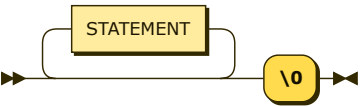


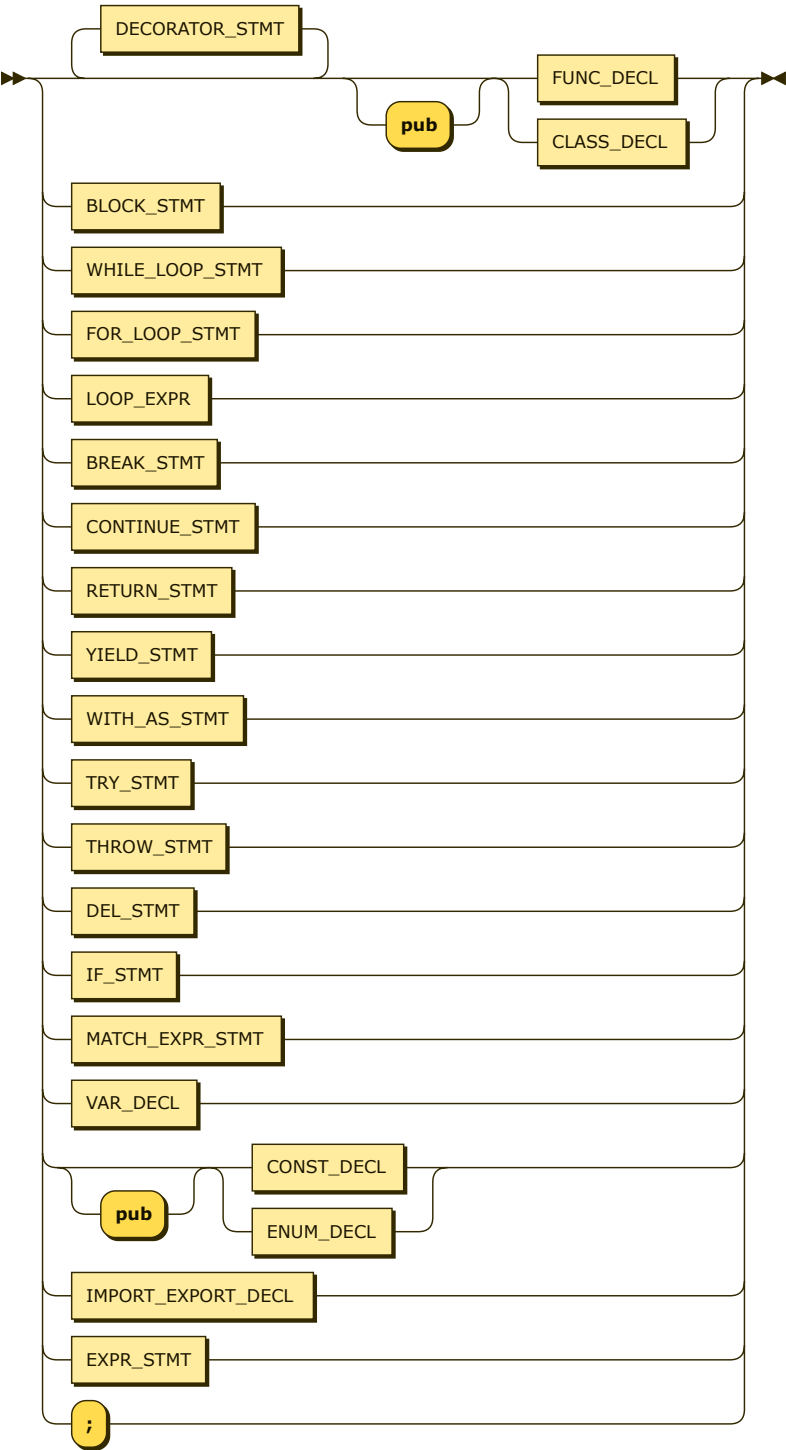
MODULE:



MODULE ::= STATEMENT\* '\0'

no references

STATEMENT:



STATEMENT  
::= BLOCK\_STMT  
| WHILE\_LOOP\_STMT  
| FOR\_LOOP\_STMT

```

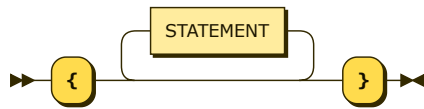
| LOOP_EXPR
| BREAK_STMT
| CONTINUE_STMT
| RETURN_STMT
| YIELD_STMT
| WITH_AS_STMT
| TRY_STMT
| THROW_STMT
| DEL_STMT
| IF_STMT
| MATCH_EXPR_STMT
| VAR_DECL
| 'pub'? ( CONST_DECL | ENUM_DECL )
| IMPORT_EXPORT_DECL
| DECORATOR_STMT* 'pub'? ( FUNC_DECL | CLASS_DECL )
| EXPR_STMT
| ';'

```

referenced by:

- [BLOCK\\_STMT](#)
- [MODULE](#)

## BLOCK\_STMT:



```

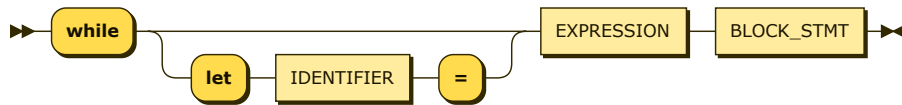
BLOCK_STMT
::= '{' STATEMENT* '}'

```

referenced by:

- [DEFAULT\\_ARM](#)
- [DEFAULT\\_CATCH](#)
- [FINALLY\\_PART](#)
- [FOR\\_LOOP\\_STMT](#)
- [FUNC\\_DECL](#)
- [IF\\_STMT](#)
- [LAMBDA\\_EXPR](#)
- [LOOP\\_EXPR](#)
- [MATCH\\_PATT\\_ARM](#)
- [NAMED\\_CATCH](#)
- [OPERATOR\\_OVERLOAD](#)
- [STATEMENT](#)
- [TRY\\_STMT](#)
- [WHILE\\_LOOP\\_STMT](#)
- [WITH\\_AS\\_STMT](#)

## WHILE\_LOOP\_STMT:



```

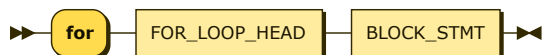
WHILE_LOOP_STMT
::= 'while' ( 'let' IDENTIFIER '=' )? EXPRESSION BLOCK_STMT

```

referenced by:

- [STATEMENT](#)

## FOR\_LOOP\_STMT:



```

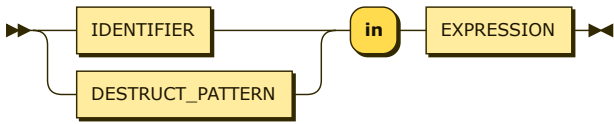
FOR_LOOP_STMT
::= 'for' FOR_LOOP_HEAD BLOCK_STMT

```

referenced by:

- [STATEMENT](#)

## FOR\_LOOP\_HEAD:

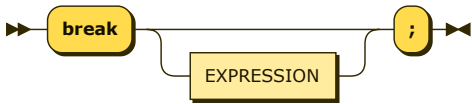


FOR\_LOOP\_HEAD  
 ::= ( IDENTIFIER | DESTRUCT\_PATTERN ) 'in' EXPRESSION

referenced by:

- [COMPACT\\_FOR\\_LOOP](#)
- [FOR\\_LOOP\\_STMT](#)

### BREAK\_STMT:



BREAK\_STMT  
 ::= 'break' EXPRESSION? ';'

referenced by:

- [STATEMENT](#)

### CONTINUE\_STMT:



CONTINUE\_STMT  
 ::= 'continue' ';'

referenced by:

- [STATEMENT](#)

### RETURN\_STMT:



RETURN\_STMT  
 ::= 'return' EXPRESSION ';'

referenced by:

- [STATEMENT](#)

### YIELD\_STMT:



YIELD\_STMT  
 ::= 'yield' EXPRESSION ';'

referenced by:

- [STATEMENT](#)

### THROW\_STMT:



THROW\_STMT  
 ::= 'throw' EXPRESSION ';'

referenced by:

- [STATEMENT](#)

#### DEL\_STMT:

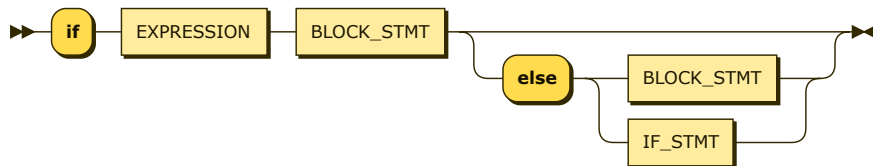


DEL\_STMT ::= 'del' EXPRESSION ';' ;

referenced by:

- [STATEMENT](#)

#### IF\_STMT:

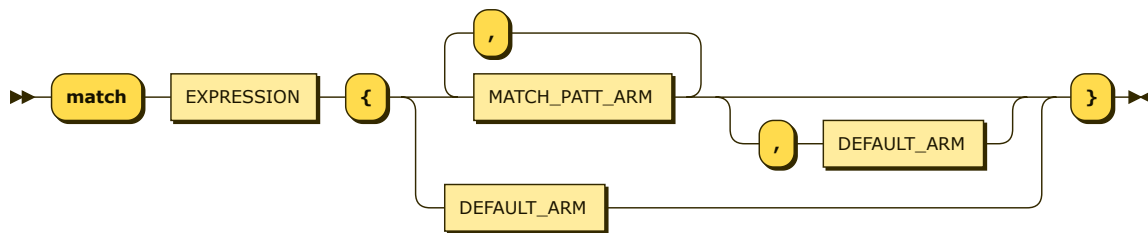


IF\_STMT ::= 'if' EXPRESSION BLOCK\_STMT ( 'else' ( BLOCK\_STMT | IF\_STMT ) ) ?

referenced by:

- [IF\\_STMT](#)
- [STATEMENT](#)

#### MATCH\_EXPR\_STMT:

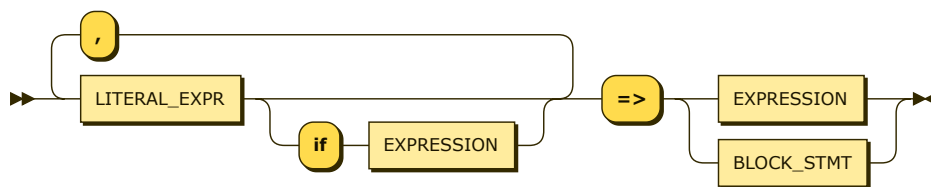


MATCH\_EXPR\_STMT ::= 'match' EXPRESSION '{' ( MATCH\_PATT\_ARM ( ',' MATCH\_PATT\_ARM )\* ( ',' DEFAULT\_ARM ) ? | DEFAULT\_ARM ) '}'

referenced by:

- [LARGE\\_EXPR](#)
- [STATEMENT](#)

#### MATCH\_PATT\_ARM:

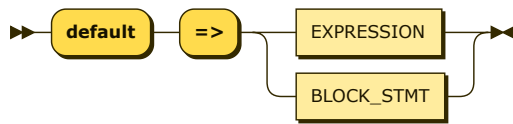


MATCH\_PATT\_ARM ::= LITERAL\_EXPR ( 'if' EXPRESSION ) ? ( ',' LITERAL\_EXPR ( 'if' EXPRESSION ) ? ) \* '=>' ( EXPRESSION | BLOCK\_STMT )

referenced by:

- [MATCH\\_EXPR\\_STMT](#)

#### DEFAULT\_ARM:

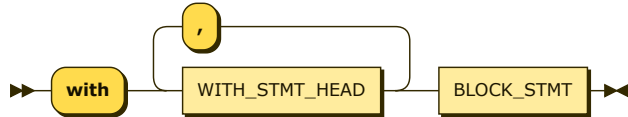


DEFAULT\_ARM  
 ::= 'default' '=>' ( EXPRESSION | BLOCK\_STMT )

referenced by:

- MATCH\_EXPR\_STMT

#### WITH\_AS\_STMT:



WITH\_AS\_STMT  
 ::= 'with' WITH\_STMT\_HEAD ( ',' WITH\_STMT\_HEAD )\* BLOCK\_STMT

referenced by:

- STATEMENT

#### WITH\_STMT\_HEAD:

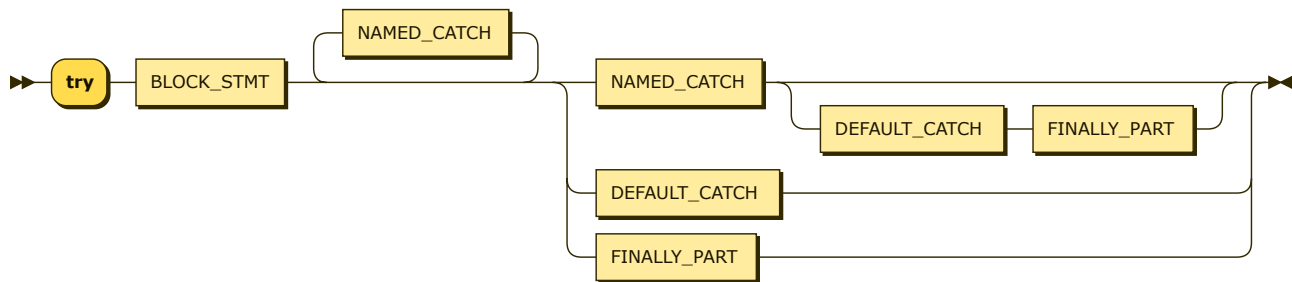


WITH\_STMT\_HEAD  
 ::= EXPRESSION 'as' IDENTIFIER

referenced by:

- WITH\_AS\_STMT

#### TRY\_STMT:

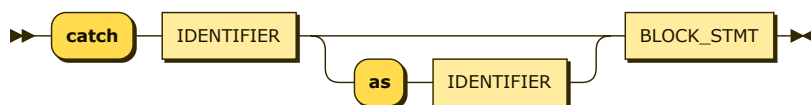


TRY\_STMT ::= 'try' BLOCK\_STMT NAMED\_CATCH\* ( NAMED\_CATCH ( DEFAULT\_CATCH FINALLY\_PART )? | DEFAULT\_CATCH | FINALLY\_PART )

referenced by:

- STATEMENT

#### NAMED\_CATCH:

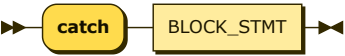


NAMED\_CATCH  
 ::= 'catch' IDENTIFIER ( 'as' IDENTIFIER )? BLOCK\_STMT

referenced by:

- TRY\_STMT

**DEFAULT\_CATCH:**

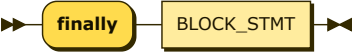


DEFAULT\_CATCH  
 ::= 'catch' BLOCK\_STMT

referenced by:

- TRY\_STMT

**FINALLY\_PART:**



FINALLY\_PART  
 ::= 'finally' BLOCK\_STMT

referenced by:

- TRY\_STMT

**EXPR\_STMT:**

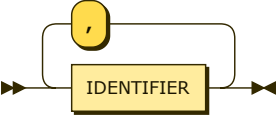


EXPR\_STMT  
 ::= EXPRESSION ';'

referenced by:

- STATEMENT

**IDENTIFIER\_LIST:**

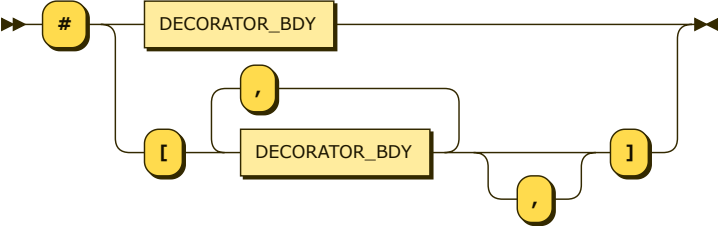


IDENTIFIER\_LIST  
 ::= IDENTIFIER ( ',' IDENTIFIER )\*

referenced by:

- CLASS\_EXTEND
- CLASS\_IMPL
- DESTRUCT\_PATTERN
- ENUM\_DECL
- PARAMETERS

**DECORATOR\_STMT:**

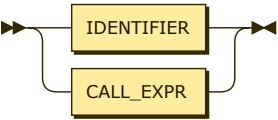


DECORATOR\_STMT  
 ::= '#' ( DECORATOR\_BDY | '[' DECORATOR\_BDY ( ',' DECORATOR\_BDY )\* ','? ']' )

referenced by:

- CLASS\_MEMBER
- STATEMENT

**DECORATOR\_BDY:**

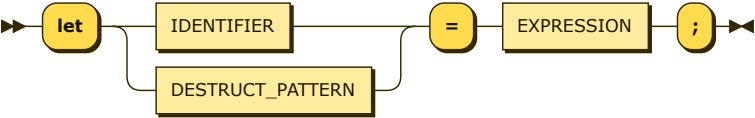


DECORATOR\_BDY  
 ::= IDENTIFIER  
 | CALL\_EXPR

referenced by:

- DECORATOR\_STMT

**VAR\_DECL:**

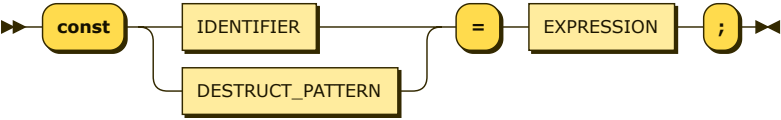


VAR\_DECL ::= 'let' ( IDENTIFIER | DESTRUCT\_PATTERN ) '=' EXPRESSION ';' ;

referenced by:

- CLASS\_MEMBER
- STATEMENT

**CONST\_DECL:**

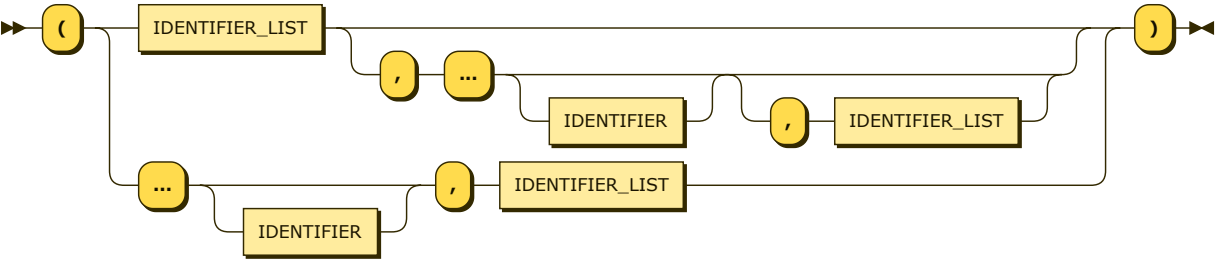


CONST\_DECL  
 ::= 'const' ( IDENTIFIER | DESTRUCT\_PATTERN ) '=' EXPRESSION ';' ;

referenced by:

- CLASS\_MEMBER
- STATEMENT

**DESTRUCT\_PATTERN:**

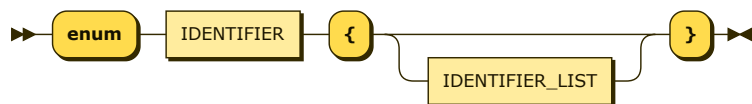


DESTRUCT\_PATTERN  
 ::= '(' ( IDENTIFIER\_LIST ( ',' '...' IDENTIFIER? ( ',' IDENTIFIER\_LIST )? )? | '...' IDENTIFIER? ',' IDENTIFIER\_LIST ) '

referenced by:

- CONST\_DECL
- FOR\_LOOP\_HEAD
- VAR\_DECL

**ENUM\_DECL:**

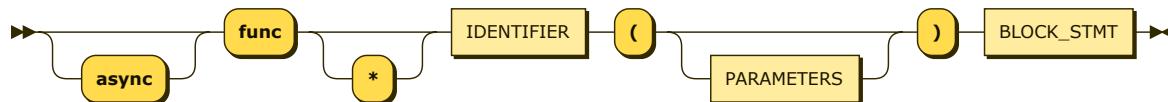


ENUM\_DECL  
 ::= 'enum' IDENTIFIER '{' IDENTIFIER\_LIST? '}'

referenced by:

- [STATEMENT](#)

## FUNC\_DECL:

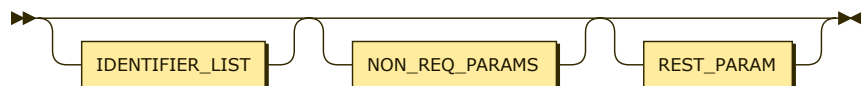


FUNC\_DECL  
 ::= 'async'? 'func' '\*'? IDENTIFIER '(' PARAMETERS? ')' BLOCK\_STMT

referenced by:

- [CLASS\\_MEMBER](#)
- [STATEMENT](#)

## PARAMETERS:

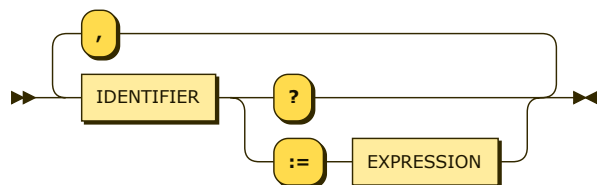


PARAMETERS  
 ::= IDENTIFIER\_LIST? NON\_REQ\_PARAMS? REST\_PARAM?

referenced by:

- [FUNC\\_DECL](#)
- [LAMBDA\\_EXPR](#)
- [OPERATOR\\_OVERLOAD](#)

## NON\_REQ\_PARAMS:

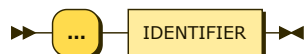


NON\_REQ\_PARAMS  
 ::= IDENTIFIER ( '?' | ':'= EXPRESSION ) ( ',' IDENTIFIER ( '?' | ':'= EXPRESSION ) )\*

referenced by:

- [PARAMETERS](#)

## REST\_PARAM:



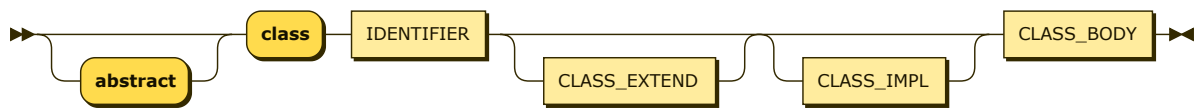
REST\_PARAM  
 ::= '...' IDENTIFIER

referenced by:

- [PARAMETERS](#)

## CLASS\_DECL:



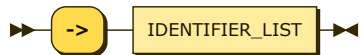


CLASS\_DECL  
 ::= 'abstract'? 'class' IDENTIFIER CLASS\_EXTEND? CLASS\_IMPL? CLASS\_BODY

referenced by:

- STATEMENT

#### CLASS\_EXTEND:

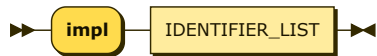


CLASS\_EXTEND  
 ::= '->' IDENTIFIER\_LIST

referenced by:

- CLASS\_DECL

#### CLASS\_IMPL:

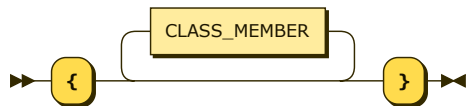


CLASS\_IMPL  
 ::= 'impl' IDENTIFIER\_LIST

referenced by:

- CLASS\_DECL

#### CLASS\_BODY:

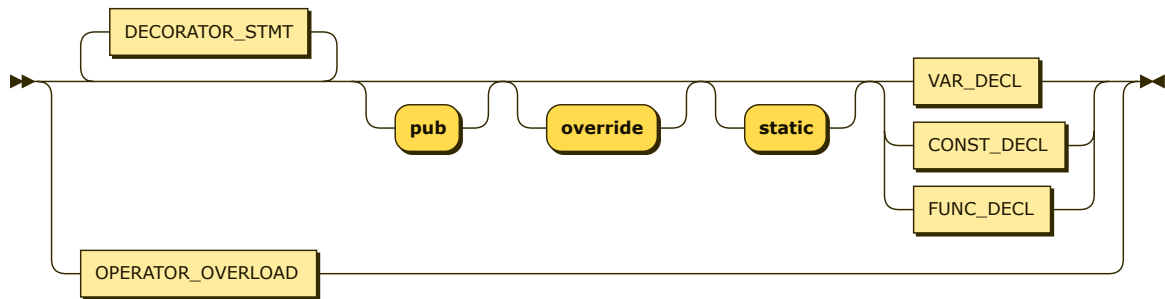


CLASS\_BODY  
 ::= '{' CLASS\_MEMBER\* '}'

referenced by:

- CLASS\_DECL

#### CLASS\_MEMBER:

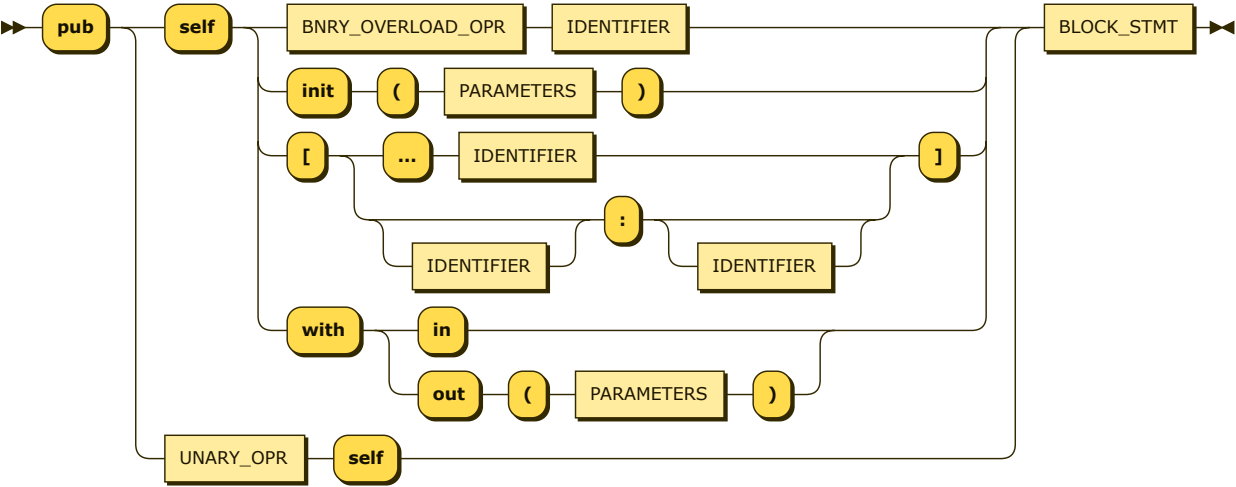


CLASS\_MEMBER  
 ::= DECORATOR\_STMT\* 'pub'? 'override'? 'static'? ( VAR\_DECL | CONST\_DECL | FUNC\_DECL )  
 | OPERATOR\_OVERLOAD

referenced by:

- CLASS\_BODY

**OPERATOR\_OVERLOAD:**

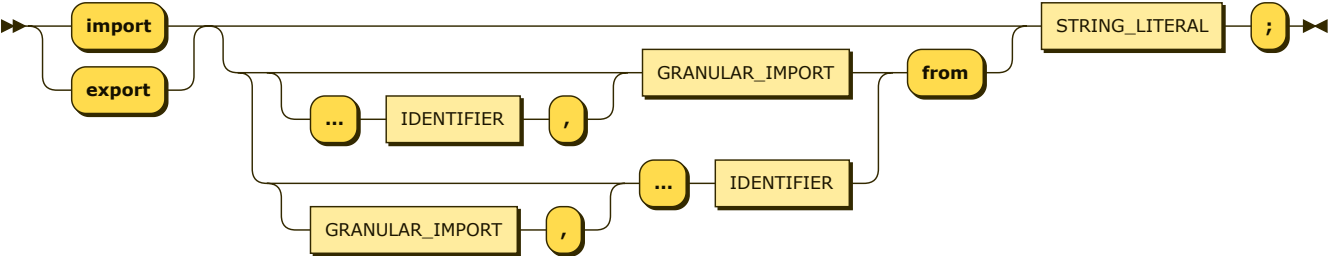


OPERATOR\_OVERLOAD ::= 'pub' ( 'self' ( BNRY\_OVERLOAD\_OPR IDENTIFIER | 'init' '(' PARAMETERS ')' | '[' ( '...' IDENTIFIER | IDENTIFIER? ':' IDENTIFIER? ) ']' | 'with' ( 'in' | 'out' '(' PARAMETERS ')' ) ) | UNARY\_OPR 'self' ) BLOCK\_STMT

referenced by:

- [CLASS\\_MEMBER](#)

**IMPORT\_EXPORT\_DECL:**

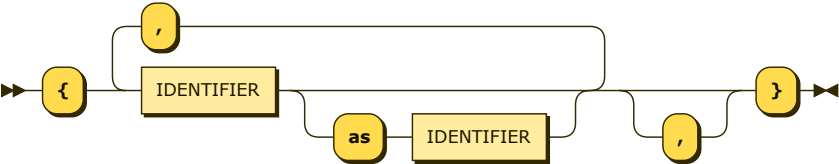


IMPORT\_EXPORT\_DECL ::= ( 'import' | 'export' ) ( ( ( '...' IDENTIFIER ',' )? GRANULAR\_IMPORT | ( GRANULAR\_IMPORT ',' )? '...' IDENTIFIER ) 'from' )? STRING\_LITERAL ';'

referenced by:

- [STATEMENT](#)

**GRANULAR\_IMPORT:**



GRANULAR\_IMPORT ::= '{' IDENTIFIER ( 'as' IDENTIFIER )? ( ',' IDENTIFIER ( 'as' IDENTIFIER )? )\* ','? '}'

referenced by:

- [IMPORT\\_EXPORT\\_DECL](#)

**EXPRESSION:**

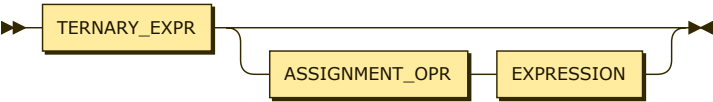


EXPRESSION ::= REASSIGNMENT\_EXPR

referenced by:

- [ARR\\_TPL\\_LIST](#)
- [ARR\\_TPL\\_REPEAT](#)
- [BREAK\\_STMT](#)
- [CALL\\_EXPR](#)
- [COMPACT\\_ARR\\_TPL](#)
- [COMPACT\\_FOR\\_LOOP](#)
- [CONST\\_DECL](#)
- [DEFAULT\\_ARM](#)
- [DEL\\_STMT](#)
- [EXPR\\_STMT](#)
- [FOR\\_LOOP\\_HEAD](#)
- [IF\\_STMT](#)
- [INDEXER](#)
- [KEY\\_VAL\\_PAR](#)
- [LAMBDA\\_EXPR](#)
- [LITERAL\\_EXPR](#)
- [MATCH\\_EXPR\\_STMT](#)
- [MATCH\\_PATT\\_ARM](#)
- [NAMED\\_ARGS](#)
- [NON\\_REQ\\_PARAMS](#)
- [REASSIGNMENT\\_EXPR](#)
- [RETURN\\_STMT](#)
- [SINGLE\\_SPREAD\\_EXPR](#)
- [SLICE](#)
- [STRING\\_SEQUENCE](#)
- [TERNARY\\_EXPR](#)
- [THROW\\_STMT](#)
- [VAR\\_DECL](#)
- [WHILE\\_LOOP\\_STMT](#)
- [WITH\\_STMT\\_HEAD](#)
- [YIELD\\_STMT](#)

**REASSIGNMENT\_EXPR:**

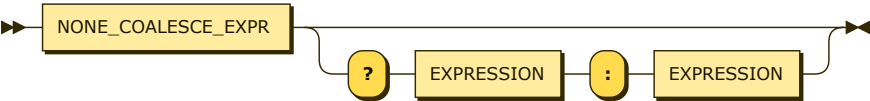


REASSIGNMENT\_EXPR  
 ::= TERNARY\_EXPR ( ASSIGNMENT\_OPR EXPRESSION ) ?

referenced by:

- [EXPRESSION](#)

**TERNARY\_EXPR:**

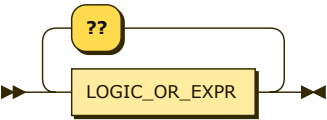


TERNARY\_EXPR  
 ::= NONE\_COALESCE\_EXPR ( '?' EXPRESSION ':' EXPRESSION ) ?

referenced by:

- [REASSIGNMENT\\_EXPR](#)

**NONE\_COALESCE\_EXPR:**

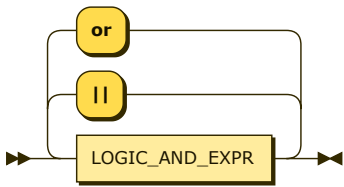


NONE\_COALESCE\_EXPR  
 ::= LOGIC\_OR\_EXPR ( '??' LOGIC\_OR\_EXPR ) \*

referenced by:

- [TERNARY\\_EXPR](#)

**LOGIC\_OR\_EXPR:**

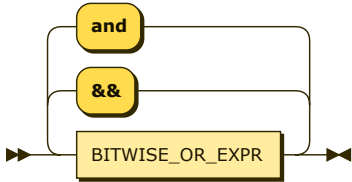


LOGIC\_OR\_EXPR  
 ::= LOGIC\_AND\_EXPR ( ( '||' | 'or' ) LOGIC\_AND\_EXPR )\*

referenced by:

- [NONE\\_COALESCE\\_EXPR](#)

**LOGIC\_AND\_EXPR:**

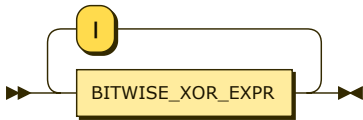


LOGIC\_AND\_EXPR  
 ::= BITWISE\_OR\_EXPR ( ( '&&' | 'and' ) BITWISE\_OR\_EXPR )\*

referenced by:

- [LOGIC\\_OR\\_EXPR](#)

**BITWISE\_OR\_EXPR:**

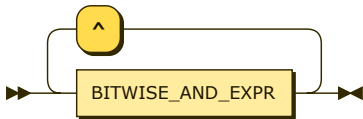


BITWISE\_OR\_EXPR  
 ::= BITWISE\_XOR\_EXPR ( '|' BITWISE\_XOR\_EXPR )\*

referenced by:

- [LOGIC\\_AND\\_EXPR](#)

**BITWISE\_XOR\_EXPR:**



BITWISE\_XOR\_EXPR  
 ::= BITWISE\_AND\_EXPR ( '^' BITWISE\_AND\_EXPR )\*

referenced by:

- [BITWISE\\_OR\\_EXPR](#)

**BITWISE\_AND\_EXPR:**

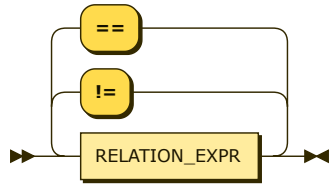


BITWISE\_AND\_EXPR  
 ::= EQUALITY\_EXPR ( '&' EQUALITY\_EXPR )\*

referenced by:

- [BITWISE\\_XOR\\_EXPR](#)

### EQUALITY\_EXPR:

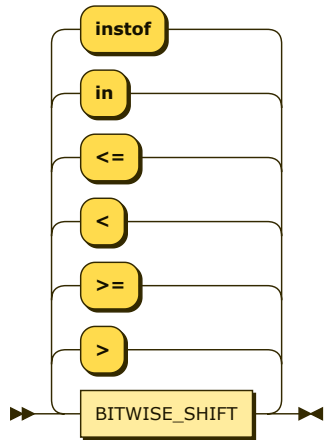


**EQUALITY\_EXPR**  
 ::= RELATION\_EXPR ( ( '!=' | '==' ) RELATION\_EXPR )\*

referenced by:

- [BITWISE\\_AND\\_EXPR](#)

### RELATION\_EXPR:

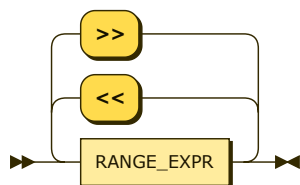


**RELATION\_EXPR**  
 ::= BITWISE\_SHIFT ( ( '>' | '>=' | '<' | '<=' | 'in' | 'instof' ) BITWISE\_SHIFT )\*

referenced by:

- [EQUALITY\\_EXPR](#)

### BITWISE\_SHIFT:

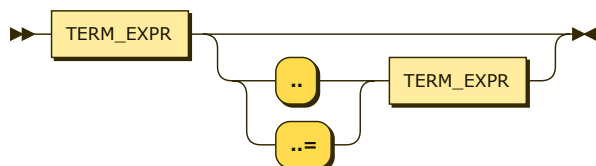


**BITWISE\_SHIFT**  
 ::= RANGE\_EXPR ( ( '<<' | '>>' ) RANGE\_EXPR )\*

referenced by:

- [RELATION\\_EXPR](#)

### RANGE\_EXPR:

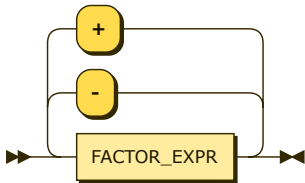


RANGE\_EXPR  
 ::= TERM\_EXPR ( ( '...' | '..=' ) TERM\_EXPR )?

referenced by:

- [BITWISE\\_SHIFT](#)

**TERM\_EXPR:**

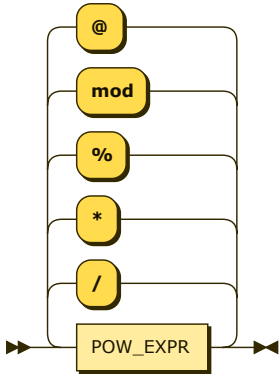


TERM\_EXPR  
 ::= FACTOR\_EXPR ( ( '-' | '+' ) FACTOR\_EXPR )\*

referenced by:

- [RANGE\\_EXPR](#)

**FACTOR\_EXPR:**

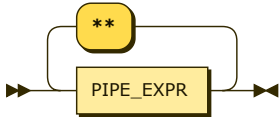


FACTOR\_EXPR  
 ::= POW\_EXPR ( ( '/' | '\*' | '%' | 'mod' | '@' ) POW\_EXPR )\*

referenced by:

- [TERM\\_EXPR](#)

**POW\_EXPR:**

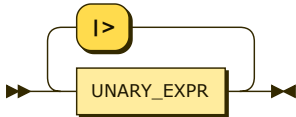


POW\_EXPR ::= PIPE\_EXPR ( '\*\*' PIPE\_EXPR )\*

referenced by:

- [FACTOR\\_EXPR](#)

**PIPE\_EXPR:**

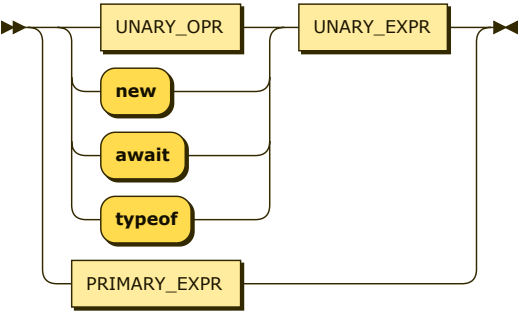


PIPE\_EXPR  
 ::= UNARY\_EXPR ( '|>' UNARY\_EXPR )\*

referenced by:

- POW\_EXPR

**UNARY\_EXPR:**

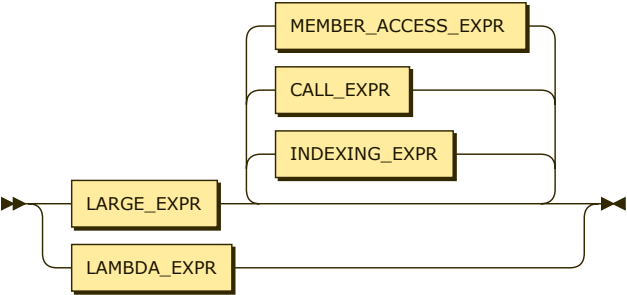


```
UNARY_EXPR
  ::= ( UNARY_OPR | 'new' | 'await' | 'typeof' ) UNARY_EXPR
  | PRIMARY_EXPR
```

referenced by:

- PIPE\_EXPR
- UNARY\_EXPR

**PRIMARY\_EXPR:**

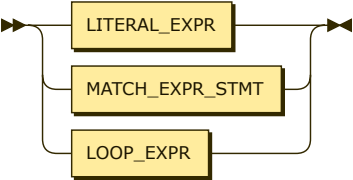


```
PRIMARY_EXPR
  ::= LAMBDA_EXPR
  | LARGE_EXPR ( INDEXING_EXPR | CALL_EXPR | MEMBER_ACCESS_EXPR )*
```

referenced by:

- UNARY\_EXPR

**LARGE\_EXPR:**

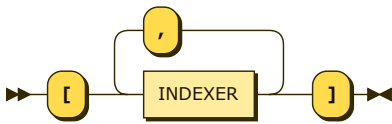


```
LARGE_EXPR
  ::= LITERAL_EXPR
  | MATCH_EXPR_STMT
  | LOOP_EXPR
```

referenced by:

- PRIMARY\_EXPR

**INDEXING\_EXPR:**



INDEXING\_EXPR  
 ::= '[' INDEXER ( ',' INDEXER )\* ']'

referenced by:

- PRIMARY\_EXPR

### INDEXER:

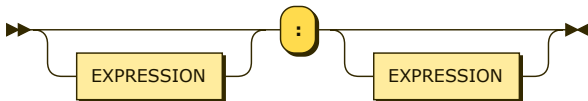


INDEXER ::= EXPRESSION  
 | SLICE

referenced by:

- INDEXING\_EXPR

### SLICE:

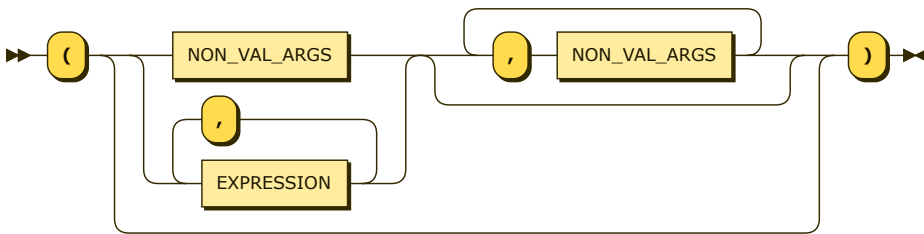


SLICE ::= EXPRESSION? ':' EXPRESSION?

referenced by:

- INDEXER

### CALL\_EXPR:

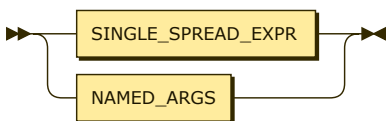


CALL\_EXPR  
 ::= '(' ( ( NON\_VAL\_ARGS | EXPRESSION ( ',' EXPRESSION )\* ) ( ',' NON\_VAL\_ARGS )\* )? ')'

referenced by:

- DECORATOR\_BDY
- PRIMARY\_EXPR

### NON\_VAL\_ARGS:



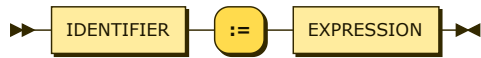
NON\_VAL\_ARGS  
 ::= SINGLE\_SPREAD\_EXPR  
 | NAMED\_ARGS

referenced by:



- [CALL\\_EXPR](#)

#### NAMED\_ARGS:

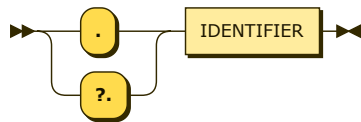


NAMED\_ARGS  
 ::= IDENTIFIER ':'= EXPRESSION

referenced by:

- [NON\\_VAL\\_ARGS](#)

#### MEMBER\_ACCESS\_EXPR:

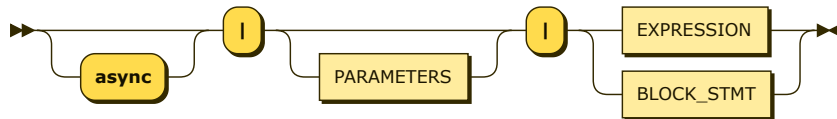


MEMBER\_ACCESS\_EXPR  
 ::= ( '.' | '?.' ) IDENTIFIER

referenced by:

- [PRIMARY\\_EXPR](#)

#### LAMBDA\_EXPR:

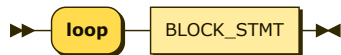


LAMBDA\_EXPR  
 ::= 'async'? '|' PARAMETERS? '|' ( EXPRESSION | BLOCK\_STMT )

referenced by:

- [PRIMARY\\_EXPR](#)

#### LOOP\_EXPR:

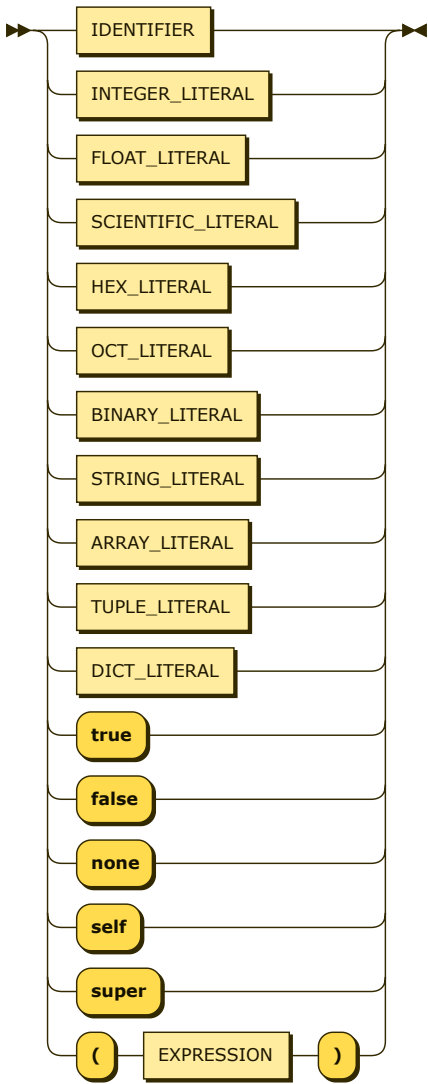


LOOP\_EXPR  
 ::= 'loop' BLOCK\_STMT

referenced by:

- [LARGE\\_EXPR](#)
- [STATEMENT](#)

#### LITERAL\_EXPR:

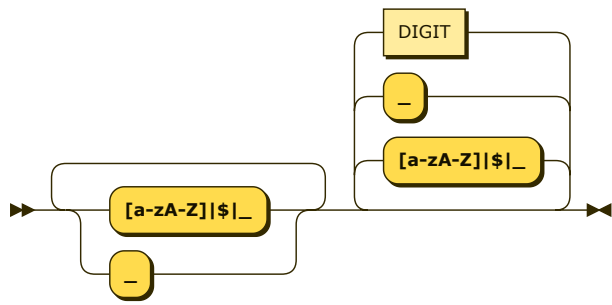


```
LITERAL_EXPR
::= IDENTIFIER
    | INTEGER_LITERAL
    | FLOAT_LITERAL
    | SCIENTIFIC_LITERAL
    | HEX_LITERAL
    | OCT_LITERAL
    | BINARY_LITERAL
    | STRING_LITERAL
    | ARRAY_LITERAL
    | TUPLE_LITERAL
    | DICT_LITERAL
    | 'true'
    | 'false'
    | 'none'
    | 'self'
    | 'super'
    | '(' EXPRESSION ')'
```

referenced by:

- LARGE\_EXPR
- MATCH\_PATT\_ARM

**IDENTIFIER:**

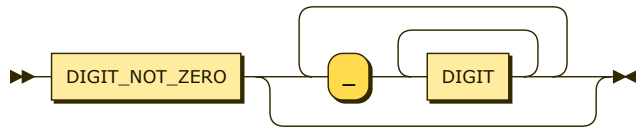


IDENTIFIER  
 ::= ( '[a-zA-Z]|\$|\_ ' | '- ' )+ ( '[a-zA-Z]|\$|\_ ' | '- ' | DIGIT )\*

referenced by:

- [CLASS\\_DECL](#)
- [CONST\\_DECL](#)
- [DECORATOR\\_BDY](#)
- [DESTRUCT\\_PATTERN](#)
- [ENUM\\_DECL](#)
- [FOR\\_LOOP\\_HEAD](#)
- [FUNC\\_DECL](#)
- [GRANULAR\\_IMPORT](#)
- [IDENTIFIER\\_LIST](#)
- [IMPORT\\_EXPORT\\_DECL](#)
- [KEY\\_VAL\\_PAR](#)
- [LITERAL\\_EXPR](#)
- [MEMBER\\_ACCESS\\_EXPR](#)
- [NAMED\\_ARGS](#)
- [NAMED\\_CATCH](#)
- [NON\\_REQ\\_PARAMS](#)
- [OPERATOR\\_OVERLOAD](#)
- [REST\\_PARAM](#)
- [VAR\\_DECL](#)
- [WHILE\\_LOOP\\_STMT](#)
- [WITH\\_STMT\\_HEAD](#)

#### INTEGER\_LITERAL:

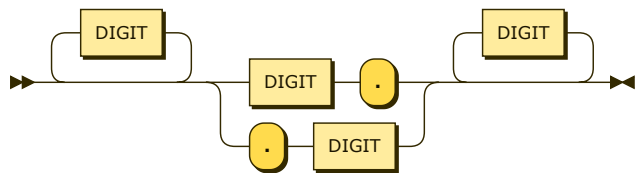


INTEGER\_LITERAL  
 ::= DIGIT\_NOT\_ZERO ( '- ' DIGIT+ )\*

referenced by:

- [KEY\\_VAL\\_PAR](#)
- [LITERAL\\_EXPR](#)
- [SCIENTIFIC\\_LITERAL](#)

#### FLOAT\_LITERAL:

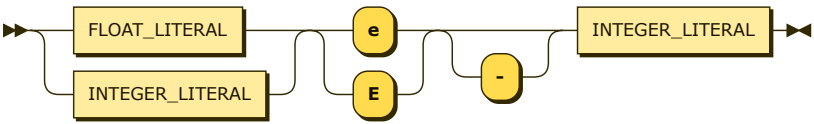


FLOAT\_LITERAL  
 ::= DIGIT\* ( DIGIT '.' | '.' DIGIT ) DIGIT\*

referenced by:

- [LITERAL\\_EXPR](#)
- [SCIENTIFIC\\_LITERAL](#)

#### SCIENTIFIC\_LITERAL:

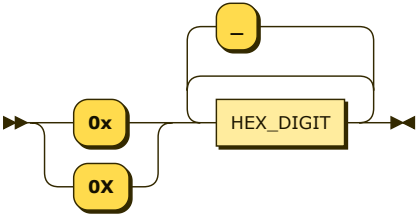


SCIENTIFIC\_LITERAL  
::= ( FLOAT\_LITERAL | INTEGER\_LITERAL ) ( 'e' | 'E' ) '-'? INTEGER\_LITERAL

referenced by:

- LITERAL\_EXPR

HEX\_LITERAL:

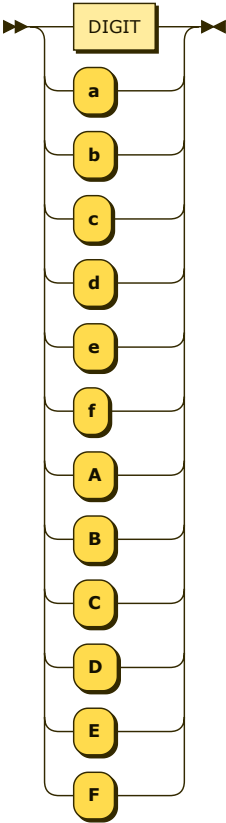


HEX\_LITERAL  
::= ( '0x' | '0X' ) HEX\_DIGIT ( '-'? HEX\_DIGIT )\*

referenced by:

- KEY\_VAL\_PAR
- LITERAL\_EXPR

HEX\_DIGIT:



HEX\_DIGIT  
::= DIGIT  
| 'a'  
| 'b'  
| 'c'  
| 'd'  
| 'e'  
| 'f'  
| 'A'  
| 'B'  
| 'C'  
| 'D'  
| 'E'  
| 'F'

```

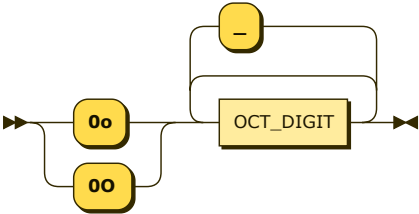
| 'B'
| 'C'
| 'D'
| 'E'
| 'F'

```

referenced by:

- HEX\_LITERAL

**OCT\_LITERAL:**



```

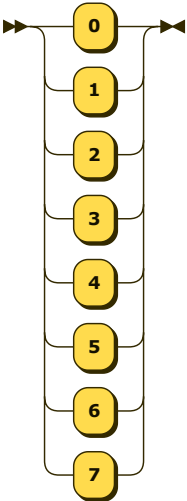
OCT_LITERAL
    ::= ( '0o' | '00' ) OCT_DIGIT ( '_'? OCT_DIGIT )*

```

referenced by:

- KEY\_VAL\_PAR
- LITERAL\_EXPR

**OCT\_DIGIT:**



```

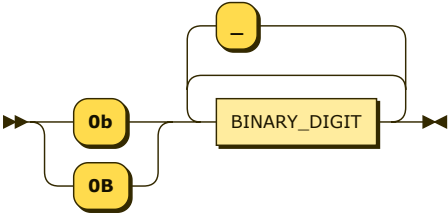
OCT_DIGIT
    ::= '0'
       | '1'
       | '2'
       | '3'
       | '4'
       | '5'
       | '6'
       | '7'

```

referenced by:

- OCT\_LITERAL

**BINARY\_LITERAL:**



```

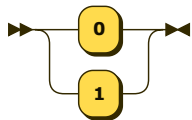
BINARY_LITERAL
    ::= ( '0b' | '0B' ) BINARY_DIGIT ( '_'? BINARY_DIGIT )*

```

referenced by:

- [KEY\\_VAL\\_PAR](#)
- [LITERAL\\_EXPR](#)

### BINARY\_DIGIT:



```

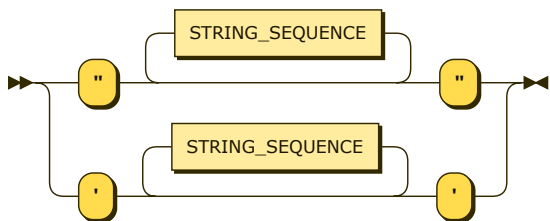
BINARY_DIGIT
    ::= '0'
    | '1'

```

referenced by:

- [BINARY\\_LITERAL](#)

### STRING\_LITERAL:



```

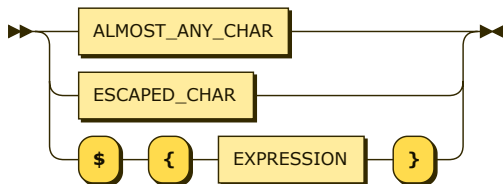
STRING_LITERAL
    ::= "'" STRING_SEQUENCE* "'"
    | '"' STRING_SEQUENCE* '"'

```

referenced by:

- [IMPORT\\_EXPORT\\_DECL](#)
- [KEY\\_VAL\\_PAR](#)
- [LITERAL\\_EXPR](#)

### STRING\_SEQUENCE:



```

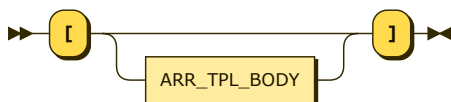
STRING_SEQUENCE
    ::= ALMOST_ANY_CHAR
    | ESCAPED_CHAR
    | '$' '{' EXPRESSION '}'

```

referenced by:

- [STRING\\_LITERAL](#)

### ARRAY\_LITERAL:



```

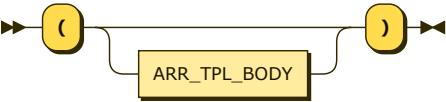
ARRAY_LITERAL
    ::= '[' ARR_TPL_BODY? ']'

```

referenced by:

- LITERAL\_EXPR

**TUPLE\_LITERAL:**

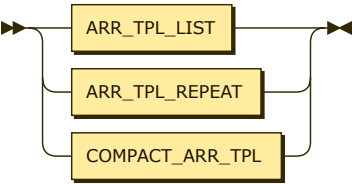


TUPLE\_LITERAL  
::= '(' ARR\_TPL\_BODY? ')'

referenced by:

- KEY\_VAL\_PAR
- LITERAL\_EXPR

**ARR\_TPL\_BODY:**

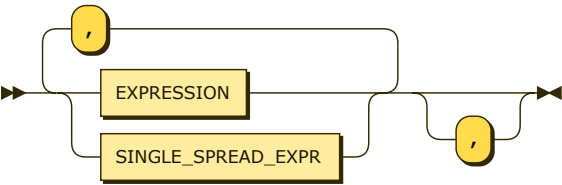


ARR\_TPL\_BODY  
::= ARR\_TPL\_LIST  
| ARR\_TPL\_REPEAT  
| COMPACT\_ARR\_TPL

referenced by:

- ARRAY\_LITERAL
- TUPLE\_LITERAL

**ARR\_TPL\_LIST:**

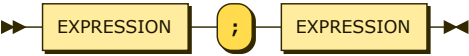


ARR\_TPL\_LIST  
::= ( EXPRESSION | SINGLE\_SPREAD\_EXPR ) ( ',' ( EXPRESSION | SINGLE\_SPREAD\_EXPR ) )\* ','?

referenced by:

- ARR\_TPL\_BODY

**ARR\_TPL\_REPEAT:**

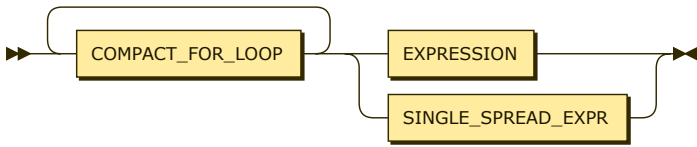


ARR\_TPL\_REPEAT  
::= EXPRESSION ';' EXPRESSION

referenced by:

- ARR\_TPL\_BODY

**COMPACT\_ARR\_TPL:**

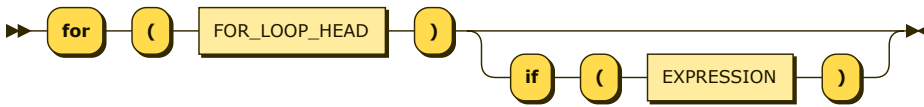


COMPACT\_ARR\_TPL  
 ::= COMPACT\_FOR\_LOOP+ ( EXPRESSION | SINGLE\_SPREAD\_EXPR )

referenced by:

- ARR\_TPL\_BODY

#### COMPACT\_FOR\_LOOP:

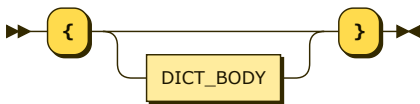


COMPACT\_FOR\_LOOP  
 ::= 'for' '(' FOR\_LOOP\_HEAD ')' ( 'if' '(' EXPRESSION ')' ) ?

referenced by:

- COMPACT\_ARR\_TPL
- COMPACT\_DICT

#### DICT\_LITERAL:

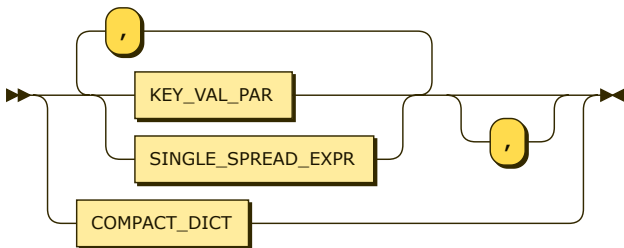


DICT\_LITERAL  
 ::= '{' DICT\_BODY? '}'

referenced by:

- LITERAL\_EXPR

#### DICT\_BODY:

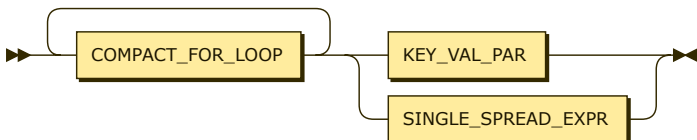


DICT\_BODY  
 ::= ( KEY\_VAL\_PAR | SINGLE\_SPREAD\_EXPR ) ( ',' ( KEY\_VAL\_PAR | SINGLE\_SPREAD\_EXPR ) ) \* ',' ?  
 | COMPACT\_DICT

referenced by:

- DICT\_LITERAL

#### COMPACT\_DICT:



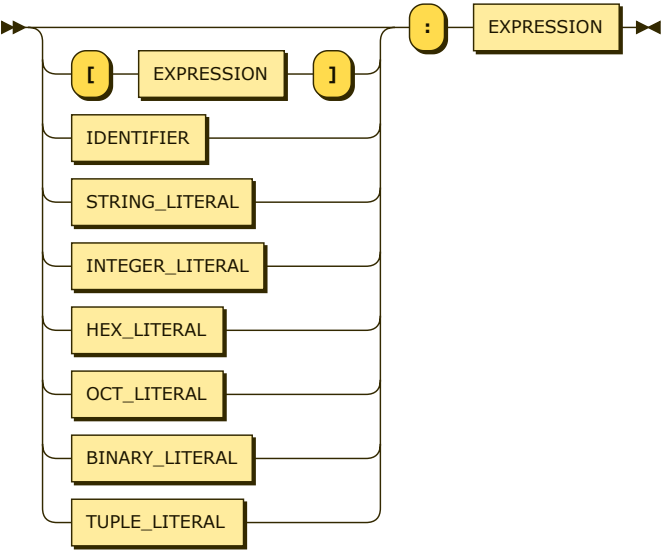
COMPACT\_DICT  
 ::= COMPACT\_FOR\_LOOP+ ( KEY\_VAL\_PAR | SINGLE\_SPREAD\_EXPR )



referenced by:

- [DICT\\_BODY](#)

**KEY\_VAL\_PAR:**



KEY\_VAL\_PAR ::= ( '[' EXPRESSION ']' | IDENTIFIER | STRING\_LITERAL | INTEGER\_LITERAL | HEX\_LITERAL | OCT\_LITERAL | BINARY\_LITERAL | TUPLE\_LITERAL )? ':' EXPRESSION

referenced by:

- [COMPACT\\_DICT](#)
- [DICT\\_BODY](#)

**SINGLE\_SPREAD\_EXPR:**



SINGLE\_SPREAD\_EXPR ::= '...' EXPRESSION

referenced by:

- [ARR\\_TPL\\_LIST](#)
- [COMPACT\\_ARR\\_TPL](#)
- [COMPACT\\_DICT](#)
- [DICT\\_BODY](#)
- [NON\\_VAL\\_ARGS](#)

**DIGIT:**

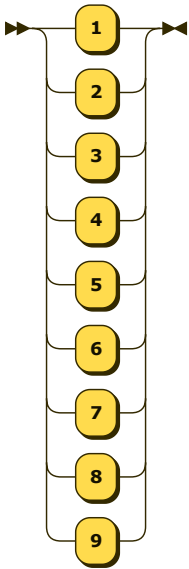


DIGIT ::= '0' | DIGIT\_NOT\_ZERO

referenced by:

- [FLOAT\\_LITERAL](#)
- [HEX\\_DIGIT](#)
- [IDENTIFIER](#)
- [INTEGER\\_LITERAL](#)

**DIGIT\_NOT\_ZERO:**

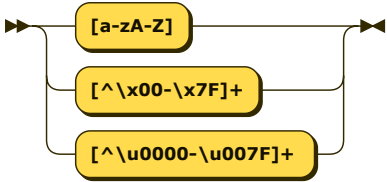


DIGIT\_NOT\_ZERO  
::= '1'  
      |  
      | '2'  
      |  
      | '3'  
      |  
      | '4'  
      |  
      | '5'  
      |  
      | '6'  
      |  
      | '7'  
      |  
      | '8'  
      |  
      | '9'

referenced by:

- DIGIT
- INTEGER\_LITERAL

**ALMOST\_ANY\_CHAR:**

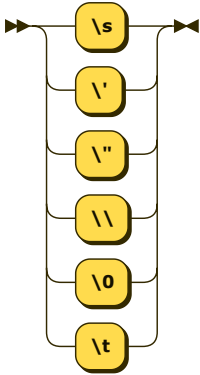


ALMOST\_ANY\_CHAR  
::= '[a-zA-Z]'  
     | ' [^\x00-\x7F]+'  
     | ' [^\u0000-\u007F]+'

referenced by:

- STRING\_SEQUENCE

**ESCAPED\_CHAR:**



ESCAPED\_CHAR

```

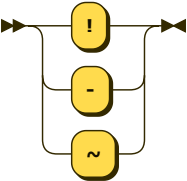
::= '\s'
    | '\"'
    | '\''
    | '\\\''
    | '\0'
    | '\t'

```

referenced by:

- STRING\_SEQUENCE

**UNARY\_OPR:**



```

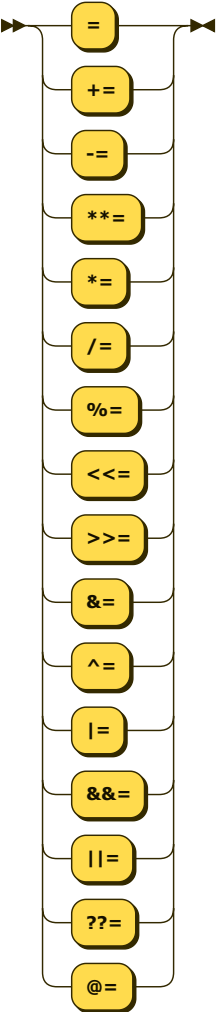
UNARY_OPR
::= '!'
    | '-'
    | '~'

```

referenced by:

- OPERATOR\_OVERLOAD
- UNARY\_EXPR

**ASSIGNMENT\_OPR:**



```

ASSIGNMENT_OPR
::= '='
    | '+='

```

```

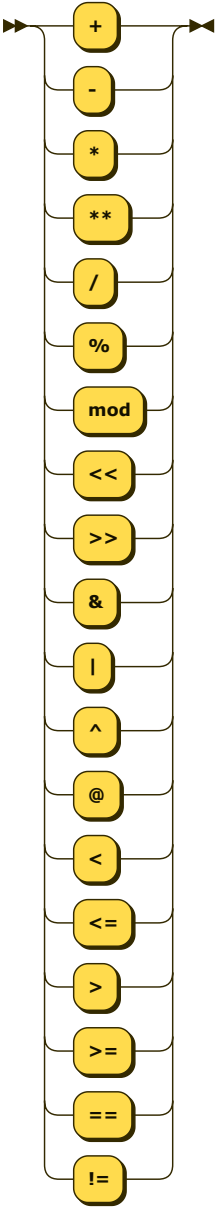
' -= '
' *= '
' *= '
' /= '
' %= '
' <<= '
' >>= '
' &= '
' ^= '
' |= '
' &&= '
' ||= '
' ??= '
' @= '

```

referenced by:

- REASSIGNMENT\_EXPR

**BNRY\_OVERLOAD\_OPR:**



```

BNRY_OVERLOAD_OPR
::=
' + '
' - '
' * '
' ** '
' / '
' % '
' mod '
' << '
' >> '
' & '

```



referenced by:

- OPERATOR OVERLOAD