

# Pseudorandom Thresholding Exercise [Help]

**Help:** The following tips will help you complete this exercise:

- In order to recursively calculate the dither matrix, its size must be a power of 2.
- The scaling factor can be calculated by dividing 255 by the difference between the Max and min values of the dither matrix.
- A modulo operation will ensure that each element of the dither matrix is used in an orderly manner.
- To display two images as one, you can use the NumPy.hstack() or NumPy.vstack() functions.
- When displaying the image, if it is entirely white or black, try specifying its data type using the .astype() function.

**Material for better understanding:**

[https://en.wikipedia.org/wiki/Ordered\\_dithering](https://en.wikipedia.org/wiki/Ordered_dithering)