# CSE4014: Graphics and Animation Lab

## Topic: Assignment 1

You will find an executable file and run it to get the clear idea about what to do on your 1st assignment described in the lab. You are also given a working code which consists of a ball is moving through Y-axis on which you can write the necessary codes.

There is a system where four spherical balls are moving through the principal axes (positive and negative) from the origin within a spring and maintain four different colors. If you click the left button of mouse then the balls must change direction 45 degree as well as their spring. Again if you click left button of mouse it must retrieve its old state.

Instructions:

1. Draw the balls according to these positions (x,0,0), (-x,0,0), (0,x,0) and (0,-x,0) using glTranslatef function. For another view draw the balls at (x, x, 0), (-x, x, 0), (x,- x, 0) and (-x,-x,0). After drawing each ball nullify the last translation. Use a flag variable to maintain two different views.
2. For the moving spring draw lines from (0, 0, 0) to these co-ordinates [centers of the spheres].
3. For the triangles above the balls find suitable points. This part is little bit chicanery.

## Topic: Assignment 2

You will find an executable file and run it to get the clear idea about what to do on your 2nd assignment described in the lab. You are also given a working where you can write the necessary code.

Instructions for this assignment was given in the class. You have to draw a circle within a square within a triangle.

## Submission:

1. After finishing copy the main.cpp file to another location. Rename the file replacing main by your student id. (Example: 2011100000026.cpp). There will be two submission windows. When submission link for each assignment is available, upload your renamed .cpp file only. Strictly follow the procedure otherwise it will cost a lot to you.
2. You have to submit the assignment within the due deadline, December 29, 2019, Saturday, 11:30 PM. After that, the submission window will be closed. There is no provision for late submission.
3. Teacher will evaluate your submission after downloading them from classroom. So, be prepared to execute your submitted code in the lab in case the teacher fails to run your code using the machines in the lab. Best if you can bring your laptop. A viva will take place also.
4. Your source code files will be checked against other source code files to report plagiarism. **SO, DO NOT COPY CODE!!!**