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CS-537 Interactive Computer Graphics
Programming Assignment 5

Implementation:

I have completed the Programming Assignment 6 of implementing 3D Transformation in Java. The algorithm works filling in the essential code in the vert file which eventually transforms a tessellated object according to the model, view and projection transformation described below. The assignment uses OpenGL and GLUT. The parameter values for the transformations will be provided from an OpenGL application, and will be given to the shader through the use of appropriate OpenGL API calls.
My implementation of 3D transform both frustum and orthographic projections of a single tessellated object.

Challenges:
The program was relatively easy to the other programs, once you know what you are doing. Initially I was trying to do matrix creation in the OpenGl itself but somehow I was ending up with some issues so I decided to edit the shader.vert file instead of that and therefore I become really easy after that, because GLSL provides all the necessary data types and operations to create and manipulate matrices

Submission:
My submission includes five java files shaderSetup.java, simpleShape.java, transMan.java, viewParams.java and teapot.java. Apart from that there is one shader.vert. I only altered the
Shader.vert file and rest of the files are unaltered. Apart from that, there is also screenshot of all the outputs of the program and a documentation file named Documentation.pdf