Python fractals:

For example: clover.py

```
from turtle import *  → turtle lib
lenght = 10  → line lenght
angle = 90  → the angle by which he will turn around

def draw_path(path):
    left(angle)
    for symbol in path:
        if symbol == 'F':
            forward(lenght)
        elif symbol == '-':
            left(angle)
        elif symbol == '+':
            right(angle)
```

function that is drawing our picture if symbol in path is equal to 'F', we move forward, etc.

```
def apply_rule(path):
    rule = "F-F+F+FF-F-F+F"   } replacing each "F" in path by rule
    return path.replace("F", rule)
path = "F-F-F+F"  → path we will be replacing and following
path = apply_rule(path)
draw_path(path)
exitonclick()
```

rule = F-F+F+FF-F-F+F

path = F-F-F-F

F → forward

- → turn left ⅞ by angle = 90°

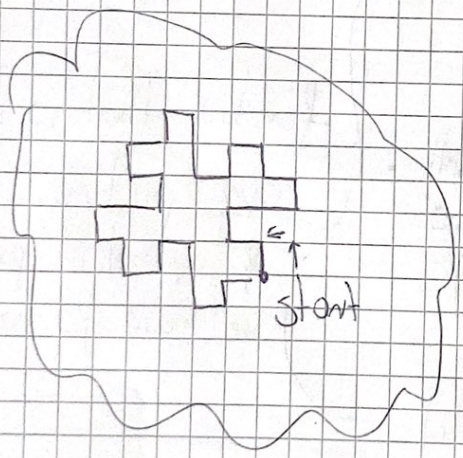
+ → turn right

apply rule → changing every 'F' in path by whole rule

Now path looks like this:

F-F+F+FF-F-F+F - F-F+F+FF-F-F+F - F-F+F+FF-F-F+F - F-F+F+FF-F-F+F

F - F - F - F



drawn picture