CSC 350 - Computer Graphics - Homework 2

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Problem 1 What happens if you call glutCreateWindow a second time in a program? Feel free to experiment to find out (0.5 points)

In my testing, the first window opens then the whole application crashes.

Problem 2 Which projection will give a more realistic image, orthographic or perspective? Why? (1 point)

Perspective projection is more realistic than orthographic as perspective mimics how images are formed on the retina via light rays traveling to a fixed point.

Problem 3 Explain the concept of state machine. (1 point)

A state machine is a model in which the machine is in any one of a finite number of states. The machine transitions to other states based on inputs. An example for our use in OpenGL could be setting a color. Say you set a color in your code. OpenGL will continue to use that color until you decide to change the color again.

Problem 4 Since the routine specified in glutDisplayFunc takes no arguments, how do you get data from other routines to it? (0.5 points)

Global variables or any other manner of saving data (reading in an external file, using shared memory, etc.).