Assignment 0209
This assignment includes reading to fill in details from what has been covered in class, plus gives you a little more practice with straight-up OpenGL 2.x programming.

Not for Submission
1. Read Chapters 3 and 5 in the red book — these chapters add detail to the OpenGL elements that were seen in class this week.
2. Read Chapters 1 and 2 from the Angel book — these chapters contain both overlapping material from the red book, but presented differently (it’s always good to hear/read about the same thing from multiple perspectives), plus additional theoretical and historical details of the material covered so far.

For Submission
Expand your OpenGL muscles even further by writing a “showroom” program — a program that displays the same three-dimensional object in five different ways (see below), positioned at different locations within the same overall space. Provide the following functions:
1. Some mechanism, of your design and implementation, that facilitates navigation around the “showroom” — this way, the user can “walk” to each object to view them up close or one by one
2. Some mechanism, of your design and implementation, that allows the user to change where he or she is “looking” — that is, allow the user to look in different directions while standing on the same spot

The five versions of your object should showcase the following types of fixed-function rendering:
- Drawn in wireframe
- Drawn with solid-color polygons
- Drawn with gradient-color colors
- Drawn with lighting and flat shading
- Drawn with lighting and gradient shading

Commit your work under `/homework/cmsi371/showroom`. Feel free to break your program up into multiple files with headers. If you go with multiple files, you should also write a makefile to make it easier to build the program.