

# Project 1

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COMPUTER GRAPHICS - CMSC 405

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# Test Cases

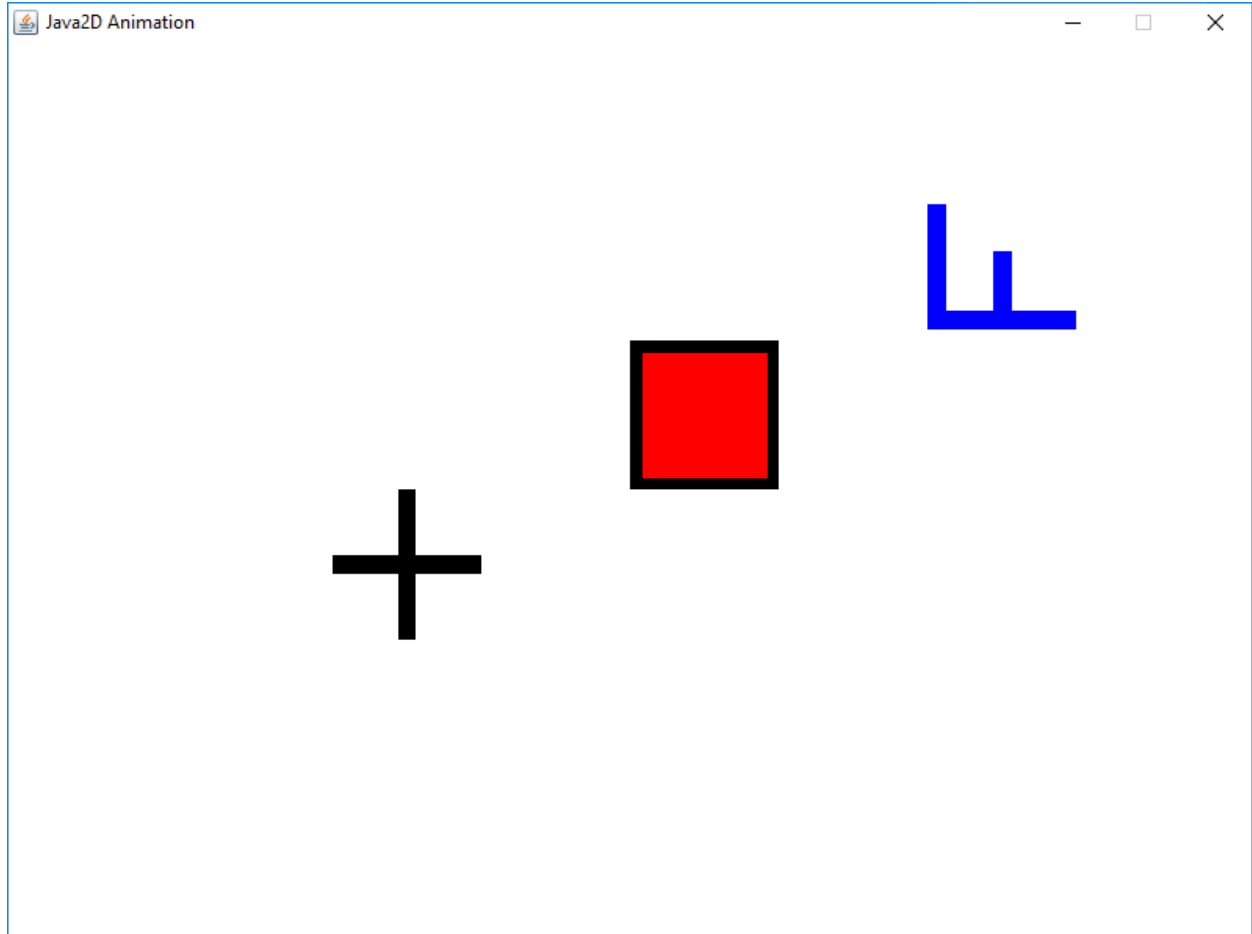
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Aspect Tested	Input	Expected Output	Actual Output	Test Outcome
Translate each image -5 in x direction	(Frame 1)	(Images translated -5 x)	(Images translated -5 x)	Passed
Translate each image +7 in y direction	(Frame 2)	(Images translated +7 y)	(Images translated +7 y)	Passed
Rotates each image 45° counter clockwise	(Frame 3)	(Images rotated 45° counter clockwise)	(Images rotated 45° counter clockwise)	Passed
Rotates each image 90° counter clockwise	(Frame 4)	(Images rotated 90° counter clockwise)	(Images rotated 90° counter clockwise)	Passed
Scales each image 2x for x component	(Frame 5)	(Images scaled 2x for x component)	(Images scaled 2x for x component)	Passed
Scales each image 0.5x for y component	(Frame 6)	(Images scaled 0.5x for y component)	(Images scaled 0.5x for y component)	Passed

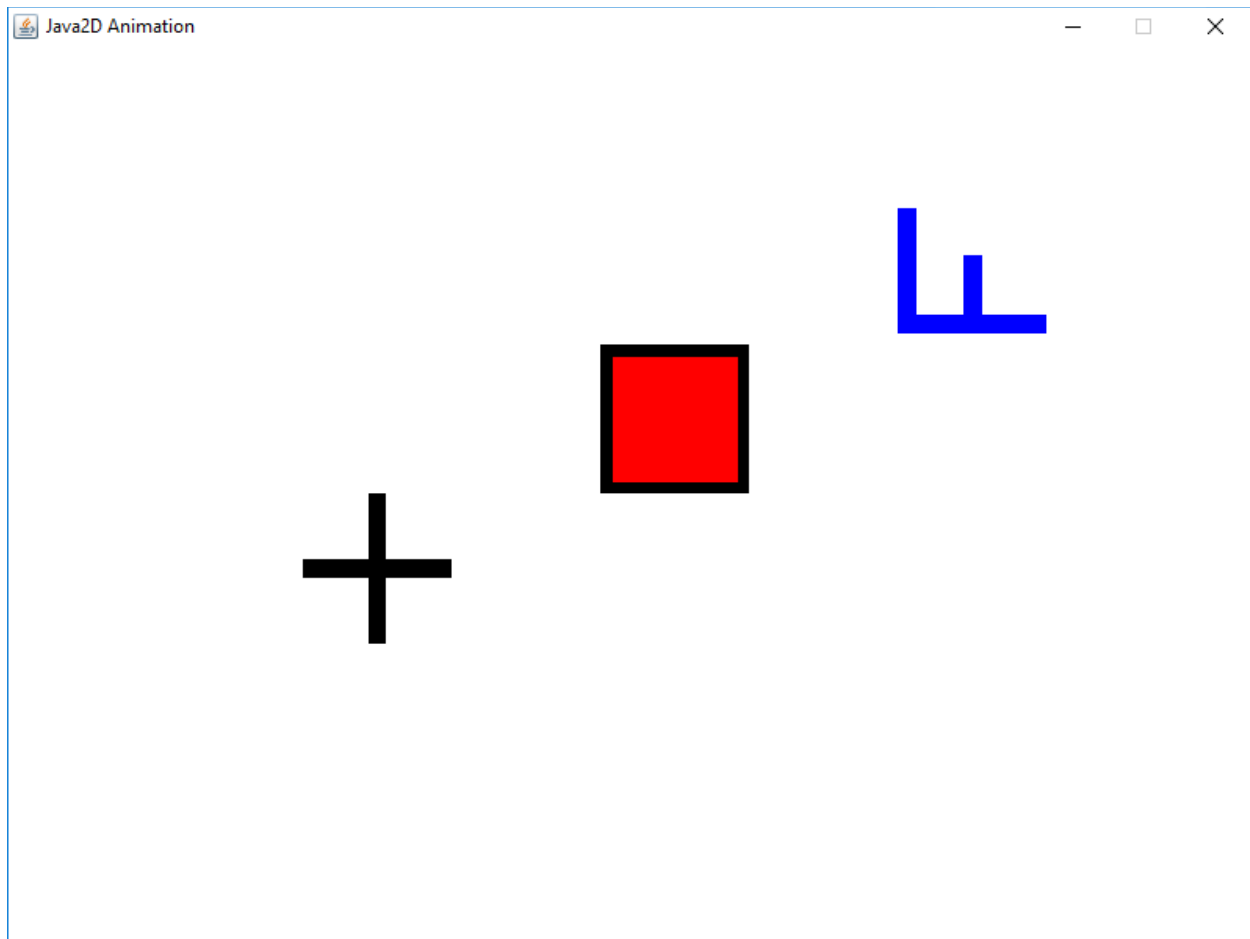
# Final Product

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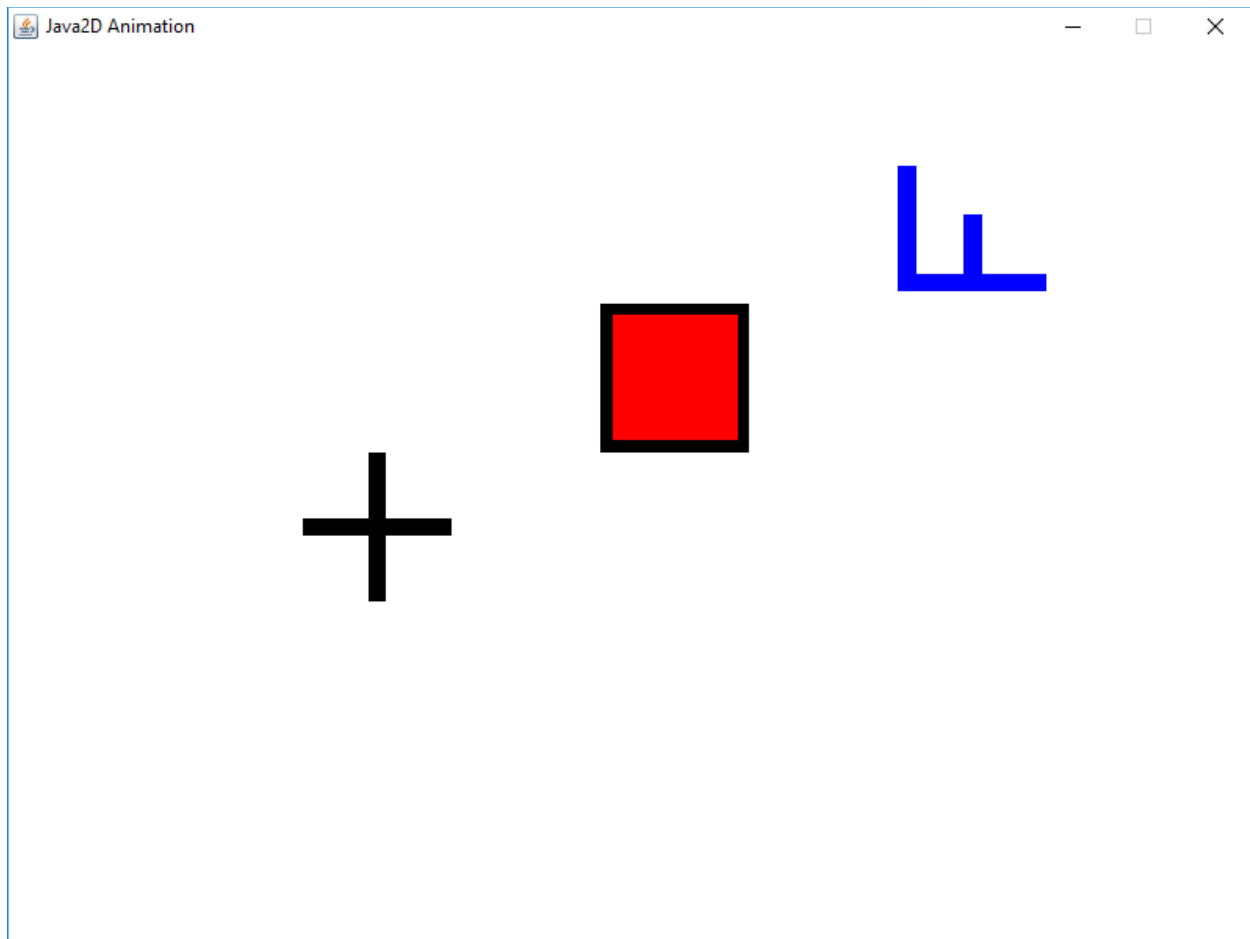
Upon starting the program, a window will open that looks like this. This is the starting frame of the animation. I have drawn three images, one of a black cross on a white background, another of a red square with a black outline, and lastly, a blue “F” on a white background.



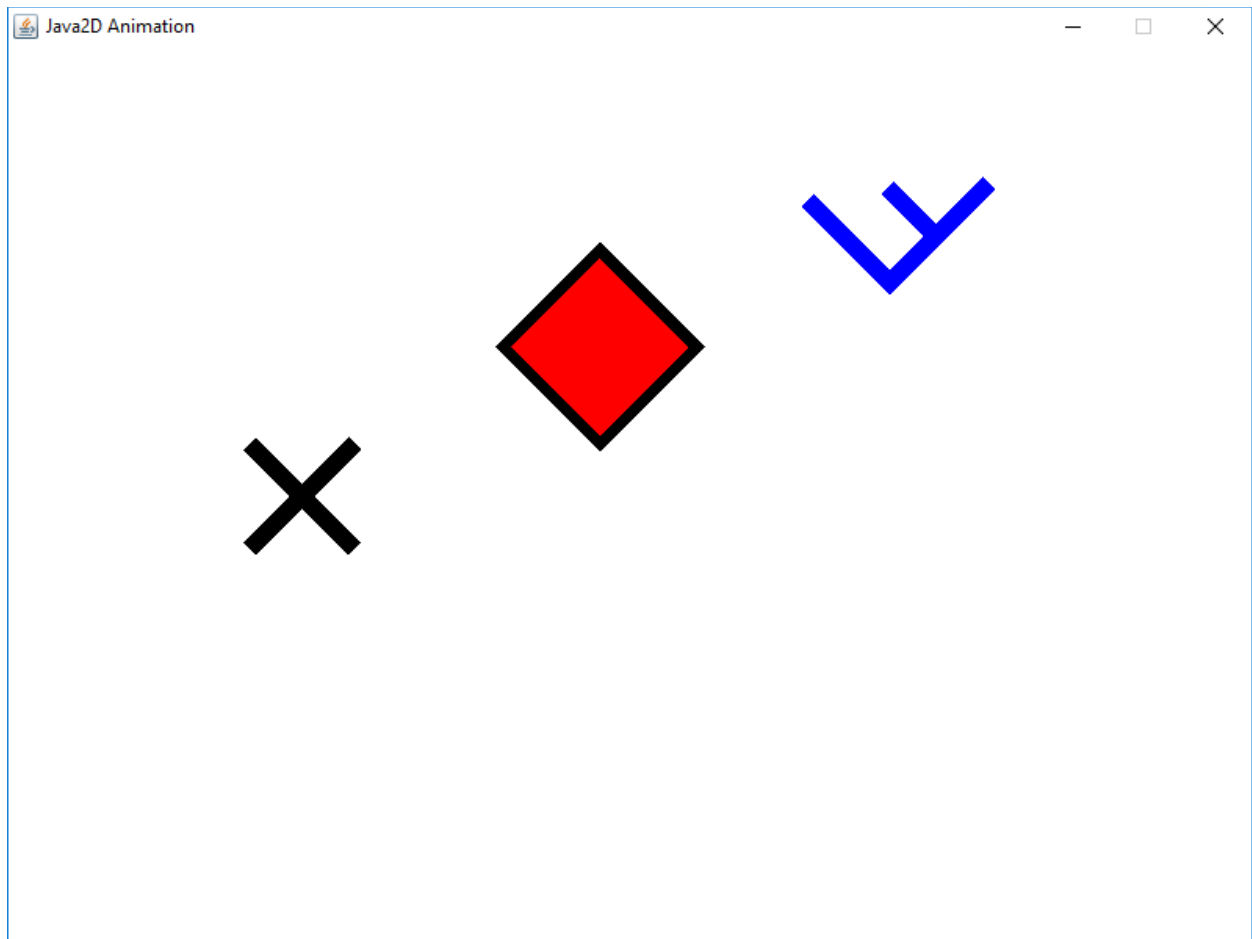
Next, it will then transition to Frame 1. This frame translates each image -5 in X direction.



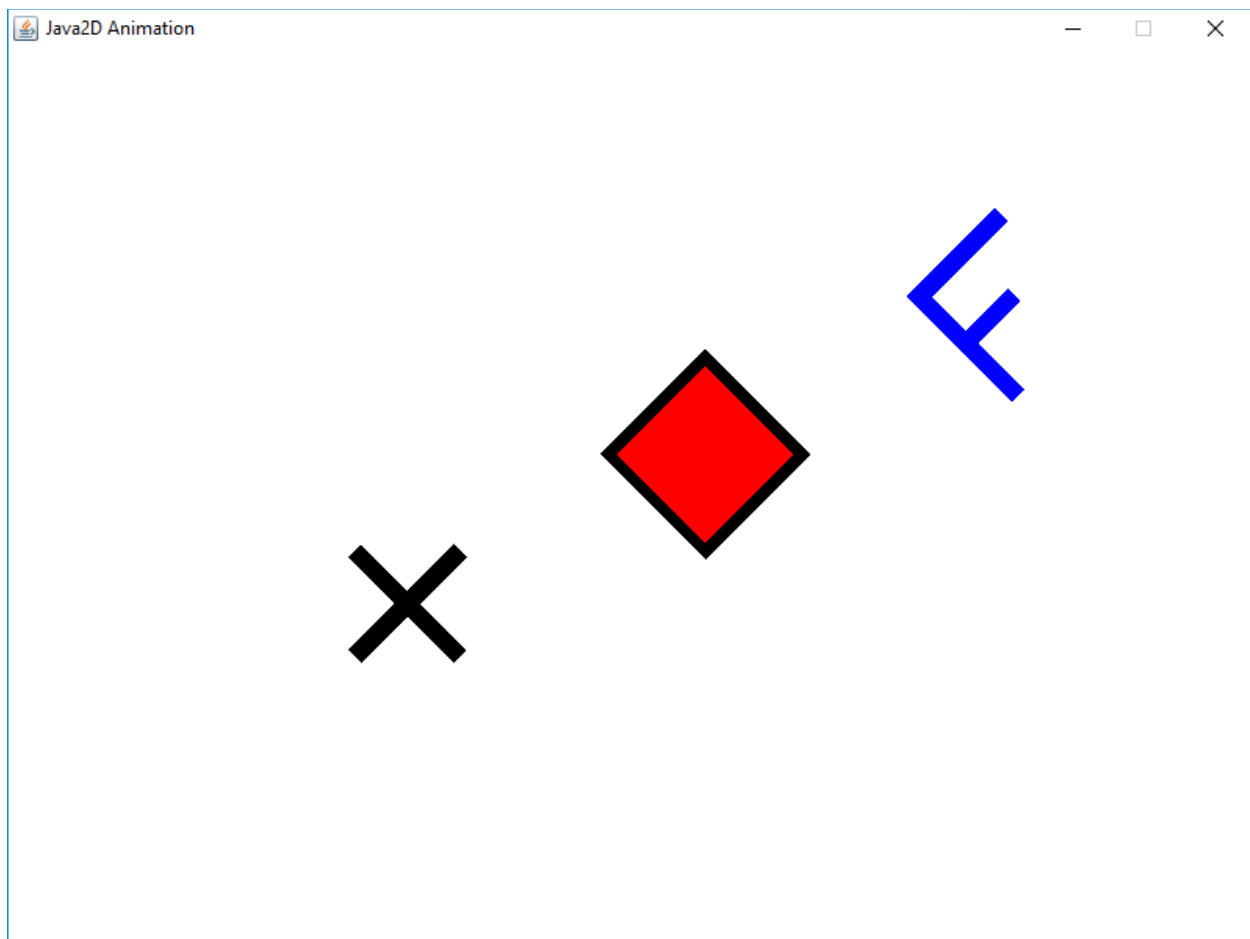
Then, the program will transition to Frame 2. This frame translates the image +7 in the Y direction.



Next, it will transition to Frame 3. This frame rotates each image 45° counter clockwise.

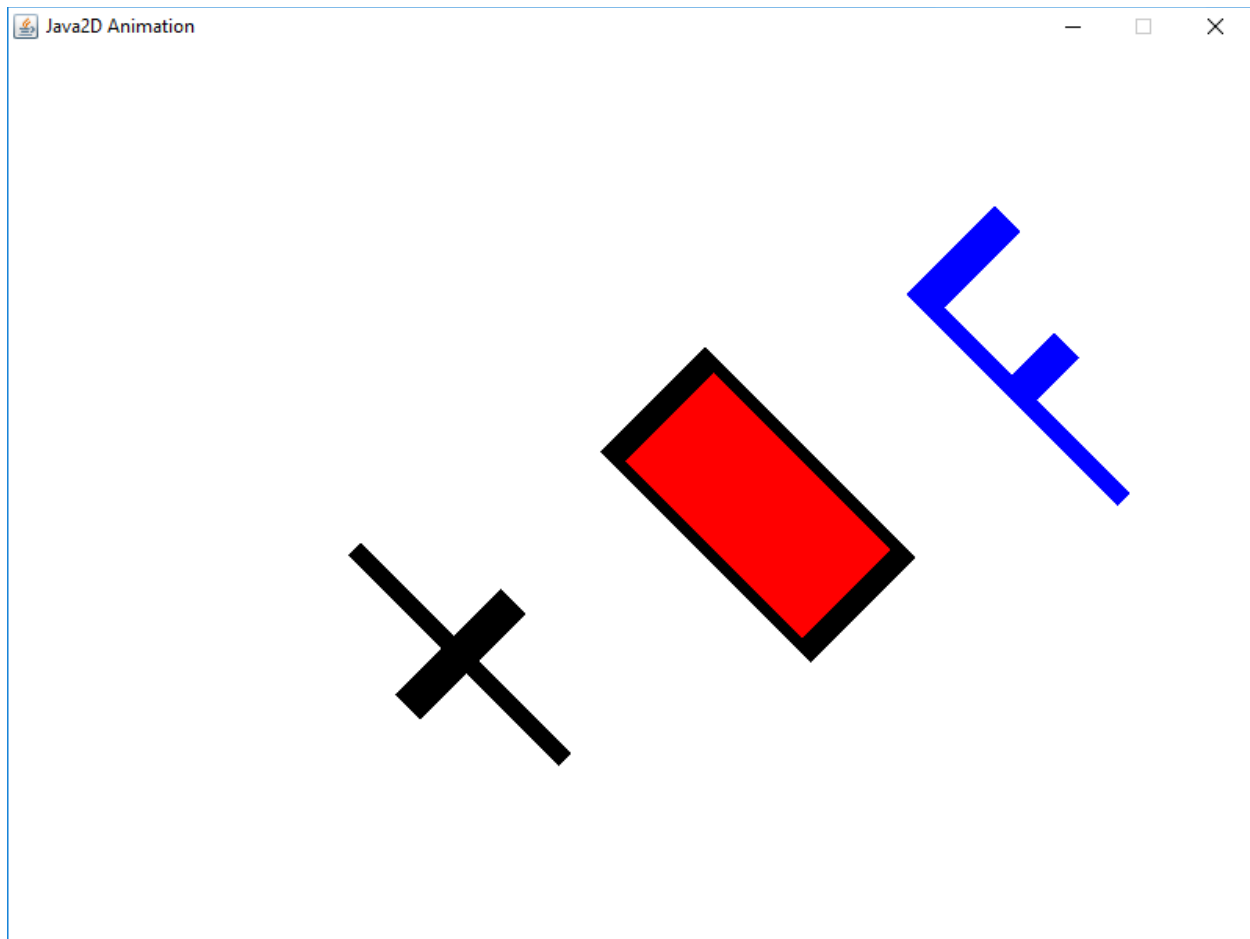


Then, on Frame 4, the image will be rotated 90° clockwise.





Moving on to Frame 5, each image will be scaled 2 times for the X component.



Lastly, the program will transition to Frame 6. The images will then be scaled 0.5 times for the Y component. After this Frame, the program will then loop and return to Frame 0, or to the starting frame, to then start the animation again.

