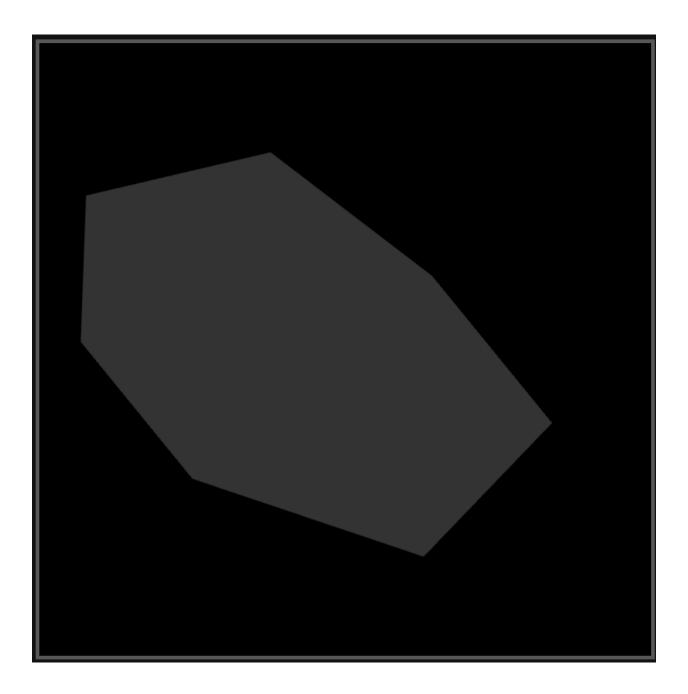
Cs 405 Project 1 Report

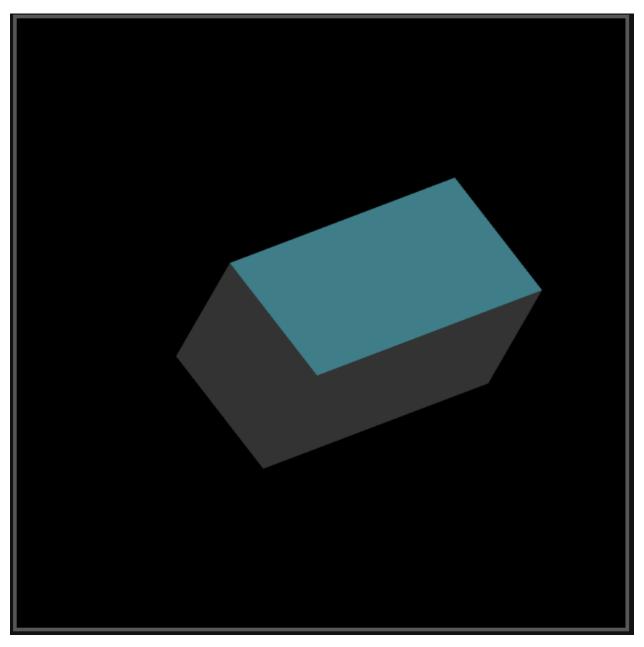
The snapshot of the image created according to the matrix given by GPT.



GPT link for transformation:

https://chat.openai.com/share/4ef2f7c0-a9f8-4a53-82fc-85d8275c12ea

The image created by the matrix I calculated using the given functions:



I first calculated all the scale, translate, and rotate matrices that will be required in finding the final matrix. Then I multiplied the matrices in the order where translation will be on the most right and rotate z will be on the most left in multiplication to apply the matrices in the right order for asked transformation. The reason for the matrix found by GPT being different than the one I calculated is I believe GPT is not good at calculating things by itself since it is an LLM model but it is good at showing how to find the right value. Therefore it calculates wrong values and causes the difference.

GPT link for animation:

https://chat.openai.com/share/5a0f7461-48ac-4155-ada0-9b5252d3f0d0

GPT created an animation where cube transforms into the final object in 10 seconds but then instantly turns back to initial position. I had to examine the code created by GPT and modify it in order to have two interpolations. Then I got an error that I could not figure out and had to ask GPT the same question 3 times. In the third output he solved the problem and created the right animation. The problem was related to using the same progression variable for both interpolations.