again, is that one gets an intricate but highly regular nested pattern.

step 1   step 2   step 3   step 4   step 5   step 6   step 7

step 8   step 9   step 10   step 11
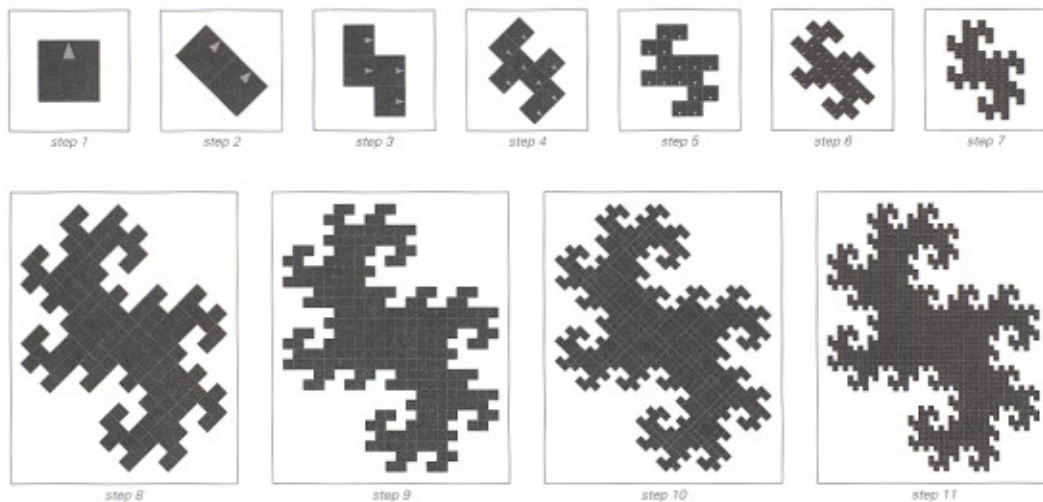
The pattern obtained by starting with a single black square and then at every step replacing each black cell with two smaller black cells according to the simple geometrical rule shown on the left. Note that in applying the rule to a particular square, one must take account of the orientation of that square. The final pattern obtained has an intricate nested structure.