

**Programming Assignment # 3**

*due: 4-10*

*percent of your your grade: 12.5*

This project is about creating and displaying a 3D object.

Using either Loop subdivision or surfaces of revolution,

- display in wireframe mode (that's not very new!)
- plus display in smooth shaded mode using one, two, or three different point light sources
- use different surface characteristics (have three available, such as two different colors, matte, and highly reflective)
- rotate your object with the light sources staying in place.

If you use a surface of revolution, use Chaikin's algorithm to generate the profile curve. Allow for 1 to 4 levels of subdivision.

If you use Loop, also allow 1 to 4 levels of subdivision.

Your input data can either be entered via mouse click or by reading from a file.