

# Report - Problem Set no 1

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## Problem 1

### Basic description

there we want to simulate the Koch curve using computational methods. in that case, we have to follow the algorithm which leads us to the solution. at first, we have a list of 2 points that create a single line. then we have to create 3 more points between them and transmit them to the position they have to go. at first, we divide the line into third. add the final point of the line in the middle of our list. then we will do that again but we will divide the first line to two-thirds instead of third. then we will rotate the final spot in 60 degrees and add the point before the last point in the list. and finally, we will do the previous operation without rotation. we have to repeat these operations for every point side by side in the initial list (the initial list in every step will be updated and will contain more points).