CS3388 ASSIGNMENT 2

Due date: Thursday Feb. 13th 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 wiremesh. For this purpose, you are required to:

- Program the helper methods in class cameraMatrix as exactly specified in the class notes on this topic.
- With the parametric equations provided in the class notes, and inspiring yourself from provided classes parametricSphere and parametricTorus, implement the following classes for additional parametric objects (name the classes as specified below):
 - o parametricPlane
 - o parametricCircle
 - o parametricCone
 - parametricCylinder

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 2. Do not include your code from assignment 1. Use the code that is provided instead.
- You must not change 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 Assign2.py and is found with the rest of the provided code.
- Executing Assign2 should result in an image identical to this one
- Use OWL to submit the file myAssignment2.py. This file must contain the following classes:
 - o cameraMatrix
 - o parametricPlane
 - parametricCircle
 - o parametricCone
 - parametricCylinder

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