Both parts are done by program written in python. Image is read by opencv.

- (a), (b), (c), and (f) is done by looping through each pixel and putting it to desired position or changing it to desired value.
- (d) is done by calling two functions, getRotationMatrix2D() and warpAffine(), of opency
- (e) is done by calling resize of opency.
- (a) Upside-down



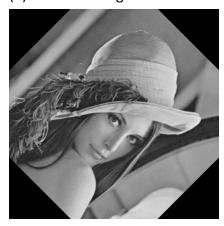
(b) Right-side-left



(c) Diagonally flip

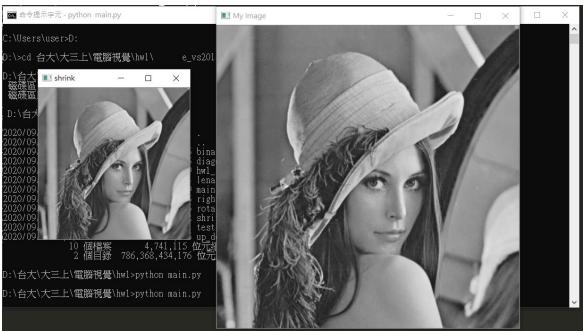


(d) Rotate 45 degrees clockwise



(e) Shrink in half





(f) Binarize at 128

