

CSE4204 | Section B2| Computer Graphics Lab | Assignment – 3

[10 marks]:

Create a 3D **octahedron** using index buffer. **The color of each side of the octahedron should be different.** You have the freedom to choose any color you want.

- For pressing **A** and **S** keys, the **octahedron** will rotate (-ve) and (+ve) along the Y-axis.
- For pressing **W** and **Z** keys, the **octahedron** will rotate (-ve) and (+ve) along the X-axis.
- Also, the **octahedron** will scale up and down for pressing the **+** and **-** buttons.

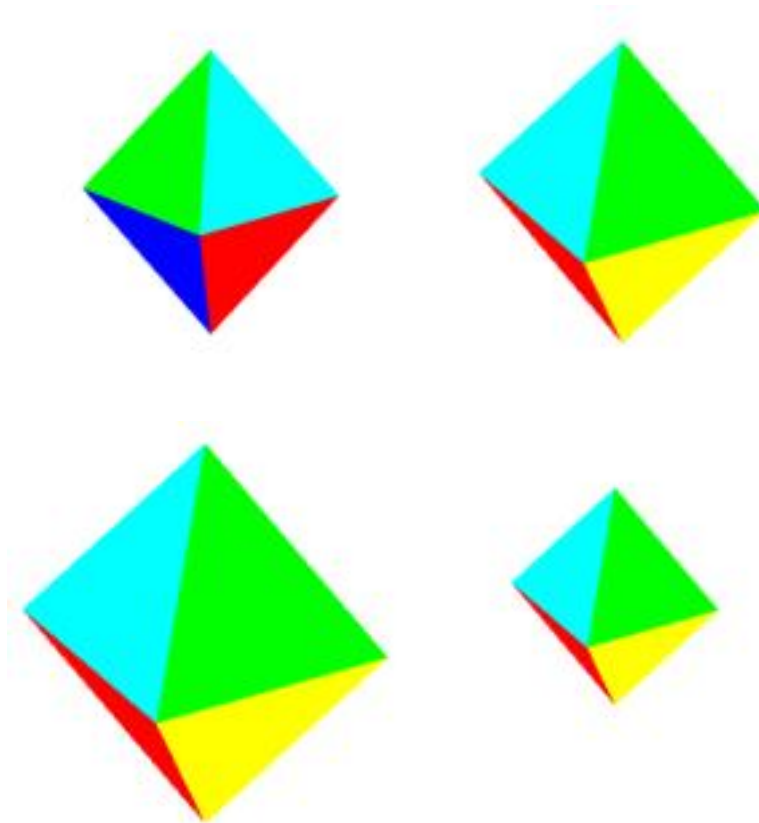


Figure: Different Example States of the 3D Octahedron.

Hints:

- You must carefully define the order of the vertices. For front-facing triangles, the order of the vertices should be counterclockwise and vice-versa