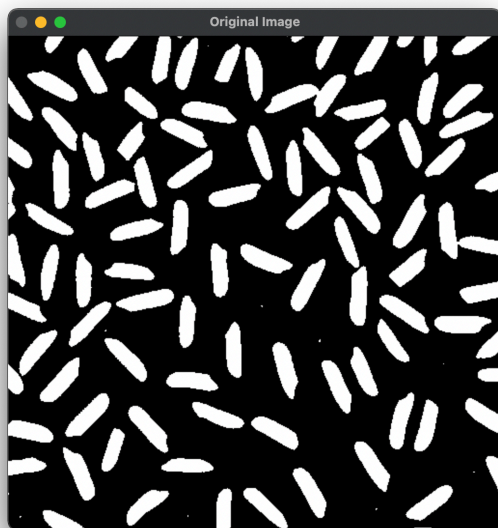


Experiment 5

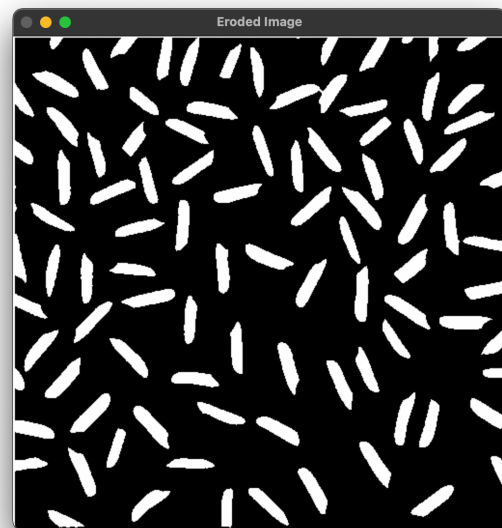
Morphological Operations

Erosion:

Erosion (usually represented by \ominus) is one of two fundamental operations (the other being dilation) in morphological image processing from which all other morphological operations are based. The erosion operation usually uses a structuring element for probing and reducing the shapes contained in the input image.



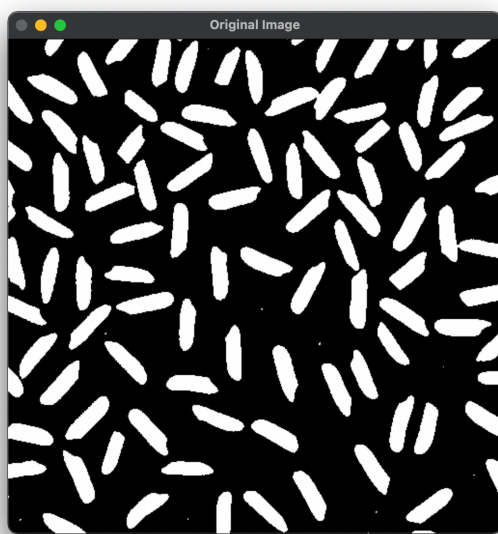
Original Image



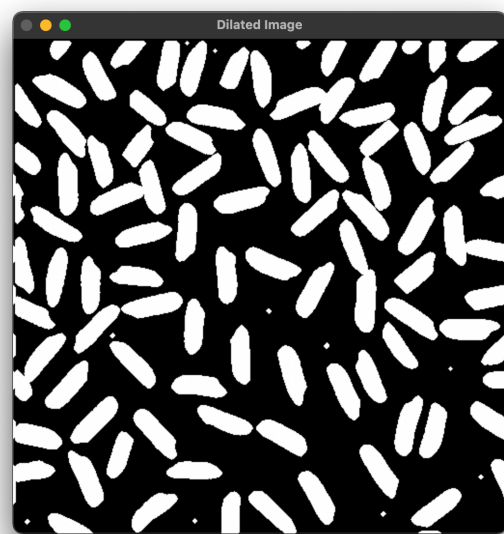
Eroded Image

Dilation:

Dilation (usually represented by \oplus) is one of the basic operations in mathematical morphology. Originally developed for binary images, it has been expanded first to grayscale images, and then to complete lattices. The dilation operation usually uses a structuring element for probing and expanding the shapes contained in the input image.



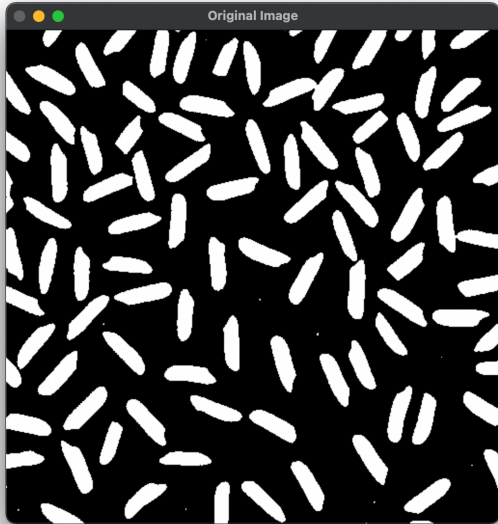
Original Image



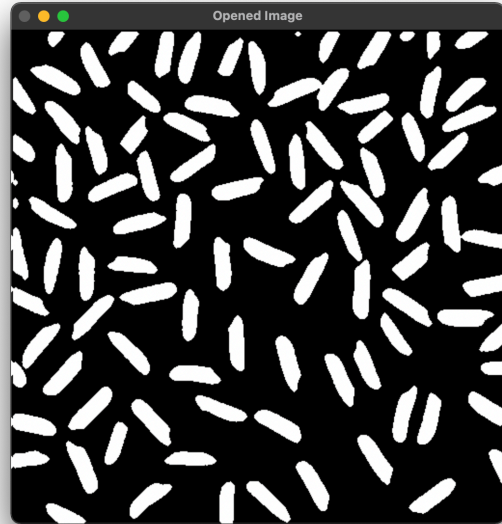
Dilated Image

Opening:

Opening is erosion, followed by dilation.



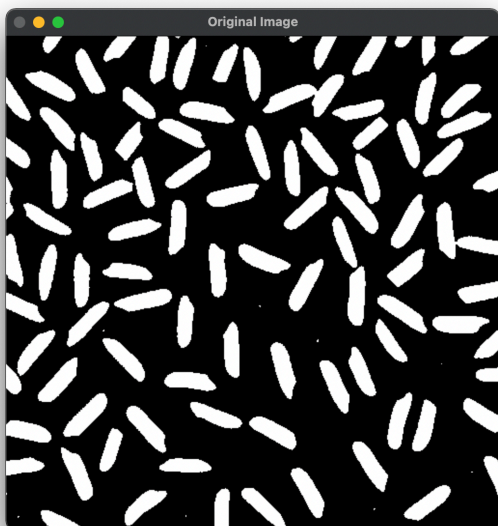
Original Image



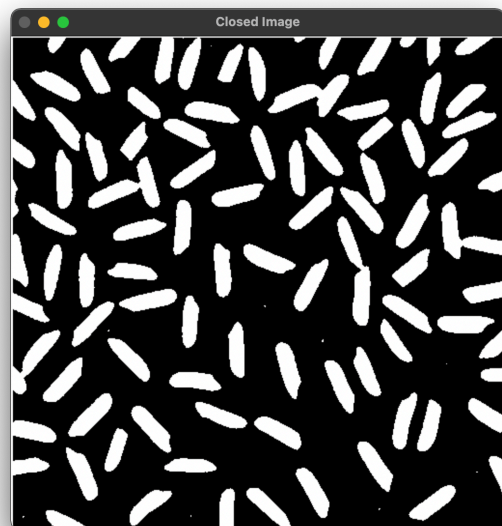
Opened Image

Closing:

Closing is dilation, followed by erosion.



Original Image



Closed Image