

## Week 10- Tutorial #8

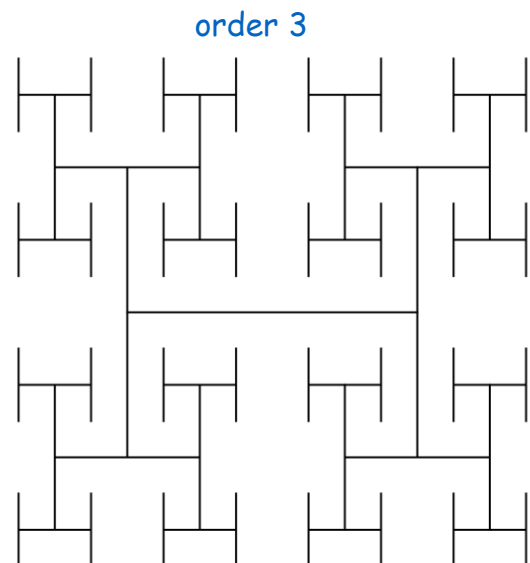
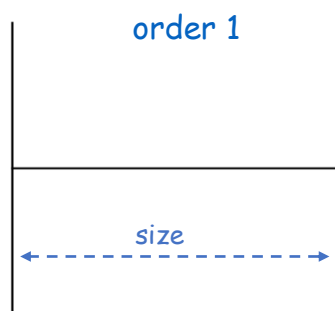
This week's tutorial is again about practicing recursive functions.

So for the given problem, you ask students to solve it and then trace it. Remember that we had a convention for tracing.

This week, I'm not going to tell you how to run your tutorial instead I ask you to be creative and find a way that you think best helps students to learn. Then, I expect you to write a paragraph explaining your approach and reflect on how well students learnt or how confusing it was. Please do not discuss your approach with other TAs this week ( you can do it next week, of course) because I want to use this as part of your evaluation<sup>1</sup>. This doesn't mean that if you brag about your method of teaching, you'll receive a positive point instead I'm more interested to see which method may/may not work. So even if you explain that your method was not effective because there were a lot of confusions or strange questions and things like that, you may still get the full credit. So please be honest.

So the question is how to draw the following HTree of order n, given the size of the line and the coordinates of the center of the H tree (the middle of the horizontal line), using recursion. The first figure shows a HTree of order 1, and the second shows a Htree of order 3 and final figure shows an Htree of order n (if you are curious and have extra time, you can count it to find what n is equal to 😊)

I have attached the code. You should download graphics.py and put it in the same folder as my code to get it run. You can easily find it by googling it. The code is clear enough and explains itself so I didn't bother to put internal comments. In the software engineering world, there are people who believe a code should be written readable enough that doesn't need any internal comments. So, as I am working late, and I am exhausted, I pretend my code is very readable and explanatory so it doesn't need internal comments 😊



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<sup>1</sup> Now, I know you are curious about how I evaluate you. You get points on how well you've done your job (i.e. missed/missed not tutorials/practicals, how cooperative/flexible you were when we assigned you to T/P sessions, how active you were in Piazza and things like that.

