LOL

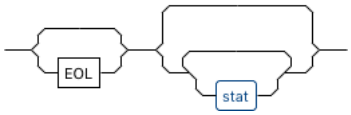
Rules

program Top

Text notation:

```
program : EOL? stat* ;
```

Visual notation:

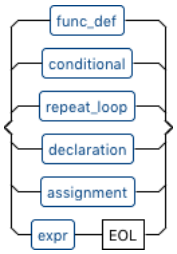


stat Top

Text notation:

```
stat : func_def | conditional | repeat_loop | declaration | assignment | expr EOL ;
```

Visual notation:

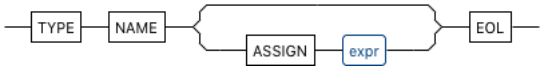


declaration Top

Text notation:

```
declaration : TYPE NAME (ASSIGN expr)? EOL ;
```

Visual notation:



assignment Top

Text notation:

```
assignment : NAME ASSIGN expr EOL ;
```

Visual notation:

repeat_loop Top

Text notation:

```
repeat_loop : 'repeat' expr block ;
```

Visual notation:

conditional Top

Text notation:

```
conditional : ('if' expr block) ('elif' expr block)* ('else' block)? ;
```

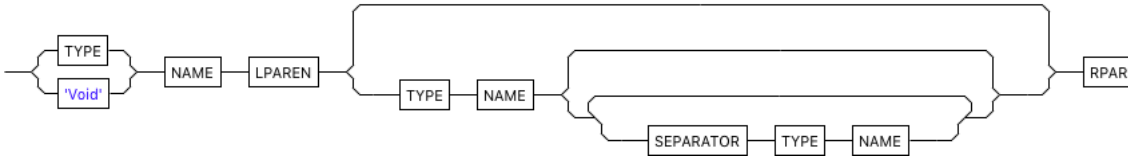
Visual notation:

func_def Top

Text notation:

```
func_def : (TYPE | 'Void') NAME LPAREN (TYPE NAME (SEPARATOR TYPE NAME)*)? RPAREN block ;
```

Visual notation:

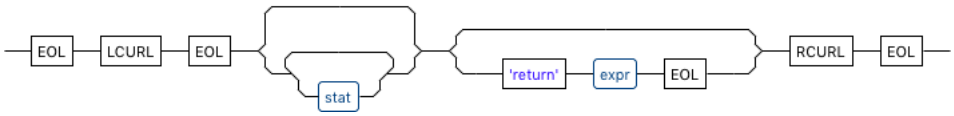


block Top

Text notation:

```
block : EOL LCURL EOL stat* ('return' expr EOL)? RCURL EOL ;
```

Visual notation:

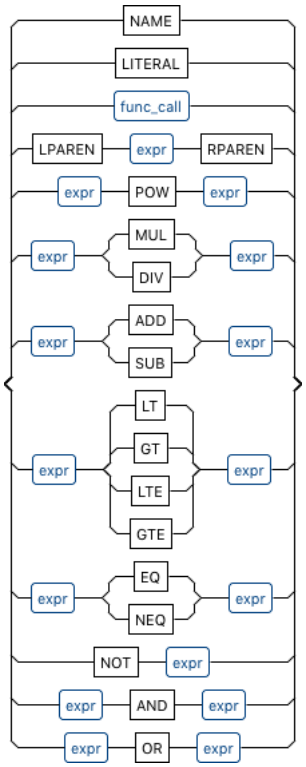


expr Top

Text notation:

```
expr : NAME | LITERAL | func_call | LPAREN expr RPAREN | expr POW expr | expr (MUL | DIV) expr | expr (ADD | SUB)
expr | expr (LT | GT | LTE | GTE) expr | expr (EQ | NEQ) expr | NOT expr | expr AND expr | expr OR expr ;
```

Visual notation:

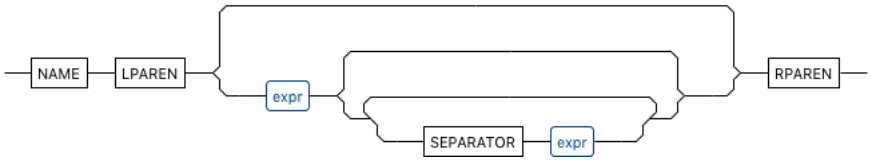


func_call Top

Text notation:

```
func_call : NAME LPAREN (expr (SEPARATOR expr)*)? RPAREN ;
```

Visual notation:

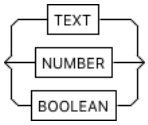


TYPE Top

Text notation:

```
TYPE : TEXT | NUMBER | BOOLEAN ;
```

Visual notation:

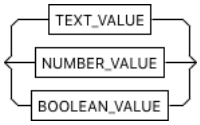


LITERAL Top

Text notation:

```
LITERAL : TEXT_VALUE | NUMBER_VALUE | BOOLEAN_VALUE ;
```

Visual notation:

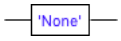


NONE Top

Text notation:

```
NONE : 'None' ;
```

Visual notation:

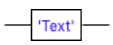


TEXT Top

Text notation:

```
TEXT : 'Text' ;
```

Visual notation:

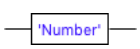


NUMBER Top

Text notation:

```
NUMBER : 'Number' ;
```

Visual notation:



BOOLEAN Top

Text notation:

```
BOOLEAN : 'Boolean' ;
```

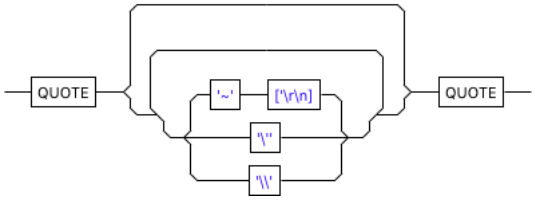
Visual notation:

TEXT_VALUE Top

Text notation:

```
TEXT_VALUE : QUOTE (~['\r\n] | '\\\'' | '\\\\')* QUOTE ;
```

Visual notation:

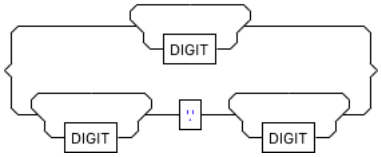


NUMBER_VALUE Top

Text notation:

```
NUMBER_VALUE : DIGIT+ | DIGIT+.DIGIT+ ;
```

Visual notation:

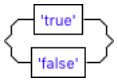


BOOLEAN_VALUE Top

Text notation:

```
BOOLEAN_VALUE : 'true' | 'false' ;
```

Visual notation:



SEPARATOR Top

Text notation:

```
SEPARATOR : ',' ;
```

Visual notation:

LPAREN Top

Text notation:

```
LPAREN : '(' ;
```

Visual notation:

RPAREN Top

Text notation:

```
RPAREN : ')' ;
```

Visual notation:

LCURL Top

Text notation:

```
LCURL : '{' ;
```

Visual notation:

RCURL Top

Text notation:

```
RCURL : '}' ;
```

Visual notation:

LSQUARE Top

Text notation:

```
LSQUARE : '[' ;
```

Visual notation:

RSQUARE Top

Text notation:

```
RSQUARE : ']' ;
```

Visual notation:

POW Top

Text notation:

```
POW : '^' ;
```

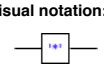
Visual notation:

MUL Top

Text notation:

```
MUL : '*' ;
```

Visual notation:

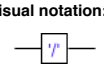


DIV Top

Text notation:

```
DIV : '/' ;
```

Visual notation:



ADD Top

Text notation:

```
ADD : '+' ;
```

Visual notation:

SUB Top

Text notation:

```
SUB : '-' ;
```

Visual notation:

LT Top

Text notation:

```
LT : '<' ;
```

Visual notation:

GT Top

Text notation:

```
GT : '>' ;
```

Visual notation:

LTE Top

Text notation:

```
LTE : '<=' ;
```

Visual notation:

GTE Top

Text notation:

```
GTE : '>=' ;
```

Visual notation:

EQ Top

Text notation:

```
EQ : '==' ;
```

Visual notation:

NEQ Top

Text notation:

```
NEQ : '!=' ;
```

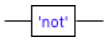
Visual notation:

NOT Top

Text notation:

```
NOT : 'not' ;
```

Visual notation:

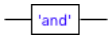


AND Top

Text notation:

```
AND : 'and' ;
```

Visual notation:



OR Top

Text notation:

```
OR : 'or' ;
```

Visual notation:

ASSIGN Top

Text notation:

```
ASSIGN : ':=' ;
```

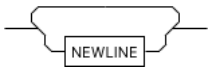
Visual notation:

EOL Top

Text notation:

```
EOL : NEWLINE+ ;
```

Visual notation:

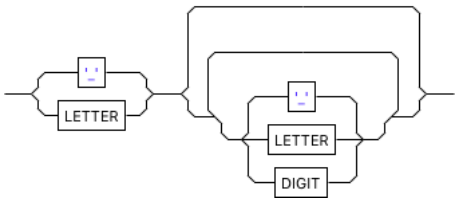


NAME Top

Text notation:

```
NAME : ('_' | LETTER) ('_' | LETTER | DIGIT)* ;
```

Visual notation:

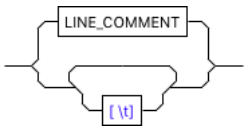


WHITESPACE Top

Text notation:

```
WHITESPACE : (LINE_COMMENT | [ \t]+) -> skip ;
```

Visual notation:

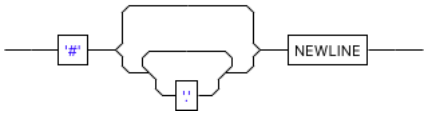


LINE_COMMENT Top

Text notation:

```
LINE_COMMENT : ('#' .*? NEWLINE) -> skip ;
```

Visual notation:

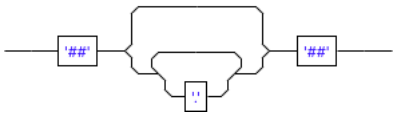


BLOCK_COMMENT Top

Text notation:

```
BLOCK_COMMENT : ('##' .*? '##') -> skip ;
```

Visual notation:



QUOTE Top

Text notation:

```
QUOTE : '\'' ;
```

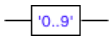
Visual notation:

DIGIT Top

Text notation:

```
DIGIT : '0'..'9' ;
```

Visual notation:

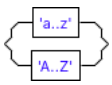


LETTER Top

Text notation:

```
LETTER : 'a'..'z' | 'A'..'Z' ;
```

Visual notation:

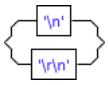


NEWLINE Top

Text notation:

```
NEWLINE : '\n' | '\r\n' ;
```

Visual notation:



BACKSLASH

Top

Text notation:

```
BACKSLASH : '\\' ;
```

Visual notation: