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CS 506

Project 7: Triangular Structure

In this task, I was given to draw a Triangular Structure using C# programming in Unity3D. This required me to draw the Triangular Structure with multiple cubes stacked one on each other having different sizes and minimum and maximum amounts of rotation. The cube placed at the very bottom has the minimum size and rotation while the cube placed at the top of the structure has the maximum size and rotation. The sizes of the cubes remain the same for the first half of the structure while the cube size increases for the second half of the structure as we go from bottom to top. However, the rotation takes place for each and every cube starting from the bottom of the first half to the cube on top of the structure. I created the cubes using the GameObject. Then I transformed, scaled and rotated them as per the requirement of the task.

Further, in the code, I initialized the height of the structure, the minScale, maxScale and deltaScale for scaling the cubes and minRotate, maxRotate and deltaRotate for rotating the cubes. Then I declare the "for loops" for the number of rows 'i' and the number of columns 'j'. In total, I am taking the number of rows as 10 and number of columns as 10.

I declare and define a method "Figure" in which I transform, scale and rotate the cubes.