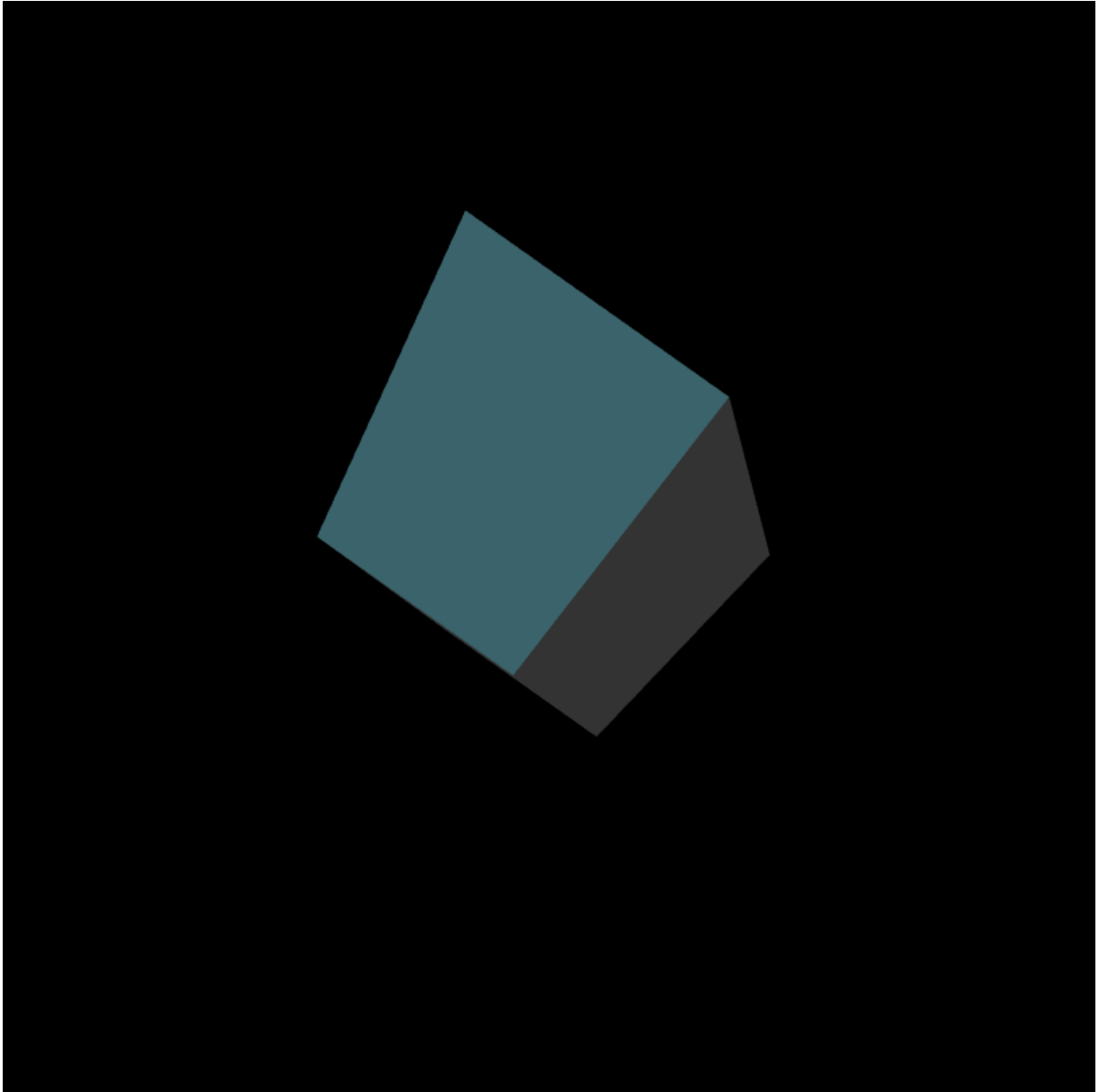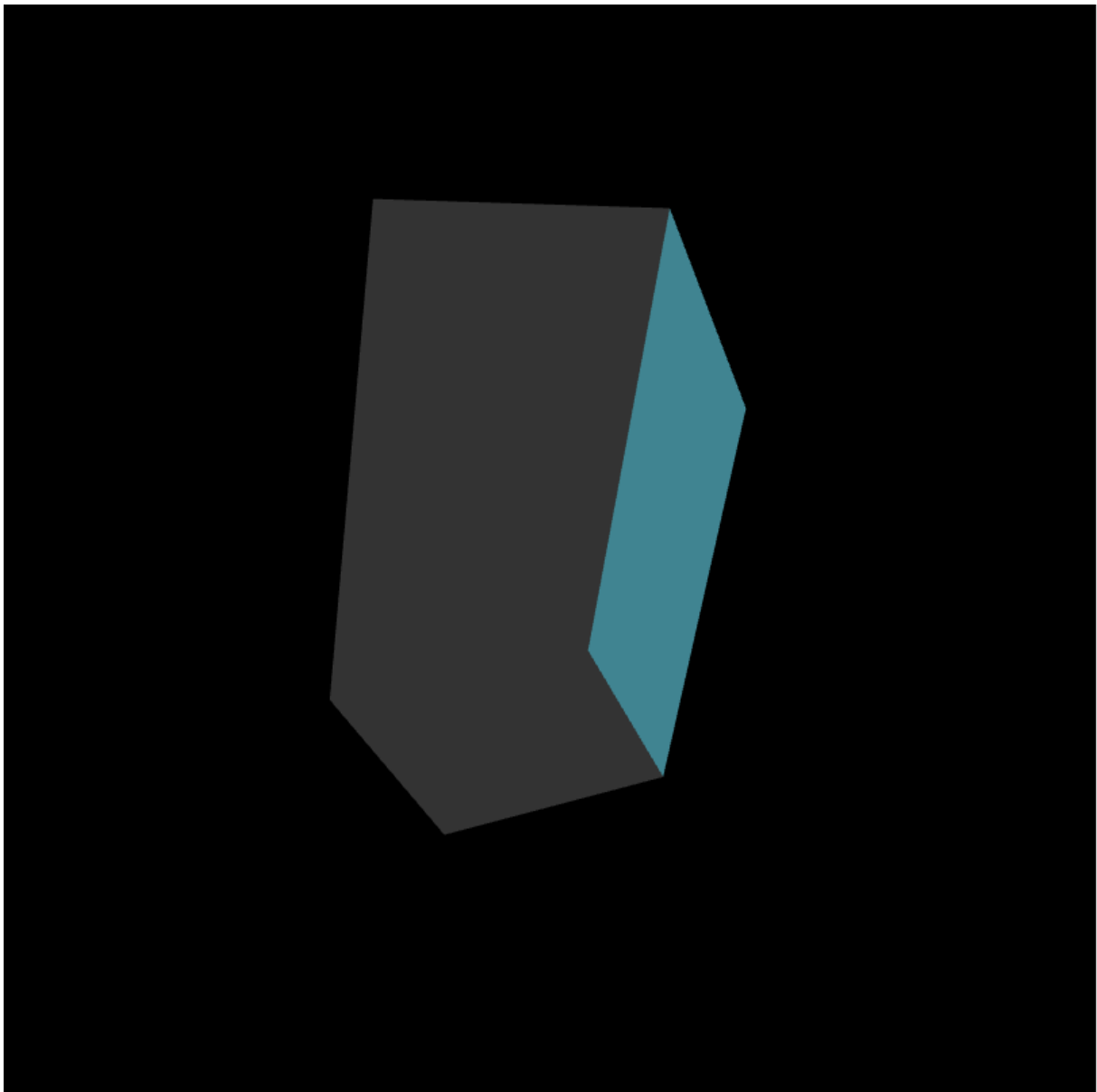Task1

The cube generated by the output given by chatgpt

Task2

The cube generated by using the functions given to in utils.js

Here the cube generated is different then the cube given by chatgpt. Reasons why this can happen the transformation order I used was Scale Rotate then translate chatgpt might have used another ordering. Chatgpt's calculations(matrix multiplication and rotations) were incorrect.

I have tried several different orderings and manipulation in the data to see if I could get to the calculations made by chatgpt, though I could not succeed in it so I am sure that it is most likely a calculation error.

Task3

I have asked the chatgpt to the rotate by giving this prompt while including the task2's function

*here I calculated the transformations by this order and using functions in my program*

*now I have to animate this cube object infinitely with an interval of 10 seconds. In the first 5 seconds, the object*

*should transition to the calculated transformation in the function. In the last 5 seconds, the*

*object should return to its initial position.*

However this did not yielded a correct result because chatgpt was unaware of the index.html file so in the next prompt I gave it the whole file to redo the function. In this case the cube animation was working.

End

The below is the link for chatgpt conversation this link includes both task1 and task3 conversations.

https://chatgpt.com/share/67115681-4fa0-800b-ba84-50b9cb1a7b28