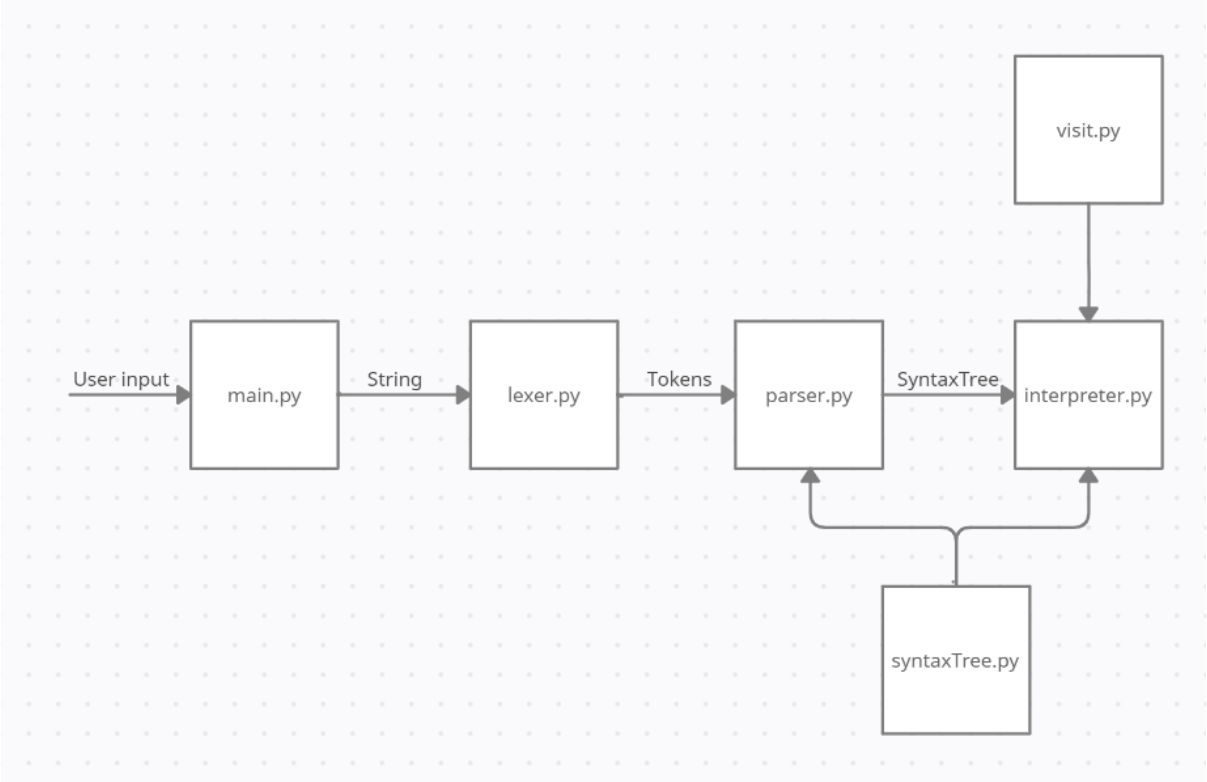
SCHEMAT PROGRAMU



TOKENY

Zarezerwowane:

SOLVE, FOR, OVER, LIMIT, TENDS, WHERE, LEFT, RIGHT, FROM, TO, DIFFERENTIATE, INTEGRATE, VARIABLE, SIN, COS, TG, CTG

Opis tokenów:

ADD = "+"
SUB = "-"
MUL = "*"
DIV = "/"
POW = "^"
EQ = "="
LP = "("
RP = ")"
NUM = *"\d+\.\d+|\d+"*
STR = *'[a-zA-Z_][a-zA-Z0-9_]*'*

GRAMATYKA

Rule 0 S' -> command
Rule 1 command -> equation
Rule 2 command -> solve
Rule 3 command -> differentiate
Rule 4 command -> integrate
Rule 5 command -> limit
Rule 6 equation -> equation expression
Rule 7 equation -> expression
Rule 8 expression -> expression1
Rule 9 expression -> expression ADD expression1
Rule 10 expression -> expression SUB expression1
Rule 11 expression1 -> expression2
Rule 12 expression1 -> expression1 MUL expression2
Rule 13 expression1 -> expression1 DIV expression2
Rule 14 expression2 -> expression3
Rule 15 expression2 -> expression2 POW expression3
Rule 16 expression3 -> LP expression RP
Rule 17 expression3 -> VAR
Rule 18 expression3 -> NUM
Rule 19 expression3 -> SUB NUM
Rule 20 expression3 -> trig
Rule 21 trig -> SIN LP expression RP
Rule 22 trig -> COS LP expression RP
Rule 23 trig -> TG LP expression RP
Rule 24 trig -> CTG LP expression RP
Rule 25 solve -> SOLVE FOR LP vars RP EQ LP nums RP equation
Rule 26 vars -> vars VAR
Rule 27 vars -> VAR
Rule 28 nums -> nums NUM
Rule 29 nums -> NUM
Rule 30 differentiate -> DIFFERENTIATE equation OVER VAR
Rule 31 integrate -> INTEGRATE FROM expression3 TO expression3 equation OVER VAR
Rule 32 integrate -> INTEGRATE equation OVER VAR
Rule 33 limit -> LIMIT equation WHERE VAR TENDS TO NUM

Rule 34 limit -> LIMIT equation WHERE VAR TENDS TO NUM FROM side
Rule 35 side -> LEFT
Rule 36 side -> RIGHT