Daniel Garcia
CSE 328

Homework 2

Part 1-2:

Run the .exe file and a window will pop up showing the cube and tetrahedron from a camera positioned at (2, 10, 10) and looking at the origin.

Part 3:

Run the .exe file and a window will pop up showing the three icosahedrons, each subdivided by 0, 1, and 2 respectively. The left object represents a 20-triangle icosahedron, the center object represents an 80-triangle icosahedron, and the right object represents a 320-triangle icosahedron. The camera also moves per frame along the y-axis to allow better view of the three objects.

Part 4:

Run the .exe file and a window will pop up showing the three quadric objects. The top left object represents a solid sphere with flat lighting, the top right object represents a wireframe cone with smooth lighting, and the bottom object represents a solid cylinder with flat lighting.

Part 5:

Similar to part 3, run the .exe file and a window will pop up showing the three icosahedrons, each divided by 0, 1, and 2 respectively. The left object represents a 20-triangle icosahedron, the center object represents an 80-triangle icosahedron, and the right object represents a 320-triangle icosahedron. These icosahedrons and their vertices are multiplied by 3 independent factors in order to represent them as ellipsoids. The camera also moves per frame along the y-axis to allow better view of the three objects.

Part 6:

Run the .exe file and a window will pop up showing the torus rotating every frame. The torus contains 32 n-sides and 32 rings in order to make the representation more accurate. The torus also switches between a wireframe and solid representation to demonstrate lighting effects.