Flos Mirabilis

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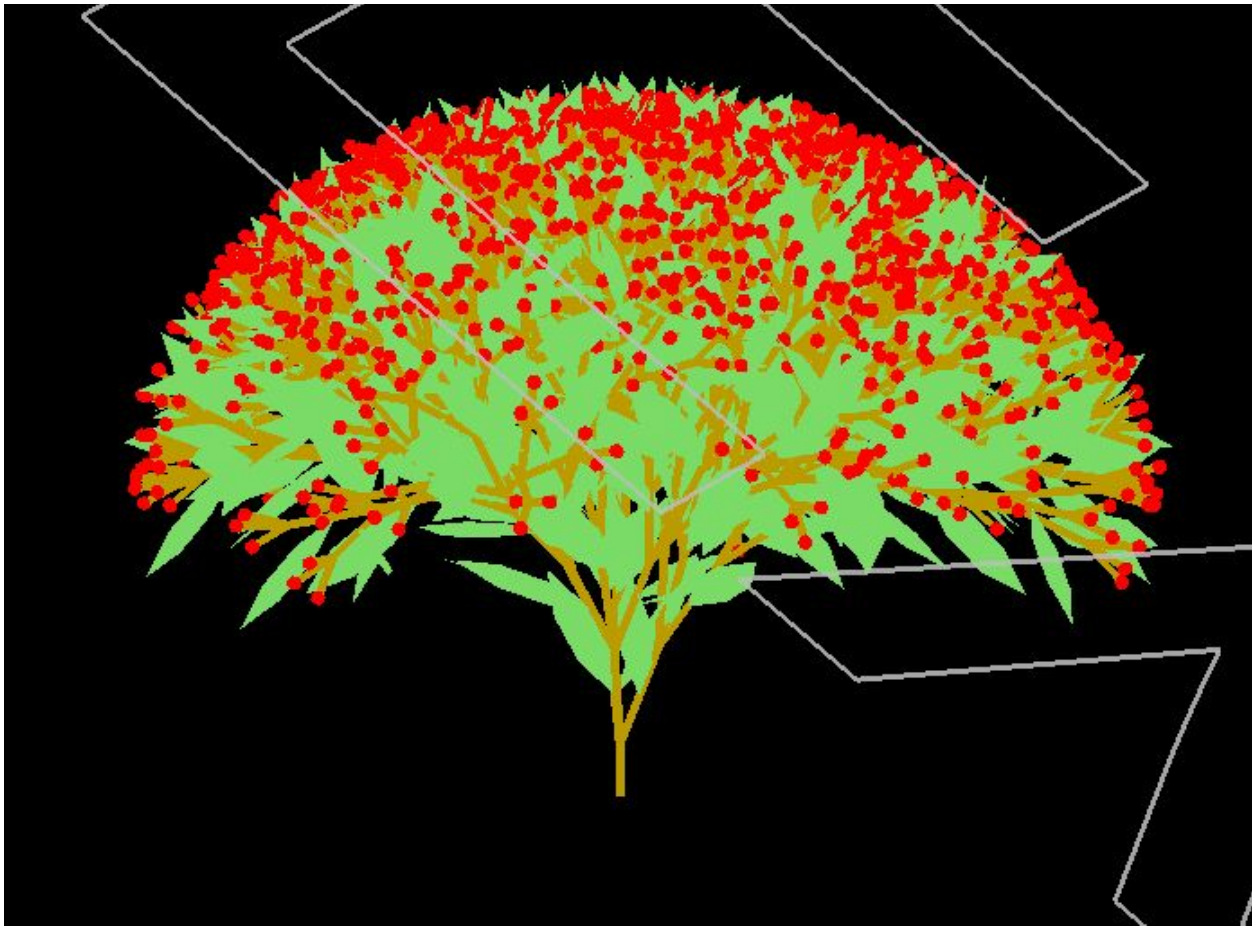
Teil 1:

Grammatik:

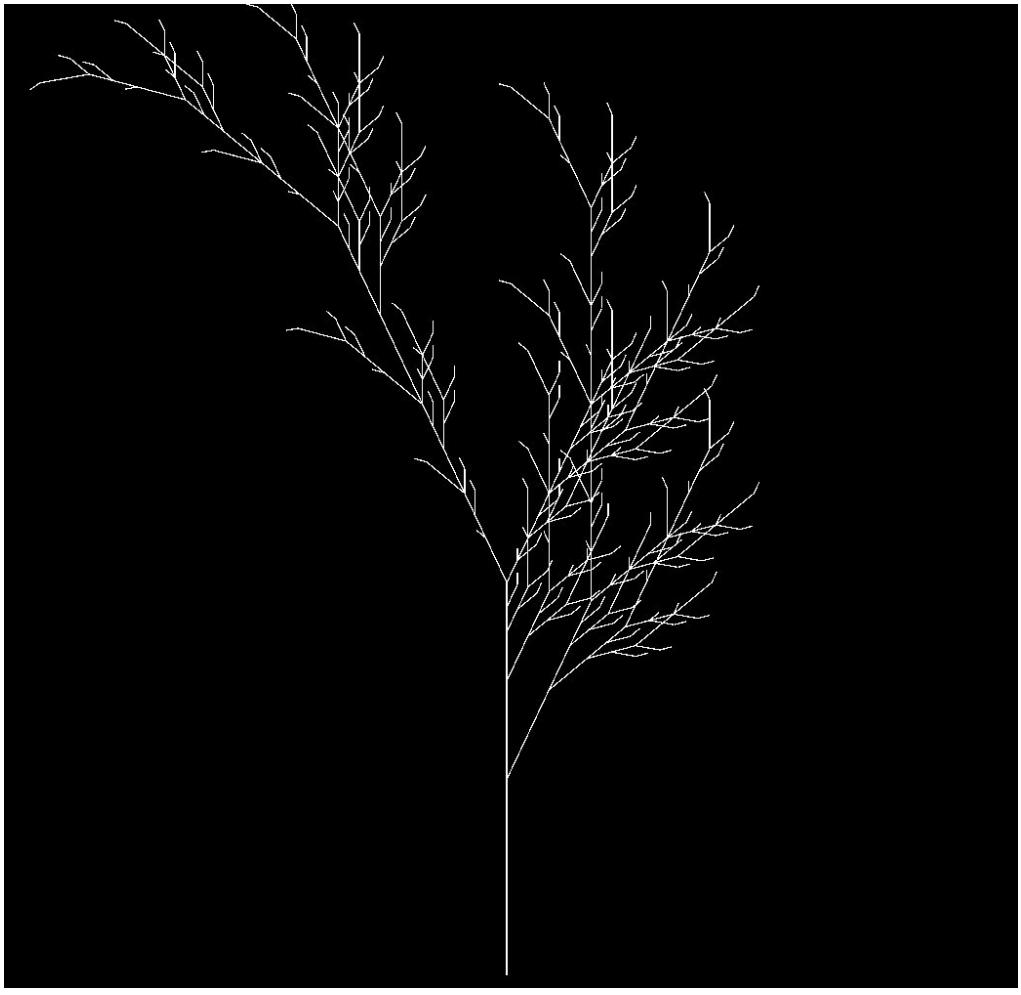
```
Lsystem: 1
derivation length: 7
Axiom: FA
F --> /////F
A --> [&F;L,!KA]/////'[&F;L,!KA]///////'[&F;L,!KA] /*branch out*/
L --> [^^{-f+f+f-|-f+f+f}] /*draw the leaves*/
K --> F
homomorphism
K --> ;;[^^@O(0.3)],, /* draw the flowers*/
endlsystem
```

Ergebnis:

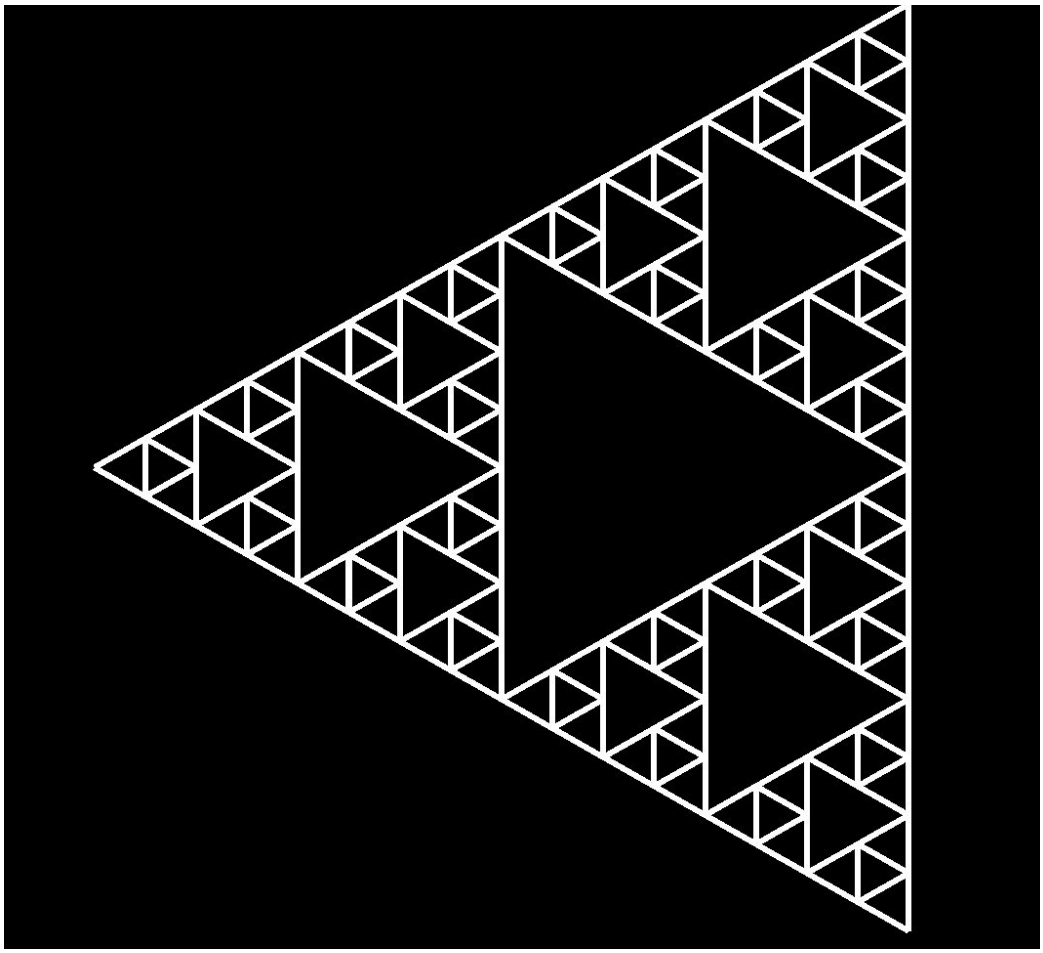


Teil 2:
Benutzung:

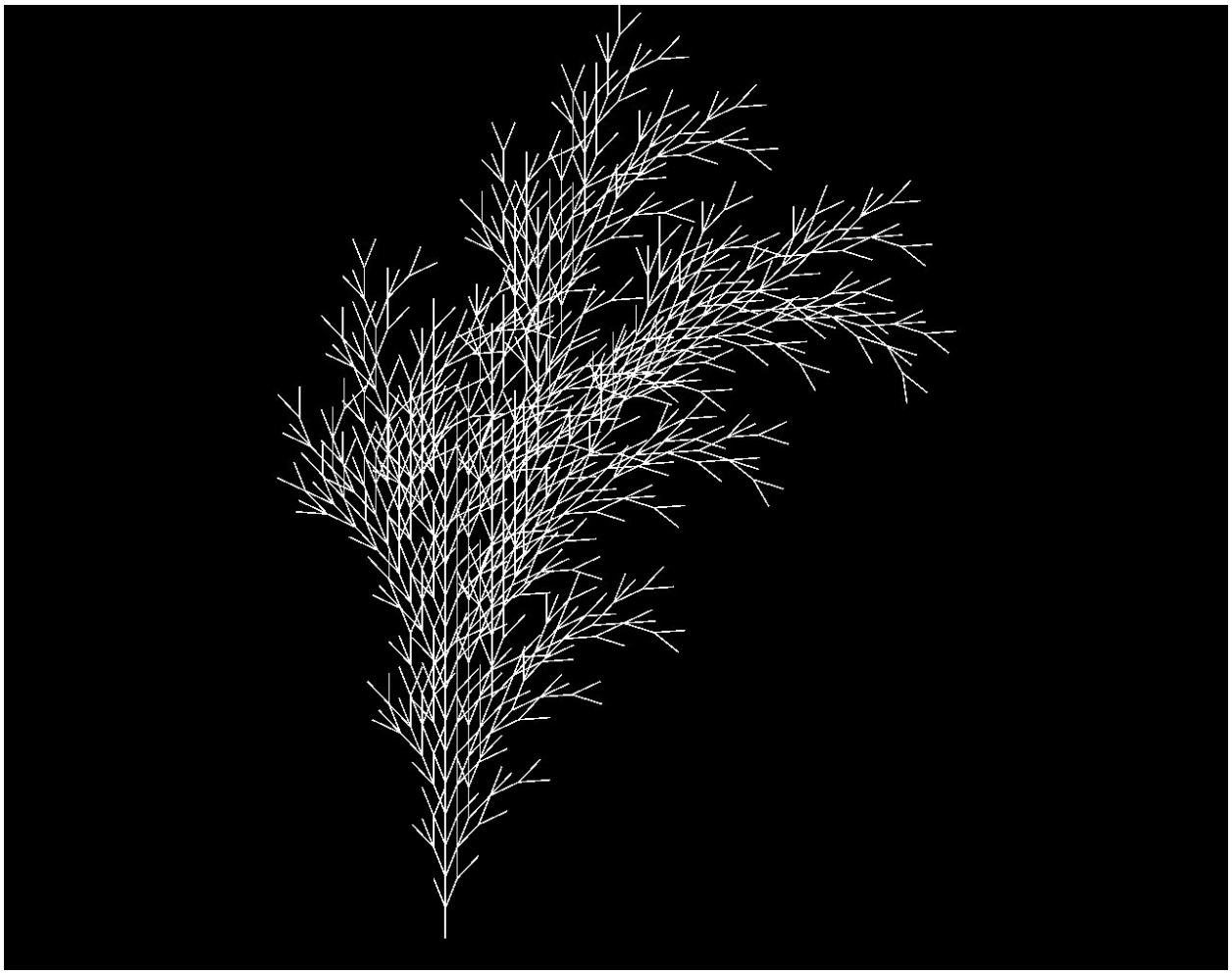
```
./build/flos -generations [x] -file [file] -angle [x] -output [output].png
-drawEveryLetter

Examples:
./build/flos -generations 5 -file fractalPlant.txt -output fractalPlant.png
-angle 25
X
000:X:F+[[X]-X]-F[-FX]+X:1.00
001:F:FF:1.00
```



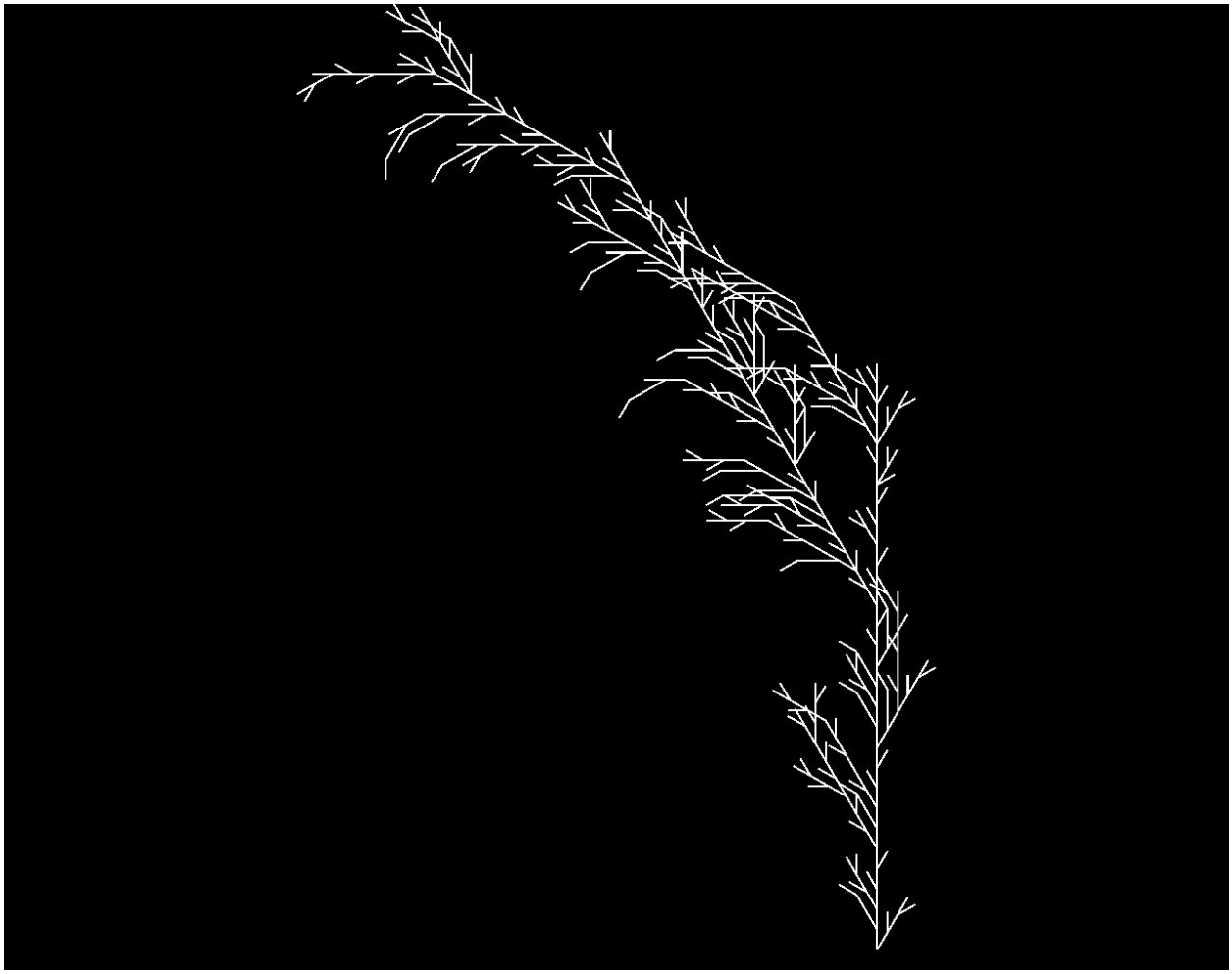
```
./build/flos -generations 4 -file sierpinski.txt -output sierpinski.png -angle
120 -drawEveryLetter
F-G-G
000:F:F-G+F+G-F:1.00
001:G:GG:1.00
```



```
./build/flos -generations 4 -file plant.txt -output plant.png -angle 21.5
F
000:F:F[+F[+F]-F][-F]F:1.00
```



```
./build/flos -generations 4 -file file.txt -output file.png -angle 30
F
000:F:[+F]F[-F]F:0.33
000:F:F[-F]F[+F]F:0.33
000:F:F[-FF-F]F:0.33
```



```
./build/flos -generations 5 -file modifiedPlant.txt -output modifiedPlant.png
-angle 25
F
000:F:F[+F[+F]-F][-F]F:0.40
000:F:F[-F[+F-F][+F]-F+F]:0.40
000:F:FF:0.20
```