

Task 10

Implement the L-system representing the growth of the plant (Fractal plant) for the following parameters:

Symbols: X F + - []

Initial word $w=X$

rules:

P1 : $X \rightarrow F+[[X]-X]-F[-FX]+X$

P2: $F \rightarrow FF$

+ and – rotation by 25°

[- push

] – pop

F – go forward and draw line

X – auxiliary symbol

Initial values:

$X=0, y=0$

$\text{Alfa} = 25^\circ$

$w_0=X$

generate w_n , where n – numer of iterations