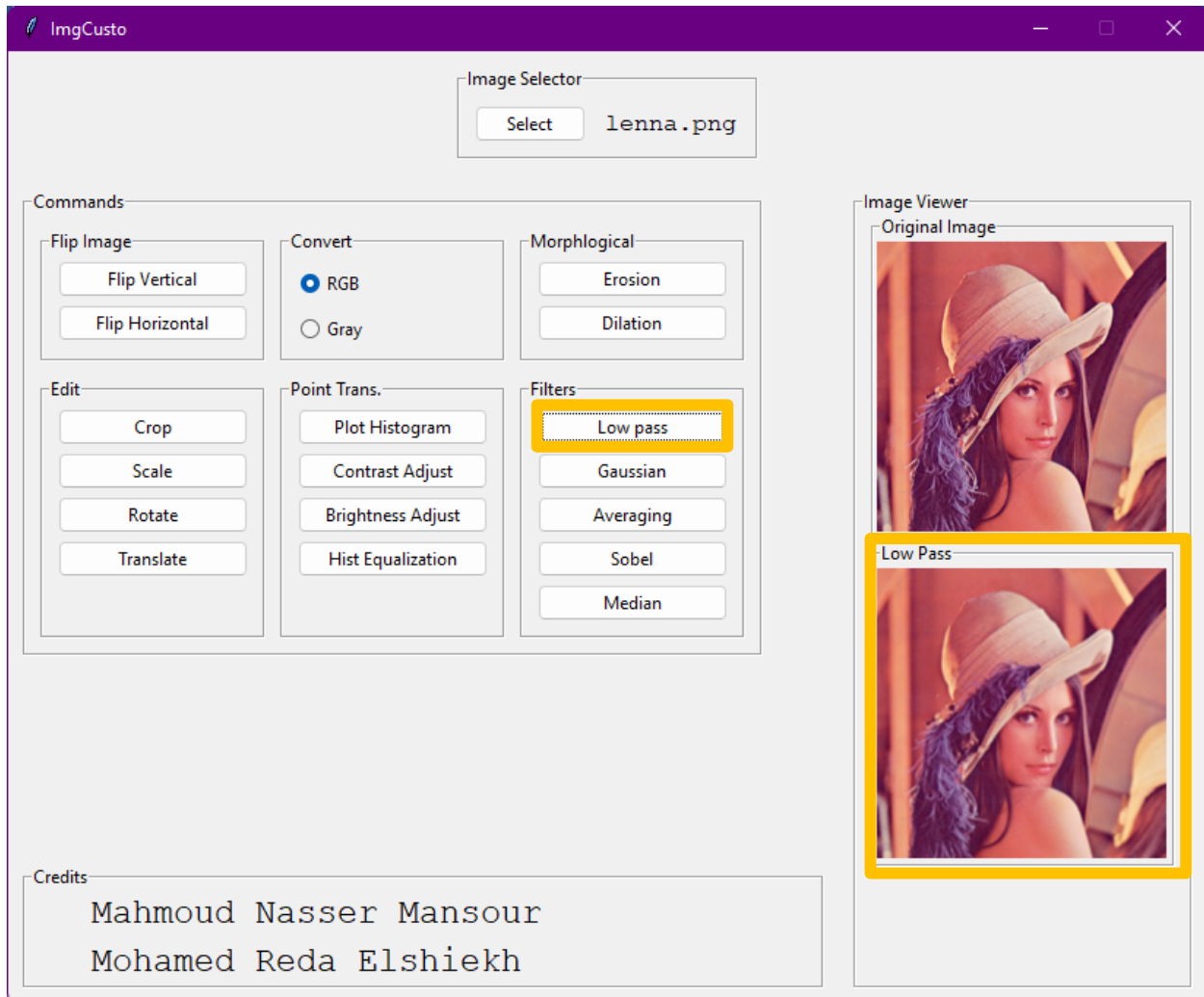
09. Adaptive threshold and histogram equalization.



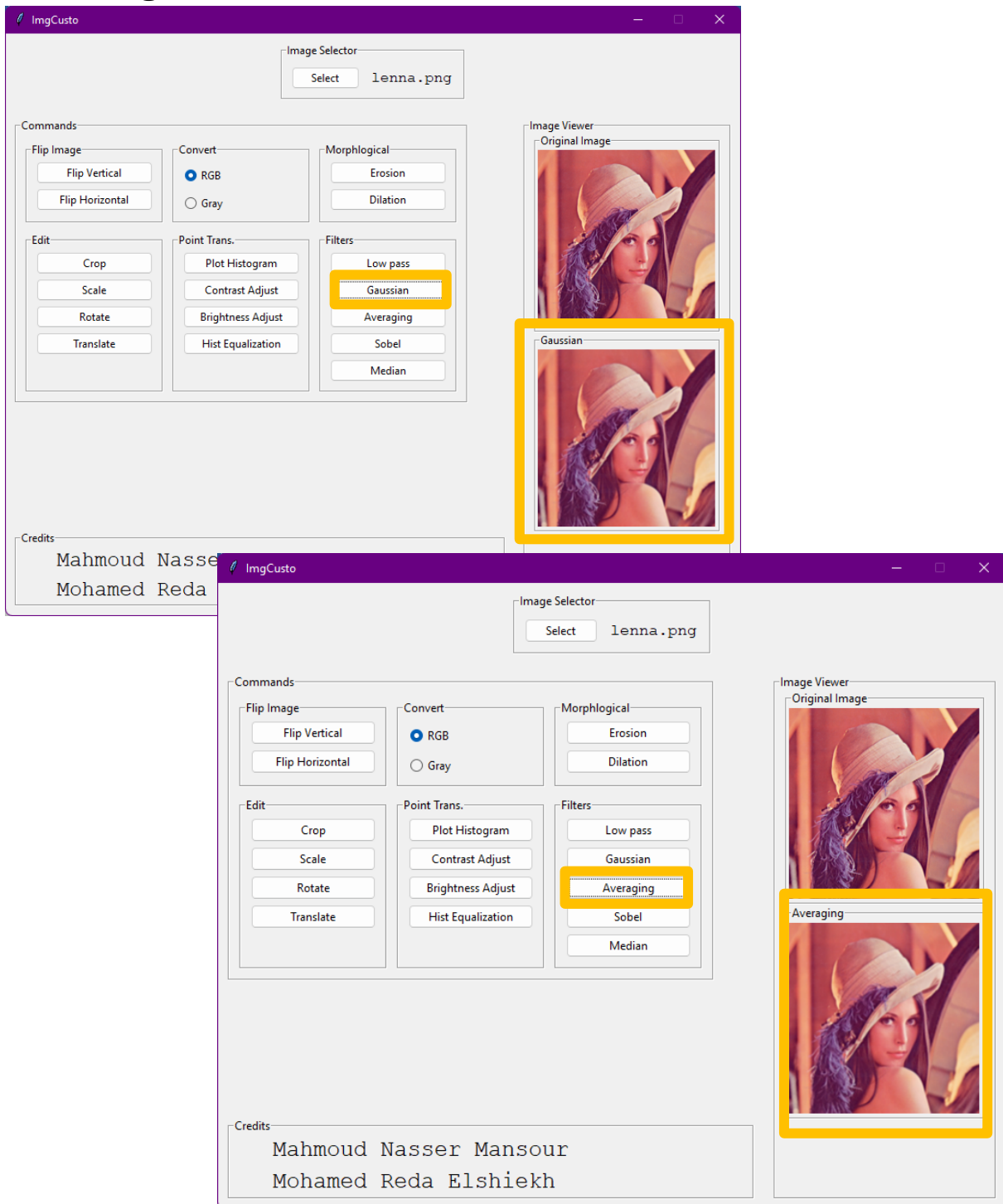
10. Scaling, translation, and rotation on the image.



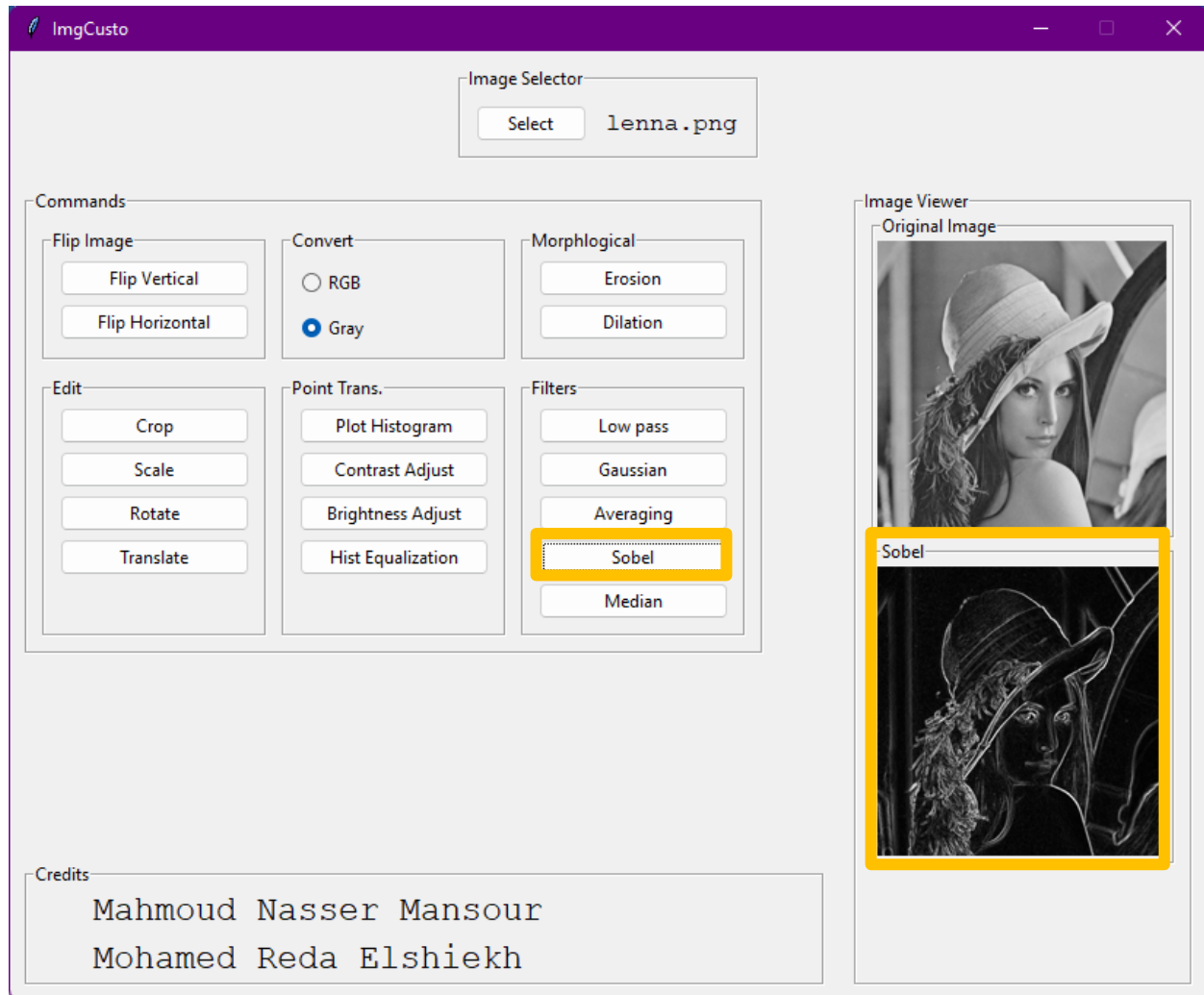
11. Smooth the image using low pass filter.



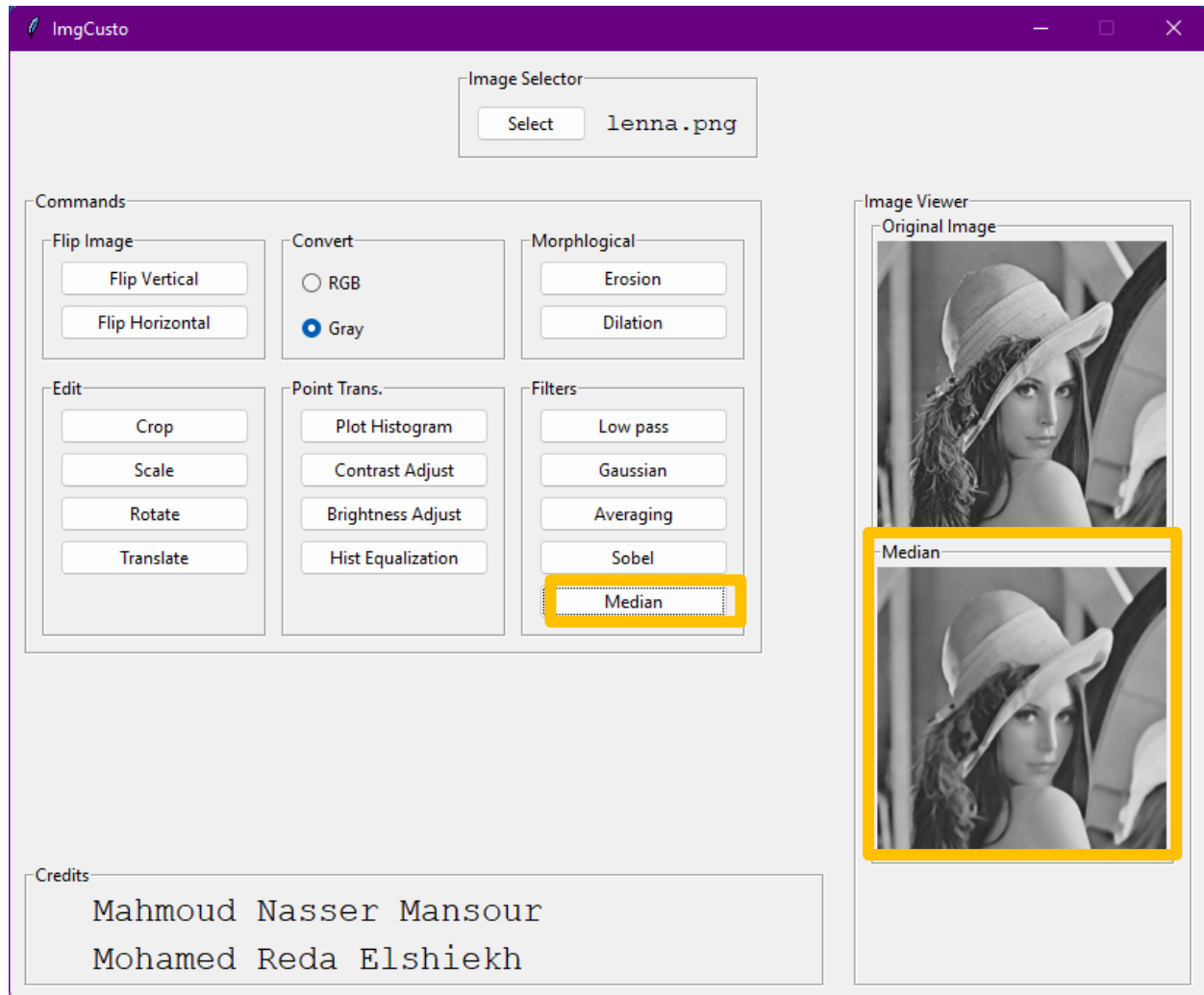
12. Gaussian filter and averaging filter on the image.



13. Sobel edge detector.



14. Median Filtering.



15. Erosion and dilation on the image.

