

# Luke's Project 8

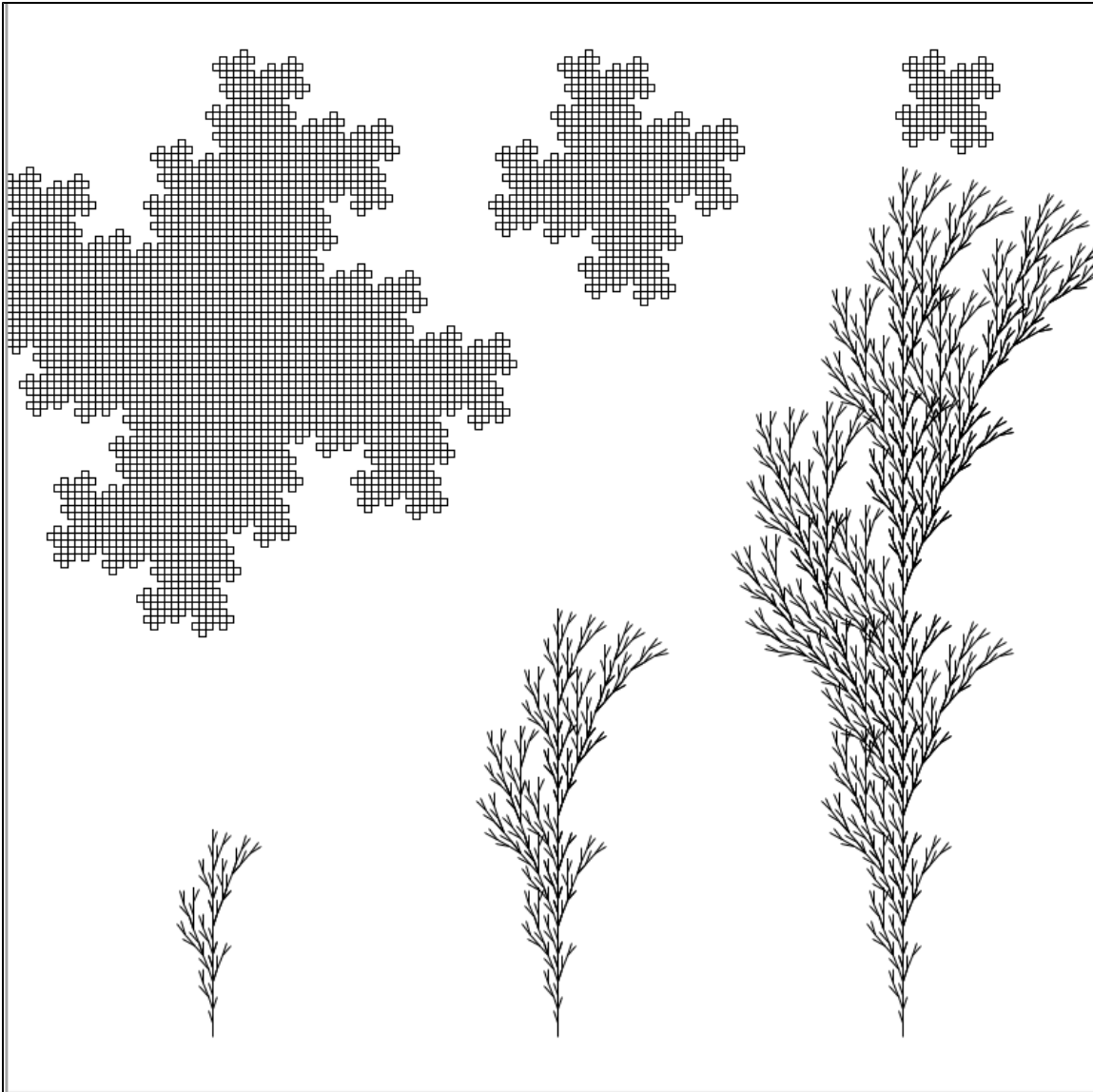
The purpose of this assignment was to make `Lsystem` and `turtle_interpreter` classes and bring them together to make pictures of trees and fractals. This made it possible to draw these pictures in a program that only imports the `Lsystem` and `turtle_interpreter` files, not `turtle` itself. I also learned how to deal with `Lsystems` that had more than one replacement rule.

The first task was just to update the `drawString` function to include more special characters for changing turtle's color and saving a turtle's color.

The following task was to create an arrangement of trees with different iterations. At least two `Lsystems` had to have at least 2 rules. I used the two given `Lsystems`, `systemGL.txt` and `systemFL.txt`. I had the number of iterations and placement be random. The output was this:



The final task was to use two new `Lsystems` and to show how they change iteration after iteration. I used one through three iterations for the trees, and three through five iterations for the fractals. The output was this:



Through this project I learned how to handle multiple rules in an Lsystem. I also learned how to create a file that will negate the necessity of importing turtle to every file. I worked alone on this.