HV Trees

Problem Description

Try to picture an HV-tree structure based on the following principles:

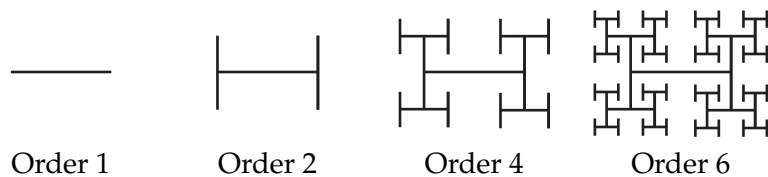Assume a basic shape of a line of length L (order 1)

Draw at each extremity a line of length (Factor $\times$ L) at right angles to the original previous line (order 2)

Draw at each extremity a line of length (Factor$^2 \times$ L) at right angles to the original previous line (order 3)

And so forth . . .

The shape takes form as follows:

Order 1   Order 2   Order 4   Order 6

Task

Write a program that will output an HV-tree of a given order and factor.

Relates to Objectives

1.1 1.2 1.3 2.1 2.2 2.3 2.4 2.5 2.7 3.3 3.5 4.1 4.5 4.7

(1 point, Individual)