MAL

Micro Animation Language using PEG.js

Syntax diagrams
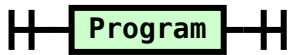
start

Referring:	Program
Used by:	Not used by other rules

Program
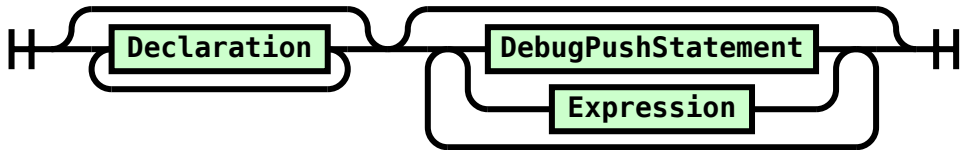
Referring:	DebugPushStatement Declaration Expression
Used by:	start

DebugPushStatement
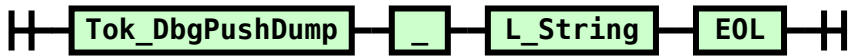
Referring:	EOL L_String Tok_DbgPushDump _
Used by:	Program

Declaration
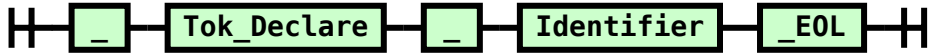
Referring:	Identifier Tok_Declare _ _EOL
Used by:	Program

Expression
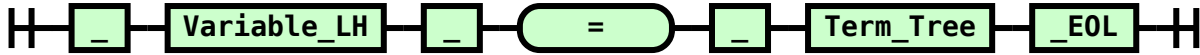
Referring:	Term_Tree Variable_LH _ _EOL
Used by:	Program

Term_Tree

```
⊢─ Term_Numeric_Additive ─⊣
```

Referring: Term_Numeric_Additive

Used by: Expression

Term_Numeric_Additive

```
⊢──── Term_Numeric_Multiplicative ────⊣
    ┌─ _ ──┬─ Op_Add ──────┬── _ ─┐
           └─ Op_Subtract ──┘
```
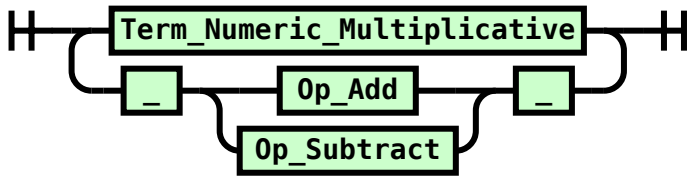
Referring: Op_Add   Op_Subtract   Term_Numeric_Multiplicative   _

Used by: Term_Numeric_Bracketed   Term_Numeric_Math   Term_Tree

Term_Numeric_Multiplicative

```
⊢──── Term_Numeric_Power ────⊣
    ┌─ _ ──┬─ Op_Multiply ──┬── _ ─┐
           └─ Op_Divide ────┘
```
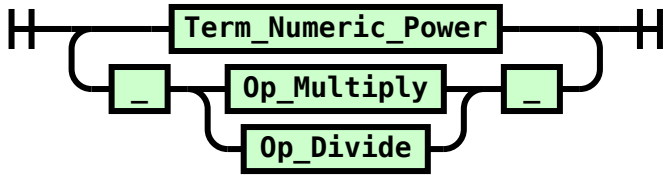
Referring: Op_Divide   Op_Multiply   Term_Numeric_Power   _

Used by: Term_Numeric_Additive

Term_Numeric_Power

```
⊢─ Term_Numeric_Exp_Signed ─┬─ _ ─ Op_PowerTo ─ _ ─ Term_Numeric_Power ─┬─⊣
```
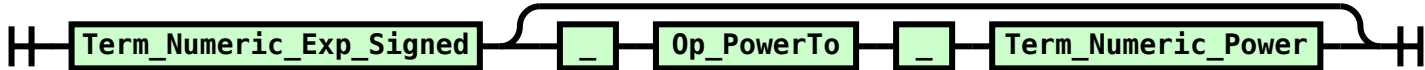
Referring: Op_PowerTo   Term_Numeric_Exp_Signed   Term_Numeric_Power   _

Used by: Term_Numeric_Multiplicative   Term_Numeric_Power

Term_Numeric_Exp_Signed

```
⊢─┬─ Op_UnaryPositive ──┬─ _ ─ Term_Numeric_Exp ─⊣
  └─ Op_UnaryNegative ──┘
```
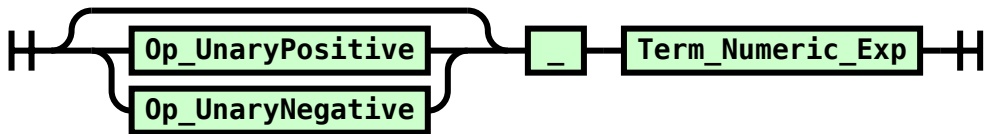
Referring: Op_UnaryNegative   Op_UnaryPositive   Term_Numeric_Exp   _

Used by: Term_Numeric_Power

Term_Numeric_Exp

```
⊢─┬─ Term_Numeric_Math ──────┬─⊣
  ├─ Term_Numeric_Bracketed ─┤
  ├─ L_Number_Constant ──────┤
  ├─ Variable_RH ────────────┤
  └─ L_Number ───────────────┘
```
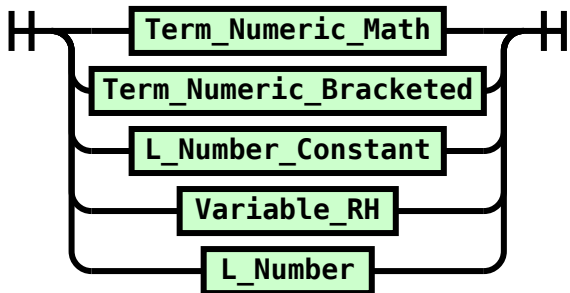
Referring: L_Number   L_Number_Constant   Term_Numeric_Bracketed   Term_Numeric_Math   Variable_RH

Used by: Term_Numeric_Exp_Signed

Term_Numeric_Math

Tok_Math — _ — (— Term_Numeric_Additive —)

Referring: Term_Numeric_Additive   Tok_Math   _

Used by: Term_Numeric_Exp

Term_Numeric_Bracketed

(— _ — Term_Numeric_Additive — _ —)
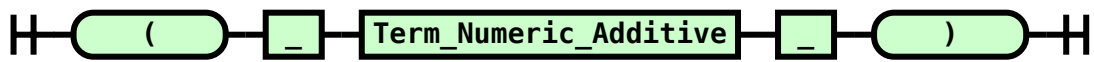
Referring: Term_Numeric_Additive   _

Used by: Term_Numeric_Exp

Variable_LH
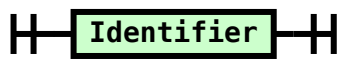
Identifier

Referring: Identifier

Used by: Expression

Variable_RH
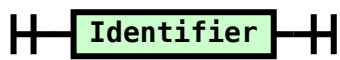
Identifier

Referring: Identifier

Used by: Term_Numeric_Exp

Identifier

Keyword — [a-zA-Z_] — [a-zA-Z0-9_]
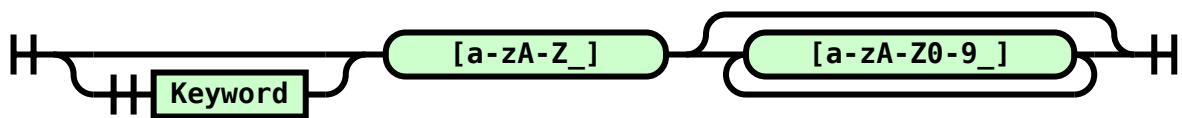
Referring: Keyword

Used by: Declaration   Variable_LH   Variable_RH

Comment

MultiLineComment
SingleLineComment
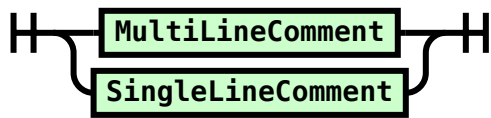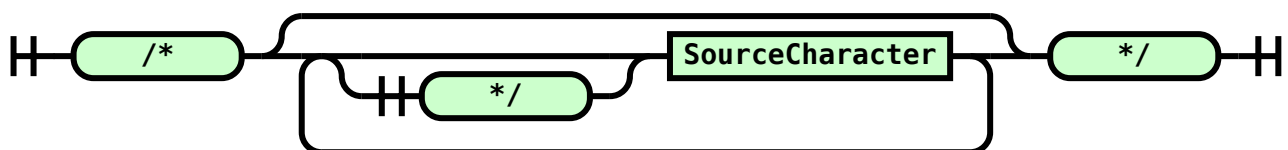
Referring: MultiLineComment   SingleLineComment

Used by: Not used by other rules

MultiLineComment

/* — */ — SourceCharacter — */

Referring: SourceCharacter

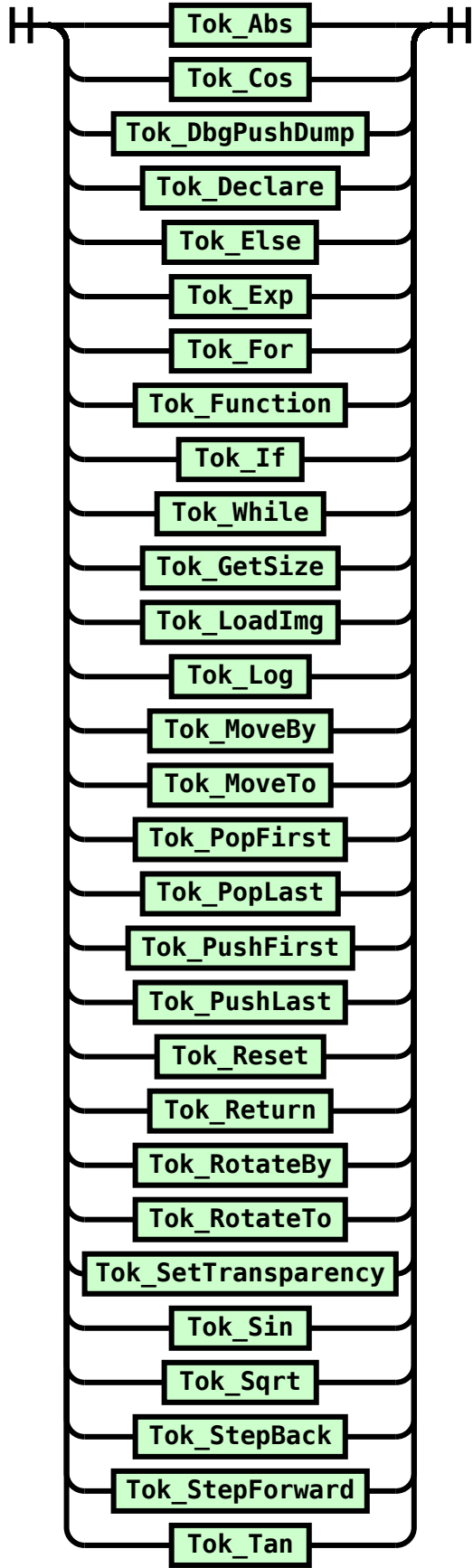## SingleLineComment

Referring: EOL   SourceCharacter

Used by: Comment

Keyword

Referring: Tok_Abs   Tok_Cos   Tok_DbgPushDump   Tok_Declare   Tok_Else   Tok_Exp   Tok_For   Tok_Function   Tok_GetSize   Tok_If   Tok_LoadImg   Tok_Log   Tok_MoveBy   Tok_MoveTo   Tok_PopFirst   Tok_PopLast   Tok_PushFirst   Tok_PushLast   Tok_Reset   Tok_Return   Tok_RotateBy   Tok_RotateTo   Tok_SetTransparency   Tok_Sin   Tok_Sqrt   Tok_StepBack   Tok_StepForward   Tok_Tan   Tok_While

Used by: Identifier

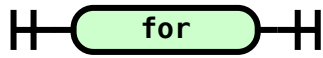## Tok_Declare

H—(**declare**)—H
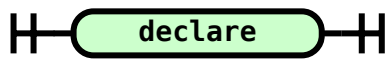
Referring: No reference to other rules

Used by: Declaration   Keyword

Tok_Else
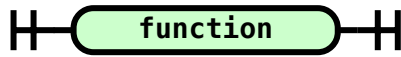
H—(**else**)—H
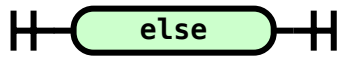
Referring: No reference to other rules
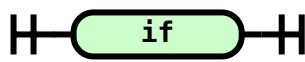
Used by: Keyword

Tok_For

H—(**for**)—H

Referring: No reference to other rules

Used by: Keyword

Tok_Function

H—(**function**)—H
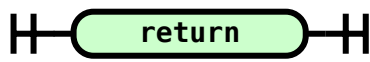
Referring: No reference to other rules

Used by: Keyword

Tok_If

H—(**if**)—H

Referring: No reference to other rules

Used by: Keyword

Tok_Return

H—(**return**)—H

Referring: No reference to other rules

Used by: Keyword

Tok_While

H—(**while**)—H
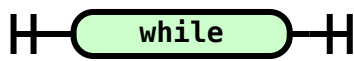
Referring: No reference to other rules

Used by: Keyword

Tok_Math

Referring: Tok_Abs   Tok_Cos   Tok_Exp   Tok_Log   Tok_Sin   Tok_Sqrt   Tok_Tan

Used by: Term_Numeric_Math

Tok_Abs

Referring: No reference to other rules

Used by: Keyword   Tok_Math

Tok_Sqrt

Referring: No reference to other rules

Used by: Keyword   Tok_Math

Tok_Log

Referring: No reference to other rules

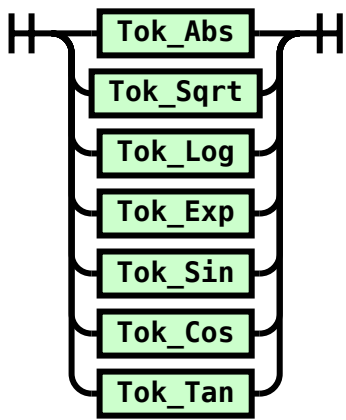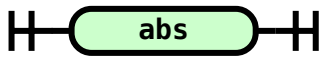Used by: Keyword   Tok_Math

Tok_Exp

Referring: No reference to other rules

Used by: Keyword   Tok_Math

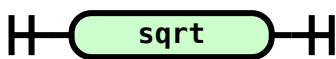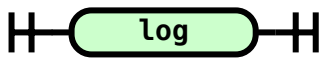## Tok_Sin

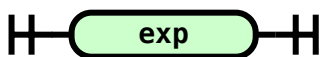Referring: No reference to other rules

Used by: Keyword   Tok_Math

Tok_Cos

Referring: No reference to other rules

Used by: Keyword   Tok_Math

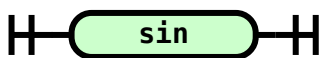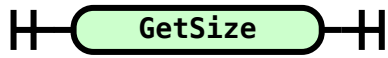## Tok_Tan

Referring: No reference to other rules

Used by: Keyword   Tok_Math

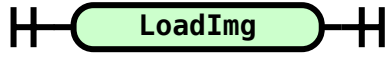## Tok_GetSize

Referring: No reference to other rules

Used by: Keyword

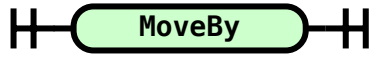## Tok_LoadImg

Referring: No reference to other rules

Used by: Keyword

Tok_MoveBy

Referring: No reference to other rules
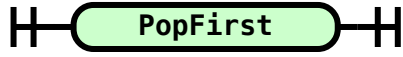
Used by: Keyword

Tok_MoveTo

Referring: No reference to other rules

Used by: Keyword

Tok_PopFirst

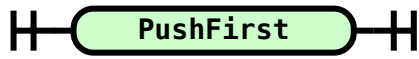Referring: No reference to other rules

Used by: Keyword

Tok_PopLast

PopLast

PopLast

Referring: No reference to other rules
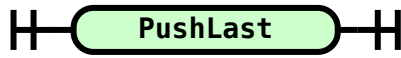
Used by: Keyword

Tok_PushFirst

PushFirst

Referring: No reference to other rules

Used by: Keyword

Tok_PushLast

PushLast

Referring: No reference to other rules

Used by: Keyword

Tok_Reset

Reset

Referring: No reference to other rules

Used by: Keyword

Tok_RotateBy

RotateBy

Referring: No reference to other rules

Used by: Keyword

Tok_RotateTo

RotateTo

Referring: No reference to other rules

Used by: Keyword

Tok_SetTransparency

SetTransparency

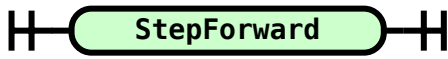Referring: No reference to other rules
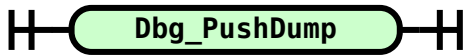
Used by: Keyword

Tok_StepBack

StepBack

Referring: No reference to other rules

Used by: Keyword

Tok_StepForward

StepForward

Referring: No reference to other rules

Used by: Keyword

Tok_DbgPushDump

Dbg_PushDump

Referring: No reference to other rules

Used by: DebugPushStatement   Keyword

SourceCharacter

[any character]
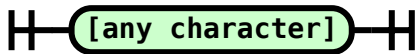
Referring: No reference to other rules

Used by: MultiLineComment   SingleLineComment

WhiteSpace

```
\t
\v
\f

\u00A0
\uFEFF
Zs
```
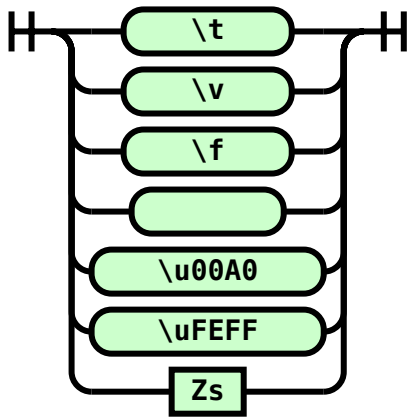
Referring: Zs

Used by: _   _EOL   __

EOL

[\n\r\u2028\u2029]
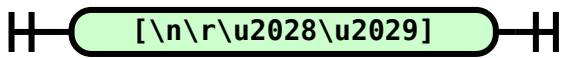
Referring: No reference to other rules

Used by: DebugPushStatement   SingleLineComment   _EOL   __

_EOL

Referring: EOL   WhiteSpace

Used by: Declaration   Expression

_
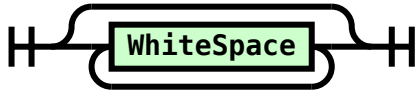
Referring: WhiteSpace

Used by: DebugPushStatement   Declaration   Expression   L_Array   Term_Numeric_Additive   Term_Numeric_Bracketed   Term_Numeric_Exp_Signed   Term_Numeric_Math   Term_Numeric_Multiplicative   Term_Numeric_Power

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__
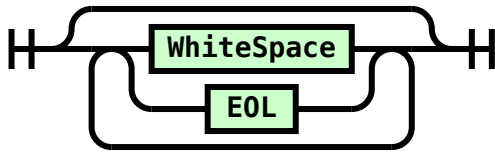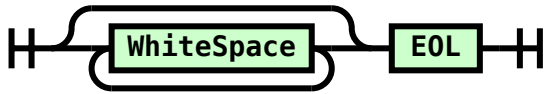

Referring: EOL   WhiteSpace

Used by: Not used by other rules

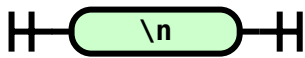# _EOL

Referring: EOL   WhiteSpace

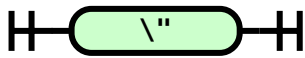Used by: Declaration   Expression

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EscNl

Referring: No reference to other rules

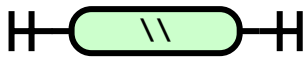Used by: Not used by other rules

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EscDQuot

Referring: No reference to other rules

Used by: Not used by other rules

EscBackslash

Referring: No reference to other rules

Used by: Not used by other rules

L_Number

Referring: L_Bin   L_Decimal   L_Hex

Used by: Term_Numeric_Exp

L_Scalar

Referring: L_Bin   L_Boolean   L_Decimal   L_Hex   L_Null   L_Number_Constant   L_String

Used by: L_Array

L_Array
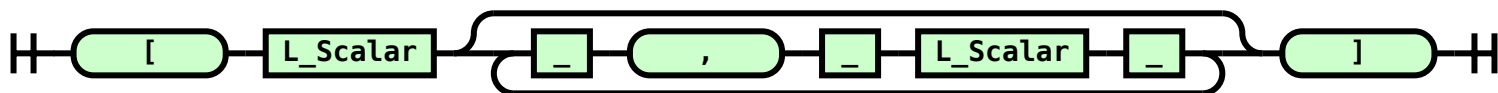
Referring: L_Scalar   _

Used by: Not used by other rules

L_Decimal
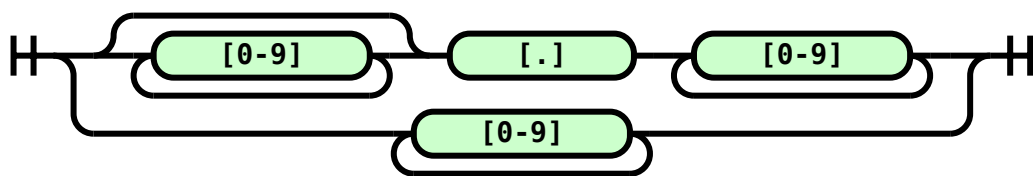
Referring: No reference to other rules

Used by: L_Number   L_Scalar

L_Hex
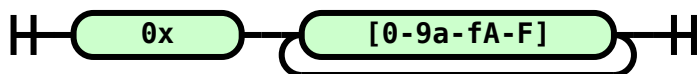
Referring: No reference to other rules

Used by: L_Number   L_Scalar

L_Bin

Referring: No reference to other rules

Used by: L_Number   L_Scalar

L_String
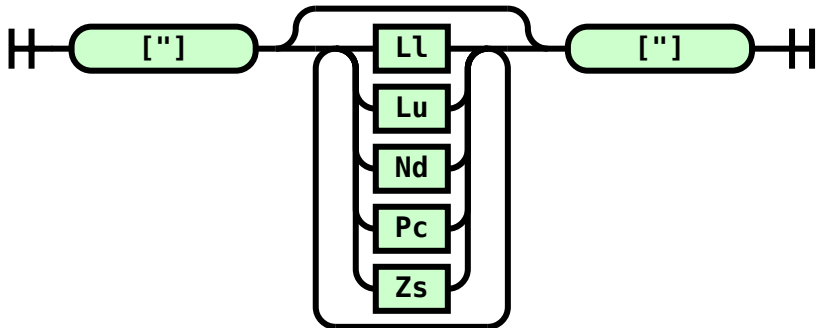
Referring: Ll   Lu   Nd   Pc   Zs

Used by: DebugPushStatement   L_Scalar

L_Boolean
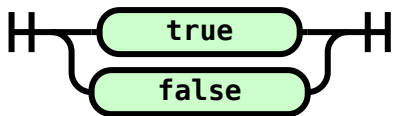
Referring: No reference to other rules

Used by: L_Scalar

L_Null

Referring: No reference to other rules

Used by: L_Scalar

L_Number_Constant

Referring: No reference to other rules

Used by: L_Scalar   Term_Numeric_Exp

Op_Add
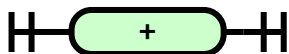
Referring: No reference to other rules

Used by: Term_Numeric_Additive

Op_Subtract
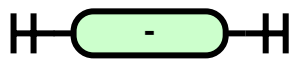
Referring: No reference to other rules

Used by: <u>Term_Numeric_Additive</u>

Op_BitwiseAND
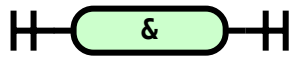
Referring: No reference to other rules

Used by: Not used by other rules

Op_BitwiseOR

Referring: No reference to other rules
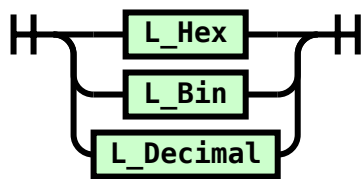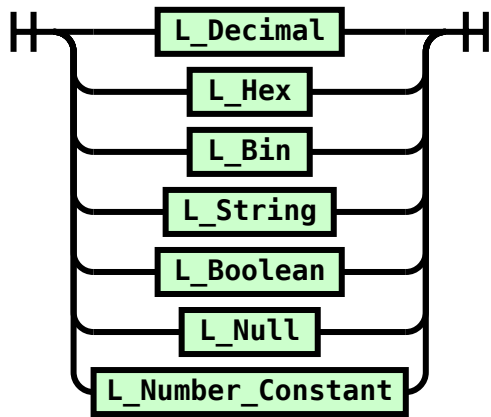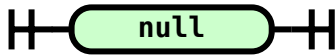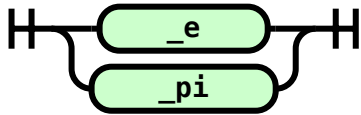
Used by: Not used by other rules

Op_BitwiseShiftL

Referring: No reference to other rules

Used by: Not used by other rules

Op_BitwiseShiftR

Referring: No reference to other rules

Used by: Not used by other rules

Op_BitwiseShiftRFillZero

Referring: No reference to other rules

Used by: Not used by other rules

Op_BitwiseXOR

Referring: No reference to other rules

Used by: Not used by other rules

Op_Equal

```
H─( == )─H
```

Referring: No reference to other rules

Used by: Not used by other rules

Op_Divide

```
H─( / )─H
```

Referring: No reference to other rules

Used by: Term_Numeric_Multiplicative

Op_EqualStrict

```
H─( === )─H
```

Referring: No reference to other rules

Used by: Not used by other rules

Op_EqualNot

```
H─( != )─H
```

Referring: No reference to other rules

Used by: Not used by other rules

Op_EqualNotStrict

```
H─( !== )─H
```

Referring: No reference to other rules

Used by: Not used by other rules

Op_GreaterThan

```
H─( > )─H
```

Referring: No reference to other rules

Used by: Not used by other rules

Op_GreaterThanOrEqualTo

```
H─( >= )─H
```

Referring: No reference to other rules

Used by: Not used by other rules

Op_LogicalAND
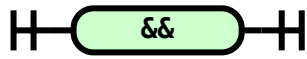
Referring: No reference to other rules

Used by: Not used by other rules

Op_LogicalOR

Referring: No reference to other rules

Used by: Not used by other rules

Op_Modulo

Referring: No reference to other rules
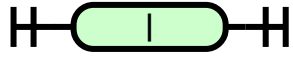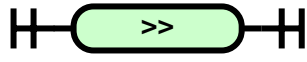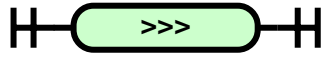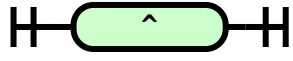
Used by: Not used by other rules

Op_Multiply

Referring: No reference to other rules

Used by: Term_Numeric_Multiplicative

Op_PowerTo

Referring: No reference to other rules

Used by: Term_Numeric_Power
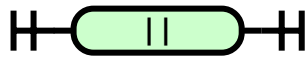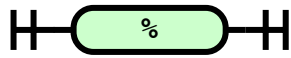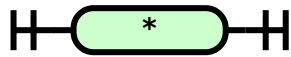
Op_SmallerThan

Referring: No reference to other rules

Used by: Not used by other rules

Op_SmallerThanOrEqualTo

Referring: No reference to other rules
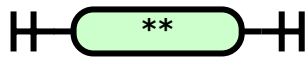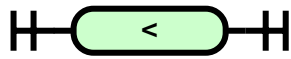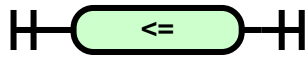
Used by: Not used by other rules

Op_UnaryPositive

```
H─( + )─H
```
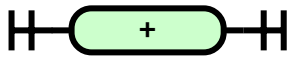
Referring: No reference to other rules

Used by: Term_Numeric_Exp_Signed

Op_UnaryNegative

```
H─( - )─H
```
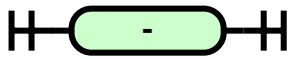
Referring: No reference to other rules

Used by: Term_Numeric_Exp_Signed

Op_UnaryBinaryNOT

```
H─( ~ )─H
```

Referring: No reference to other rules

Used by: Not used by other rules

Op_UnaryLogicalNOT

```
H─( ! )─H
```

Referring: No reference to other rules

Used by: Not used by other rules

Ll

```
H─( [a-z\xB5\xDF-\xF6\xF8-\xFF\u0101\u0103\u0105\u0107\u0109\u0 ... )─H
```

Referring: No reference to other rules

Used by: L_String

Lm

```
H─( [\u02B0-\u02C1\u02C6-\u02D1\u02E0-\u02E4\u02EC\u02EE\u0374\ ... )─H
```

Referring: No reference to other rules

Used by: Not used by other rules

Lo

```
H─( [\xAA\xBA\u01BB\u01C0-\u01C3\u0294\u05D0-\u05EA\u05F0-\u05F ... )─H
```

Referring: No reference to other rules

Used by: Not used by other rules

Lt

H⊢ [\u01C5\u01C8\u01CB\u01F2\u1F88-\u1F8F\u1F98-\u1F9F\u1FA8-\ ... ⊢H

Referring: No reference to other rules

Used by: Not used by other rules

Lu

H⊢ [A-Z\xC0-\xD6\xD8-\xDE\u0100\u0102\u0104\u0106\u0108\u010A\ ... ⊢H

Referring: No reference to other rules

Used by: L_String

Mc

H⊢ [\u0903\u093B\u093E-\u0940\u0949-\u094C\u094E-\u094F\u0982- ... ⊢H

Referring: No reference to other rules

Used by: Not used by other rules

Mn

H⊢ [\u0300-\u036F\u0483-\u0487\u0591-\u05BD\u05BF\u05C1-\u05C2 ... ⊢H

Referring: No reference to other rules

Used by: Not used by other rules

Nd

H⊢ [0-9\u0660-\u0669\u06F0-\u06F9\u07C0-\u07C9\u0966-\u096F\u0 ... ⊢H

Referring: No reference to other rules

Used by: L_String

Nl

H⊢ [\u16EE-\u16F0\u2160-\u2182\u2185-\u2188\u3007\u3021-\u3029 ... ⊢H

Referring: No reference to other rules

Used by: Not used by other rules

Pc

H⊢ [_\u203F-\u2040\u2054\uFE33-\uFE34\uFE4D-\uFE4F\uFF3F] ⊢H

Referring: No reference to other rules

Used by: L_String

Zs

`[ \xA0\u1680\u2000-\u200A\u202F\u205F\u3000]`

Referring: No reference to other rules

Used by: L_String WhiteSpace