# **Assignment 2:: Transformations**

#### Task 1: Stack of Cubes

Create a  $10 \times 10 \times 10$  stack of cubes anywhere in a  $500 \times 500$  window. The gap between cubes should be equal to two cubes. Each cube should be of a random color.

### **Task 2: Object Movement**

From Assignment 1, create two similar objects of your choice that appear at a random position in a 500x500 window. Each object moves in a random direction and keeps on moving in that direction until it collides with the window boundary, or another object.

#### Task 3: Camera Movement

In the 10x10x10 stack created above, include camera movement. The camera should be at the height of the first stack of cubes (bottom layer) and it shouldn't be able to move higher than this. Position of the camera should be controlled by the keyboard. The direction of the camera should be controlled using your mouse.

## **Deliverables**

I need exactly 2 source-codes named as follows:

12P-1234-task1.c, 12P-1234-task2.c, all the way to 12P-1234-task6.c

Remember that I use Linux. I should be able to compile your code.

Note: Do the code yourselves. Use only concepts studied in class. If your code has more than 70% similarity with other students, there will be penalty marks applied.