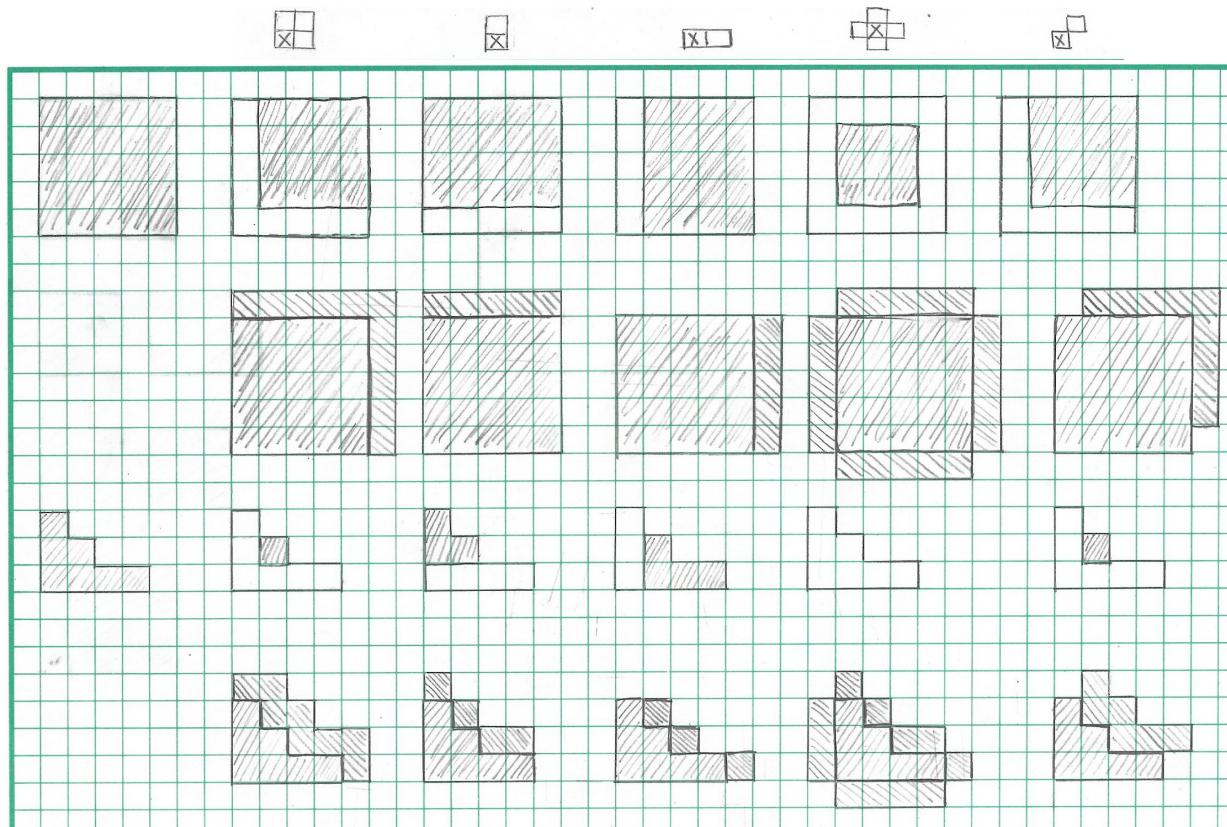


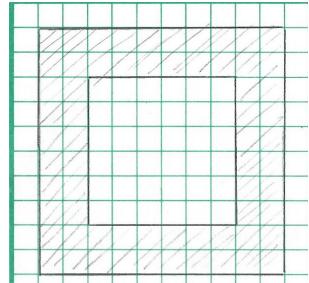
Activity 8 - Morphological Operations

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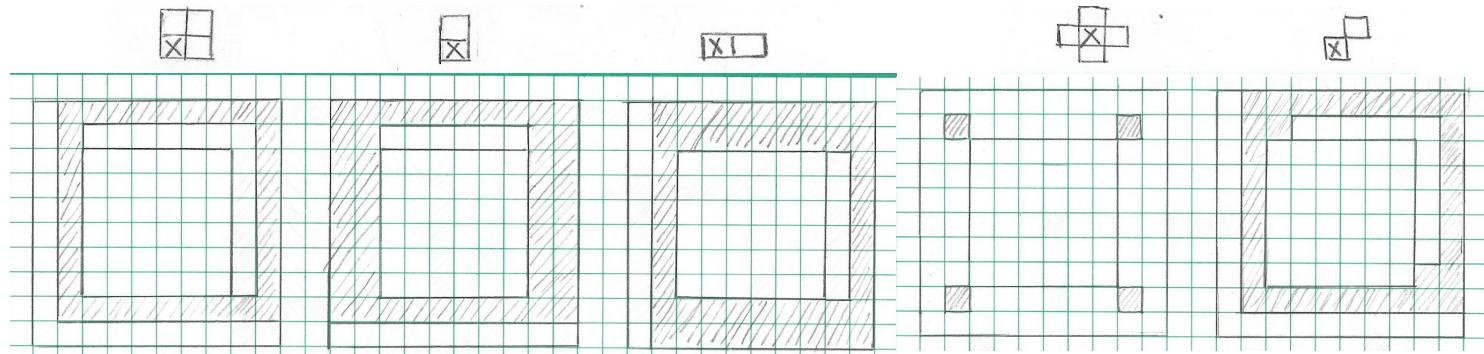
Predicted Erosion and Dilation of a Square and Triangle



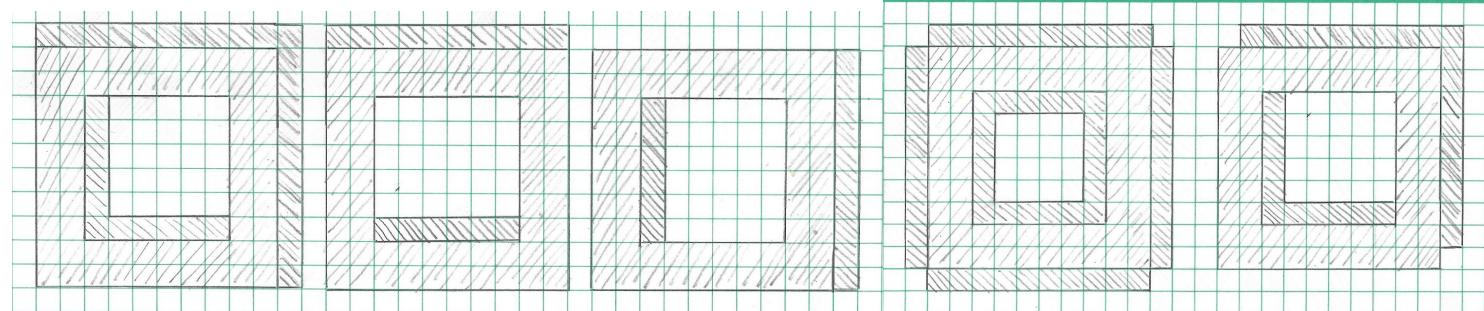
Predicted Erosion and Dilation of a Hollow Square



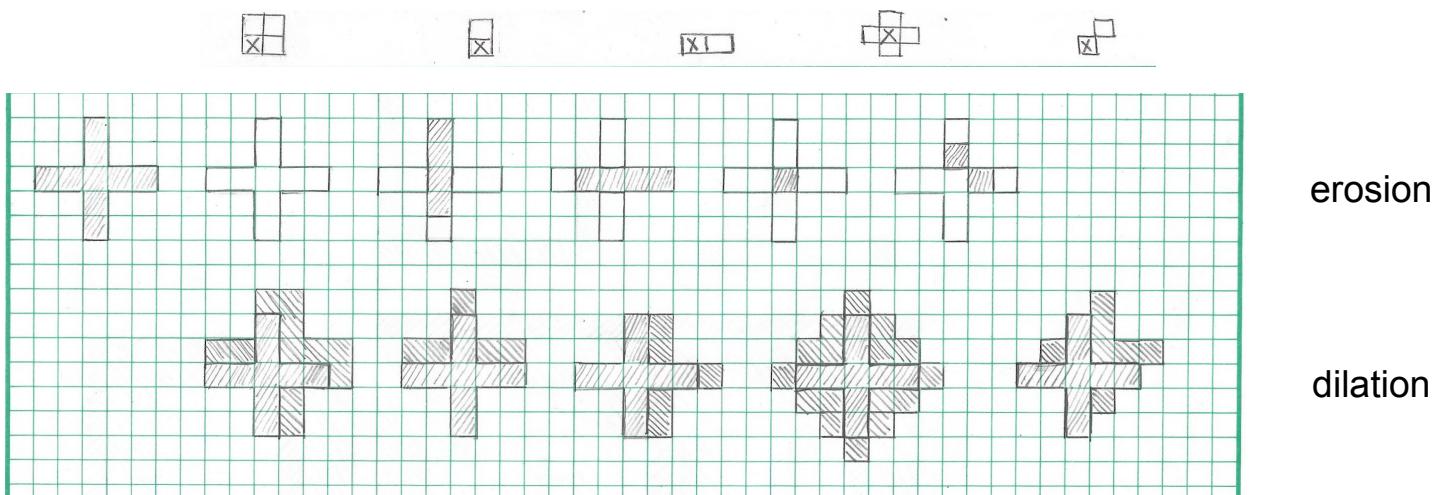
erosion



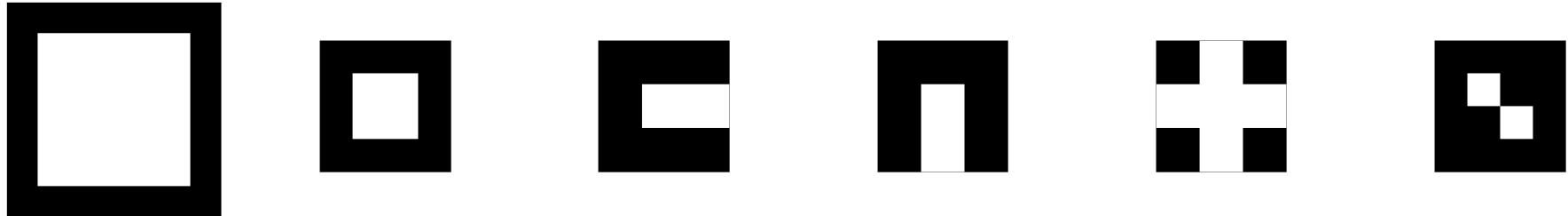
dilation



Predicted Erosion and Dilation of a Cross



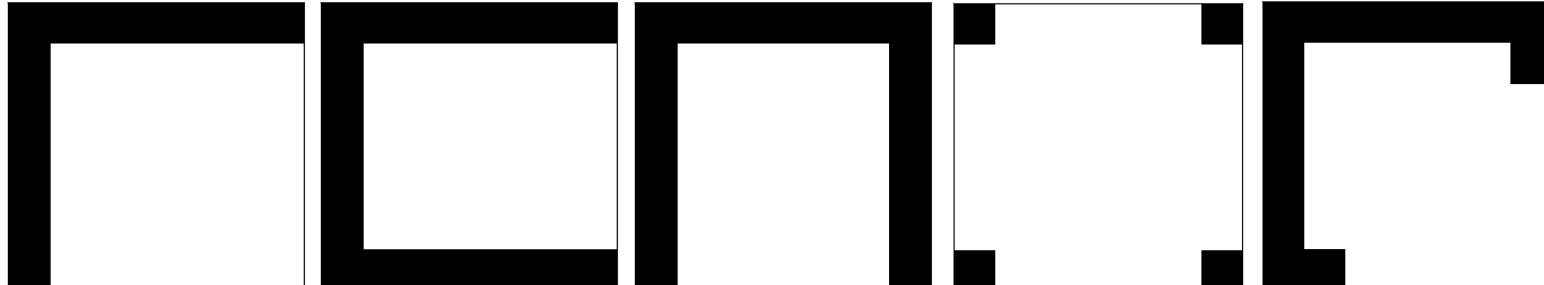
Erosion and Dilation of a Square



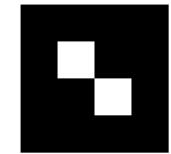
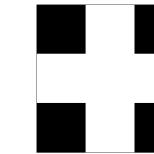
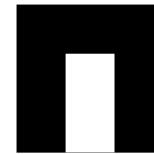
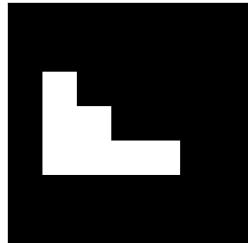
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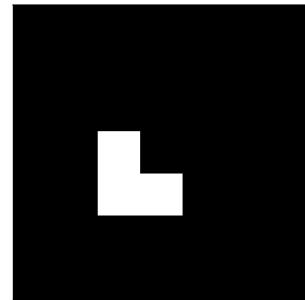
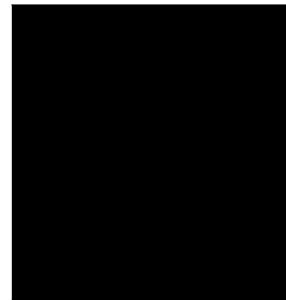
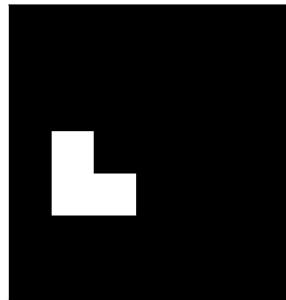
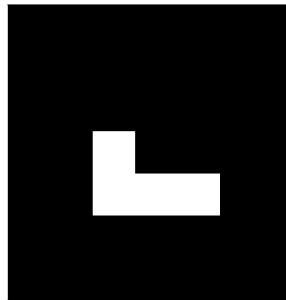
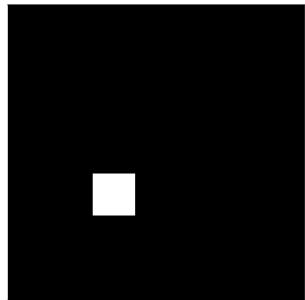
dilation



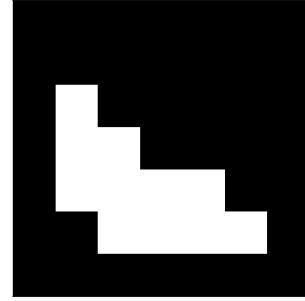
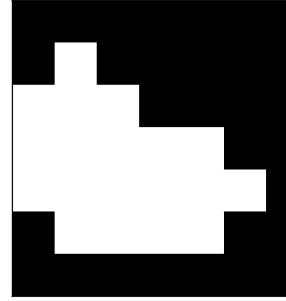
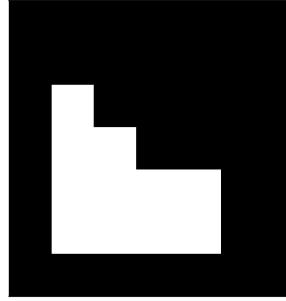
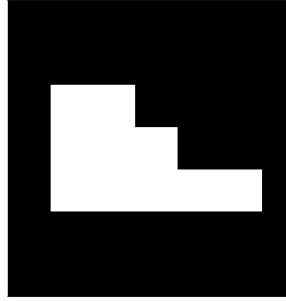
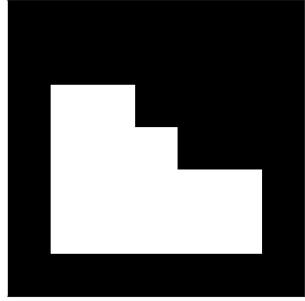
Erosion and Dilation of a Triangle



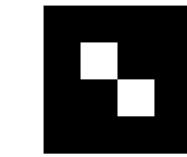
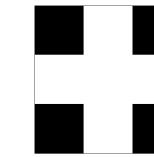
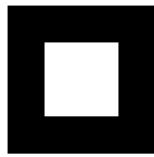
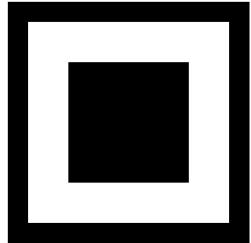
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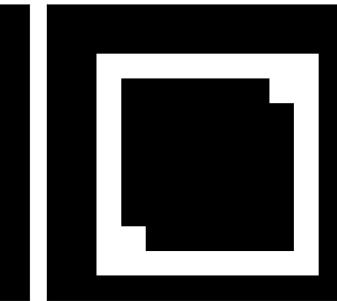
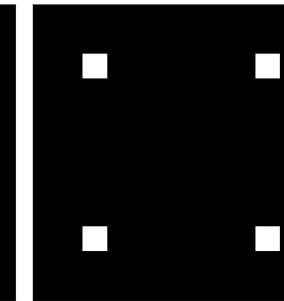
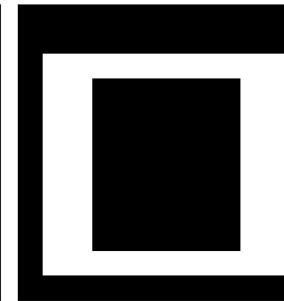
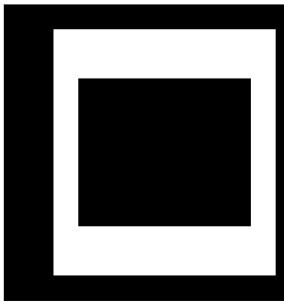
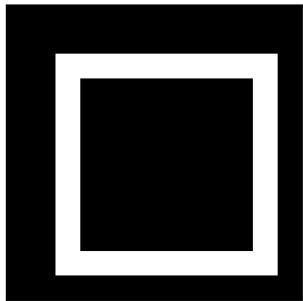
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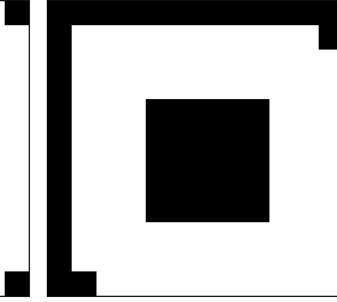
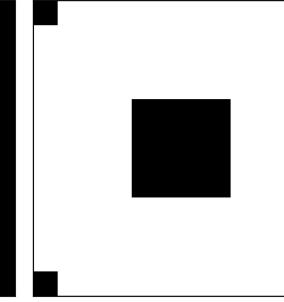
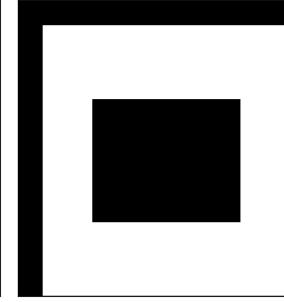
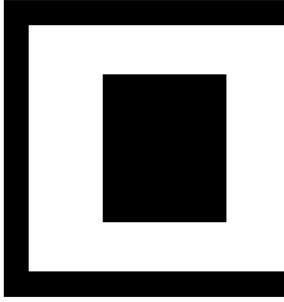
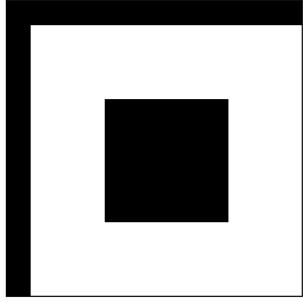
Erosion and Dilation of a Hollow Square



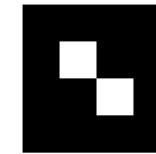
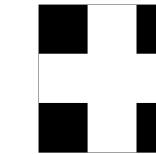
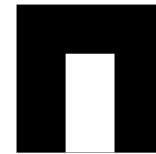
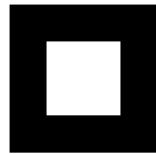
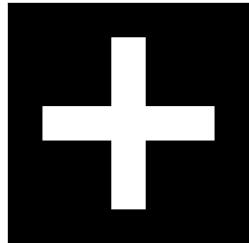
erosion



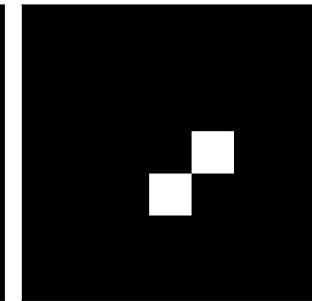
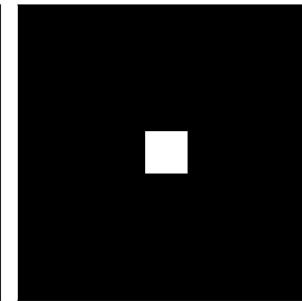
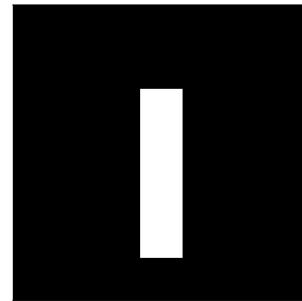
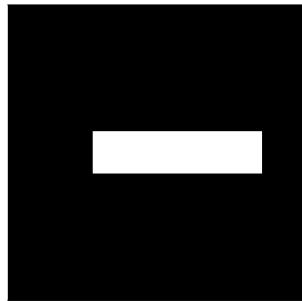
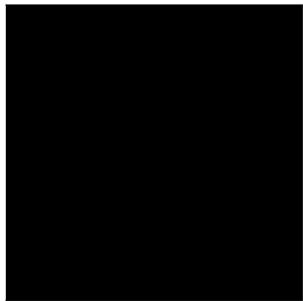
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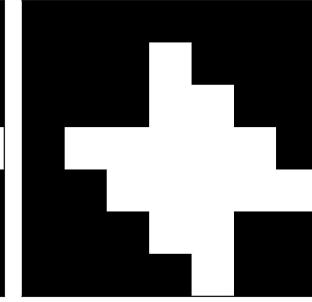
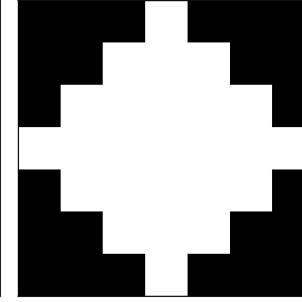
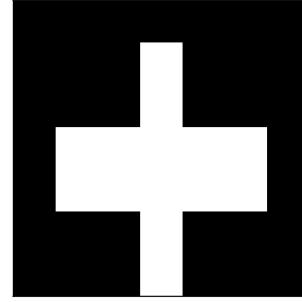
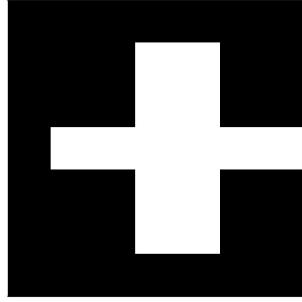
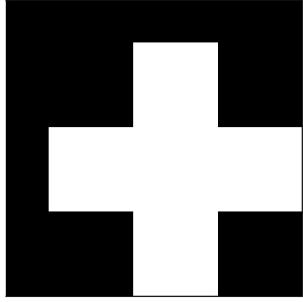
Erosion and Dilation of a Cross



erosion



dilation



Prediction vs Program Output

The output of the program matches the predictions, except for a few minor differences. The shapes of the output program matches the predicted shape, but some of their positions are different. This can be remedied by changing my origin point (x mark) for the structuring element in my predictions. A major difference between the two are the results using the diagonal structural element. The diagonal kernel I used in the predictions doesn't work when I implement it in Python. The mirror image of the diagonal works, though. Thus, I used this instead in the program. The results still look similar except for the erosion of the cross.