

CS100433
Computer Graphics

Assignment 1

Questions

- 1 What is a graphics pipeline? Why is it called a pipeline?
- 2 Why should the graphics pipeline be programmable?
- 3 What are vertex, primitive and fragment?
- 4 What are geometry and topology?

Questions

5 What happens when the viewport is reduced? Why?

6 What happens when the clipping window is reduced?
Why?

7 Is virtual camera exactly the same as the real camera?
Why?

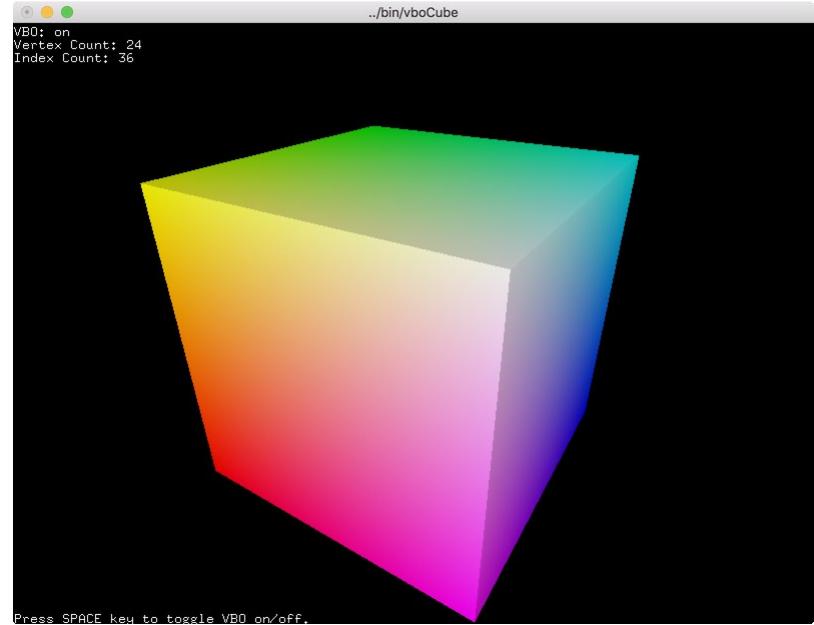
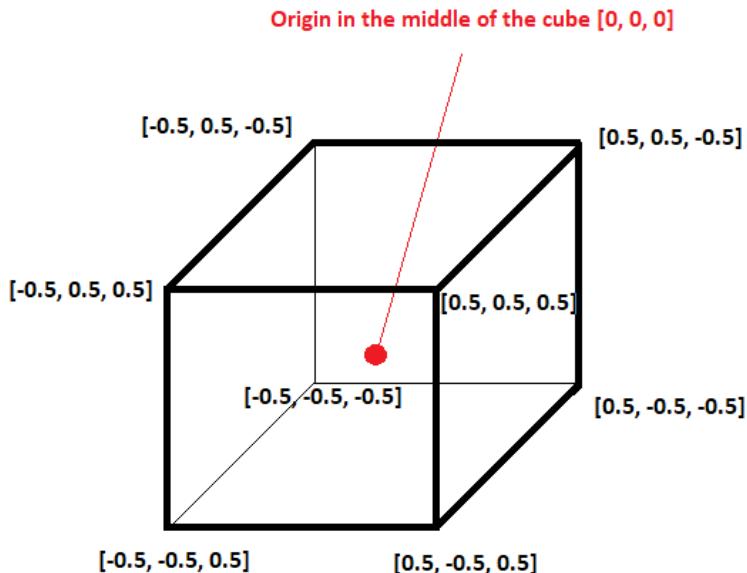
8 Describe the pros and cons of mesh-based solid
modeling

Questions

- 9 Describe the pros and cons of voxel-based solid modeling
- 10 Describe the pros and cons of point cloud-based solid modeling.

Programming

- Draw a Cube with Colors like this:



- Can you animate the color of the cube? To approximate a neon light.