

Despite the recursive method continuing to call on itself each time, to continue through the list, the non recursive method is still using the same list and making the same changes just at different points. Therefore, the same drawing is being done. In further detail, here is the step by step. The Non-recursive uses a while loop to iterate instead of calling on itself like the recursive. Both begin with testing to see if the branch length is greater than 5. The nonrecursive utilizes `self.turtle.left(20)` and then branch length is then subtracted by 10, whereas the recursive starts with `self.turtle.right(20)` and then subtracts 15. So they are starting to shift into different directions but then alter branch length by a different amount because they are at different points. Then they both readjust, going in the opposite direction, which in the case of the nonrecursive is `self.turtle.right(40)` and then subtracting length by 15. So they both change direction the same amount and then subtract the same length for when they go right or left which keeps the branches the same length. Nonrecursive finally readjusts by `self.turtle.left(20)` again, so they are always iterating around the same numbers. They have the same position when the branch length is the same, the non-recursive just is able to draw this without having to call on itself time and time again to draw, but all same movements and drawing happen at different times.