CS3388 ASSIGNMENT 3

Due date: Friday Mar. 6th 2020, at 11:00pm.
Weight: 10% of final mark

The purpose of this assignment is to complete a 3D graphics program capable of displaying parametric objects as polygonal surfaces. For this purpose, you are required to:

- Complete the methods in class `lightSource`. The methods needing completion are the setter and getter methods.
- Complete the constructor and the helper methods in class `tessel`. This class tessels the objects of the graphical scence into convex polygons, and computes the color shade to fill the polygons with. In order to program this properly, refer to the notes on lighting models (particularly the Section on **A Practical Lighting Model**), and the comments included with the provided code `tessel.py`
- If you are starting the assignment before Sunday Feb. 16th at 11:00pm, you will have to rely on the classes that you have programmed for assignment 2 until its solution becomes available, which is shortly after its late deadline. It is advised that you use the solution code of assignment 2 when it comes available.

Here are some general considerations concerning this assignment:

- The sum of the Python code needed for this assignment can be found in OWL under Resources, Python Code, Assignment 3.
- You must not change the provided classes that are complete, nor the provided file names and class names. In addition, exactly follow the instructions as to the naming of the files and classes you will have to program for this assignment.
- The test program for this assignment is `Assign3.py` and is found with the rest of the provided code.
- Executing `Assign3` should result in an image identical to this one
- Use OWL to submit the file `myAssignment3.py`. This file must contain the following classes:
  - `lightSource`
  - `tessel`

You must use Python 3.7 and PyCharm 2018.2 or above for this assignment. Before submitting your assignment, please refer to the assignment marking scheme and submission guidelines.