Homework 2

1. Implement a GUI to open image/video files from your computer and capture real time video from your webcam. Then show the image/video on the screen.
2. Have a click button for capturing a snapshot of yourself.
3. You can save the snapshot and show the snapshot on the screen.
4. Implement the following functions:
   1. Histogram equalization (images will be provided)
   2. Locally adaptive histogram equalization (images will be provided)
5. Have a click button to apply the above function.
6. Show the result on the screen.
7. Submit your design document (e.g., the block diagram of the procedure, the definition of your functions, your description of the method, your conclusions, etc.), your code (only function part) and the pictures of the GUI, the snapshot, and the result.