SIFOpt grammar

statlist → statement statlist | \epsilon

statement → expression ';' | declaration ';' | COMMENTLINE | COMMENT

expression → assignment_expression

assignment_expression → summation_expression | NAME '=' assignment_expression

summation_expression → product_expression | summation_expression '+' product_expression
 | summation_expression '-' product_expression

product_expression → unary_expression | product_expression '*' literal_expression

unary_expression → postfix_expression | '-' unary_expression

postfix_expression → literal_expression | postfix_expression wordlen | NAME '(' ')' | NAME '(' arglist ')' | literal_expression

lighter_expression → literal | NAME | '(' expression ')' | NAME

arglist → assignment_expression | arglist ',' assignment_expression

declaration → var_declaration | known_declaration

known_declaration → KNOWN NAME '=' reallit

var_declaration → MIXED sif_opt range_opt wordlen_opt NAME var_initializer_opt

var_initializer_opt → '=' expression | \epsilon

lighter → reallit SIFTOKEN | reallit

reallit → NNUMD | RNUMD

range_opt → range | \epsilon

range → '[' sign_opt reallit ':' sign_opt reallit ']'

sif_opt → SIFTOKEN | \epsilon

sign_opt → '+' | '-' | \epsilon

wordlen_opt → wordlen | \epsilon

wordlen → WIDTHNUM | WIDTHVAR

(\epsilon - empty character)

Tokens

COMMENTLINE → ^\[[[:space:]\]+\/.*

COMMENT → \/.*

NAME → (([a-zA-Z\-]) | {([a-zA-Z\-]) | ([0-9])}*

KNOWN → "known"

MIXED → "var"
SIFTOKEN →

NNUMD → [0-9]⁺

RNUMD → [+?]? [0-9]* | [+?]? [0-9]* . [0-9]⁺

WIDTHNUM → @[0-9]⁺

WIDTHVAR → @{|{(a-zA-Z\_)} {{([a-zA-Z\_] | ([0-9]))}*}}