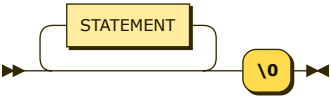


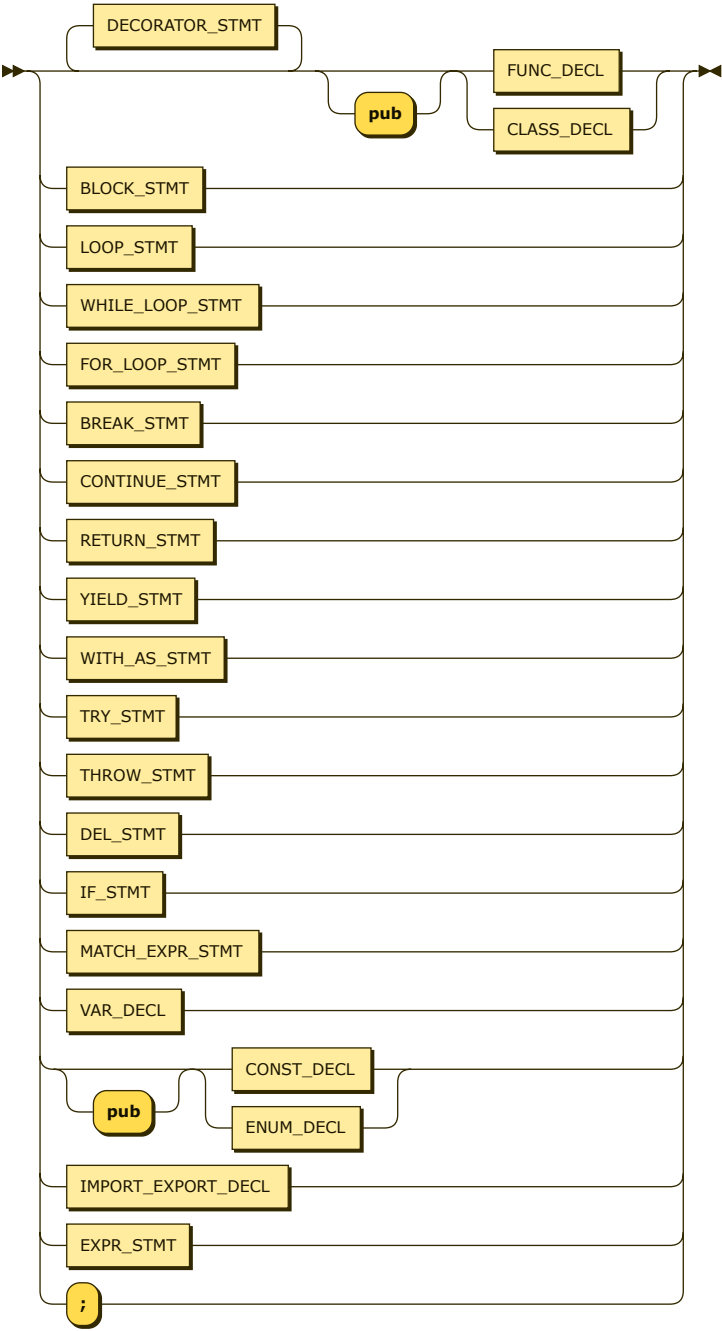
MODULE:



MODULE ::= STATEMENT\* '\0'

no references

STATEMENT:



STATEMENT  
::= BLOCK\_STMT  
| LOOP\_STMT  
| WHILE\_LOOP\_STMT  
| FOR\_LOOP\_STMT  
| BREAK\_STMT  
| CONTINUE\_STMT  
| RETURN\_STMT  
| YIELD\_STMT  
| WITH\_AS\_STMT  
| TRY\_STMT  
| THROW\_STMT  
| DEL\_STMT

```

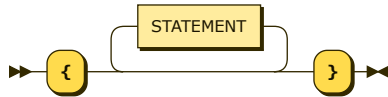
| IF_STMT
| MATCH_EXPR_STMT
| VAR_DECL
| 'pub'? ( CONST_DECL | ENUM_DECL )
| IMPORT_EXPORT_DECL
| DECORATOR_STMT* 'pub'? ( FUNC_DECL | CLASS_DECL )
| EXPR_STMT
| ';'

```

referenced by:

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

### BLOCK\_STMT:



```

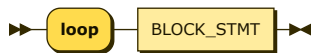
BLOCK_STMT
::= '{' STATEMENT* '}'

```

referenced by:

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

### LOOP\_STMT:



```

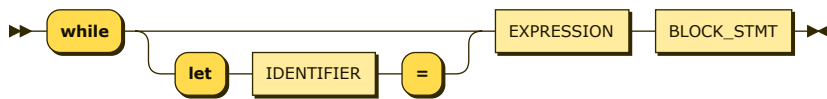
LOOP_STMT
::= 'loop' BLOCK_STMT

```

referenced by:

- [STATEMENT](#)

### WHILE\_LOOP\_STMT:



```

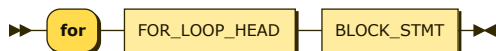
WHILE_LOOP_STMT
::= 'while' ( 'let' IDENTIFIER '=' )? EXPRESSION BLOCK_STMT

```

referenced by:

- [STATEMENT](#)

### FOR\_LOOP\_STMT:



```

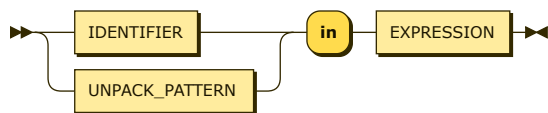
FOR_LOOP_STMT
::= 'for' FOR_LOOP_HEAD BLOCK_STMT

```

referenced by:

- [STATEMENT](#)

### FOR\_LOOP\_HEAD:

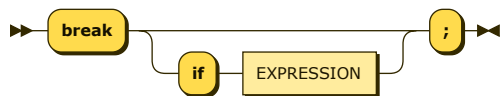


FOR\_LOOP\_HEAD  
 ::= ( IDENTIFIER | UNPACK\_PATTERN ) 'in' EXPRESSION

referenced by:

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

#### BREAK\_STMT:

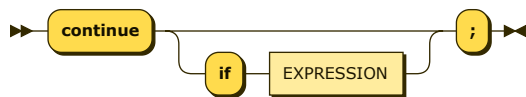


BREAK\_STMT  
 ::= 'break' ( 'if' EXPRESSION )? ';'

referenced by:

- [STATEMENT](#)

#### CONTINUE\_STMT:

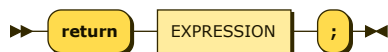


CONTINUE\_STMT  
 ::= 'continue' ( 'if' EXPRESSION )? ';'

referenced by:

- [STATEMENT](#)

#### RETURN\_STMT:

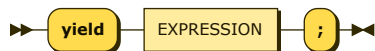


RETURN\_STMT  
 ::= 'return' EXPRESSION ';'

referenced by:

- [STATEMENT](#)

#### YIELD\_STMT:

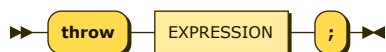


YIELD\_STMT  
 ::= 'yield' EXPRESSION ';'

referenced by:

- [STATEMENT](#)

#### THROW\_STMT:



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

referenced by:

- [STATEMENT](#)

#### DEL\_STMT:

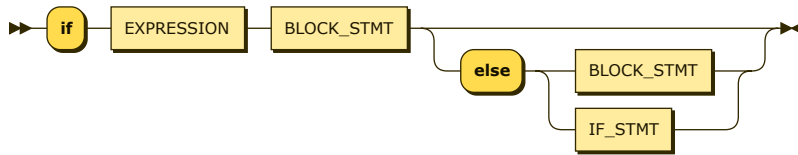


DEL\_STMT ::= 'del' EXPRESSION ';' ;

referenced by:

- STATEMENT

#### IF\_STMT:

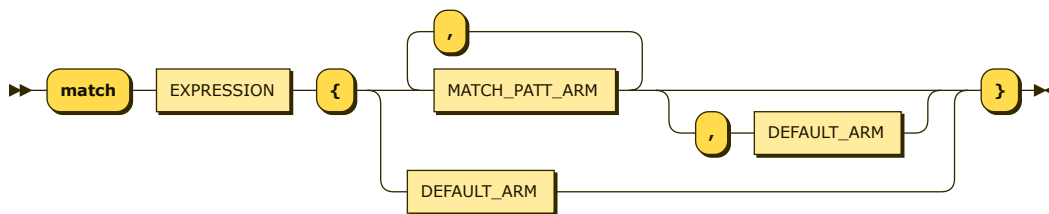


IF\_STMT ::= 'if' EXPRESSION BLOCK\_STMT ( 'else' ( BLOCK\_STMT | IF\_STMT ) ) ?

referenced by:

- IF\_STMT
- STATEMENT

#### MATCH\_EXPR\_STMT:

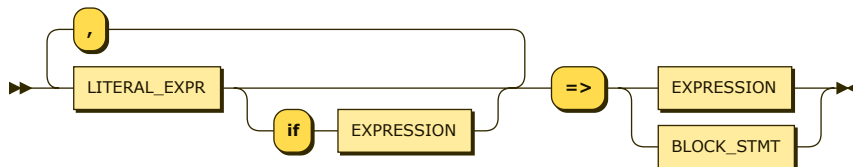


MATCH\_EXPR\_STMT ::= 'match' EXPRESSION '{' ( MATCH\_PATT\_ARM ( ',' MATCH\_PATT\_ARM ) \* ( ',' DEFAULT\_ARM ) ? | DEFAULT\_ARM ) '}'

referenced by:

- PRIMARY\_EXPR
- STATEMENT

#### MATCH\_PATT\_ARM:

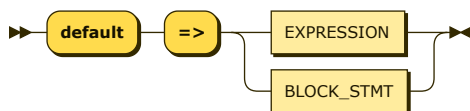


MATCH\_PATT\_ARM ::= LITERAL\_EXPR ( 'if' EXPRESSION ) ? ( ',' LITERAL\_EXPR ( 'if' EXPRESSION ) ? ) \* '=>' ( EXPRESSION | BLOCK\_STMT )

referenced by:

- MATCH\_EXPR\_STMT

#### DEFAULT\_ARM:

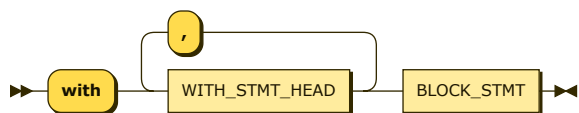


DEFAULT\_ARM ::= 'default' '=>' ( EXPRESSION | BLOCK\_STMT )

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:

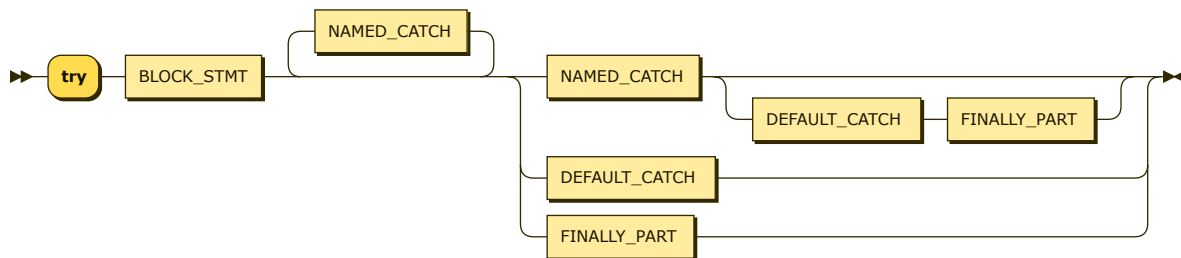


WITH\_STMT\_HEAD  
 ::= EXPRESSION 'as' IDENTIFIER

referenced by:

- WITH\_AS\_STMT

#### TRY\_STMT:

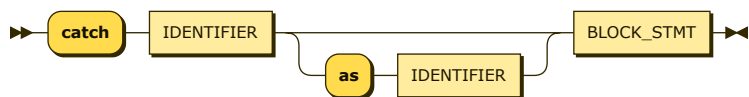


TRY\_STMT ::= 'try' BLOCK\_STMT NAMED\_CATCH\* ( NAMED\_CATCH ( DEFAULT\_CATCH FINALLY\_PART )? | DEFAULT\_CATCH | FINALLY\_PART )

referenced by:

- STATEMENT

#### NAMED\_CATCH:

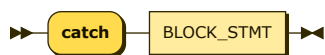


NAMED\_CATCH  
 ::= 'catch' IDENTIFIER ( 'as' IDENTIFIER )? BLOCK\_STMT

referenced by:

- TRY\_STMT

#### DEFAULT\_CATCH:

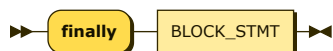


DEFAULT\_CATCH  
 ::= 'catch' BLOCK\_STMT

referenced by:

- TRY\_STMT

#### FINALLY\_PART:



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

referenced by:

- TRY\_STMT

**EXPR\_STMT:**

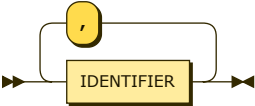


EXPR\_STMT  
::= EXPRESSION ';' ;

referenced by:

- STATEMENT

**IDENTIFIER\_LIST:**

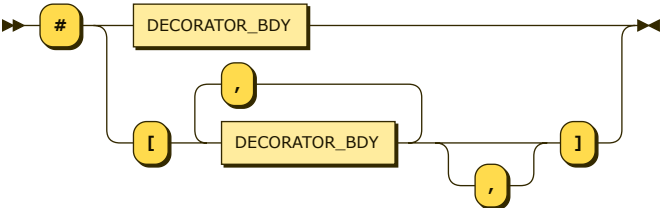


IDENTIFIER\_LIST  
::= IDENTIFIER ( ',' IDENTIFIER )\*

referenced by:

- CLS\_EXTEND
- CLS\_IMPL
- ENUM\_DECL
- PARAMETERS
- UNPACK\_PATTERN

**DECORATOR\_STMT:**

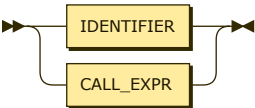


DECORATOR\_STMT  
::= '#' ( DECORATOR\_BDY | '[' DECORATOR\_BDY ( ',' DECORATOR\_BDY )\* ','? ']' )

referenced by:

- CLS\_MEMBER
- CLS\_PARAM\_MODE
- STATEMENT

**DECORATOR\_BDY:**

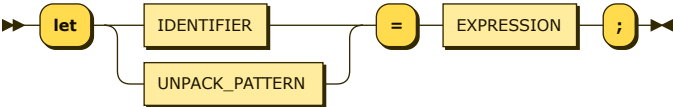


DECORATOR\_BDY  
::= IDENTIFIER  
| CALL\_EXPR

referenced by:

- DECORATOR\_STMT

**VAR\_DECL:**

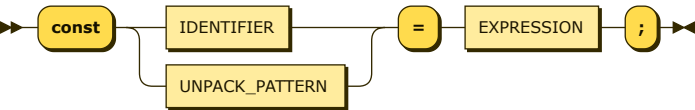


VAR\_DECL ::= 'let' ( IDENTIFIER | UNPACK\_PATTERN ) '=' EXPRESSION ';' ;

referenced by:

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

**CONST\_DECL:**

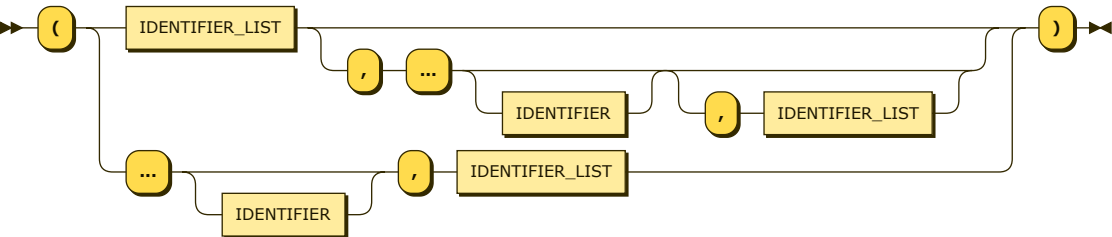


CONST\_DECL  
::= 'const' ( IDENTIFIER | UNPACK\_PATTERN ) '=' EXPRESSION ';' ;

referenced by:

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

**UNPACK\_PATTERN:**

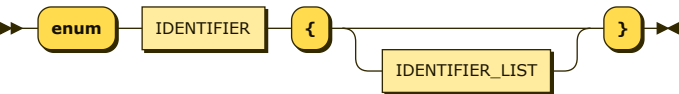


UNPACK\_PATTERN  
::= '(' ( IDENTIFIER\_LIST ( ',' '...' IDENTIFIER? ( ',' IDENTIFIER\_LIST )? )? | '...' IDENTIFIER? ',' IDENTIFIER\_LIST ) ')'

referenced by:

- [CONST\\_DECL](#)
- [FOR\\_LOOP\\_HEAD](#)
- [VAR\\_DECL](#)

**ENUM\_DECL:**

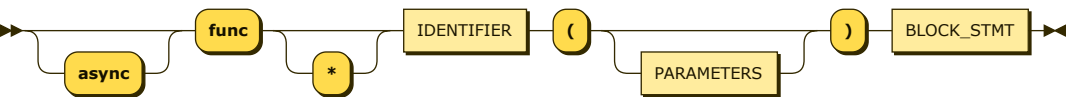


ENUM\_DECL  
::= 'enum' IDENTIFIER '{' IDENTIFIER\_LIST? '}'

referenced by:

- [STATEMENT](#)

**FUNC\_DECL:**

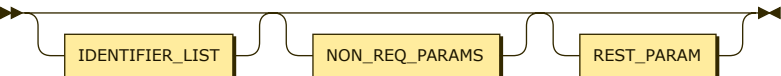


FUNC\_DECL  
::= 'async'? 'func' '\*'? IDENTIFIER '(' PARAMETERS? ')' BLOCK\_STMT

referenced by:

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

**PARAMETERS:**

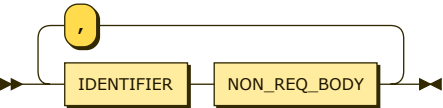


PARAMETERS  
::= IDENTIFIER\_LIST? NON\_REQ\_PARAMS? REST\_PARAM?

referenced by:

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

**NON\_REQ\_PARAMS:**

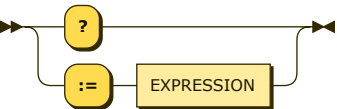


NON\_REQ\_PARAMS  
 ::= IDENTIFIER NON\_REQ\_BODY ( ',' IDENTIFIER NON\_REQ\_BODY )\*

referenced by:

- [PARAMETERS](#)

**NON\_REQ\_BODY:**



NON\_REQ\_BODY  
 ::= '?'  
 | ':=' EXPRESSION

referenced by:

- [CLS\\_NON\\_REQ\\_PARAMS](#)
- [NON\\_REQ\\_PARAMS](#)

**REST\_PARAM:**

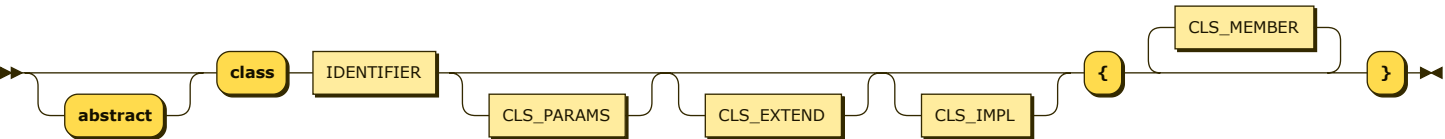


REST\_PARAM  
 ::= '...' IDENTIFIER

referenced by:

- [CLS\\_PARAMS](#)
- [PARAMETERS](#)

**CLASS\_DECL:**

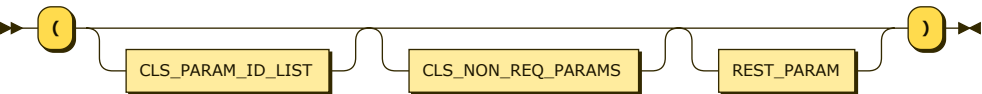


CLASS\_DECL  
 ::= 'abstract'? 'class' IDENTIFIER CLS\_PARAMS? CLS\_EXTEND? CLS\_IMPL? '{' CLS\_MEMBER\* '}'

referenced by:

- [STATEMENT](#)

**CLS\_PARAMS:**



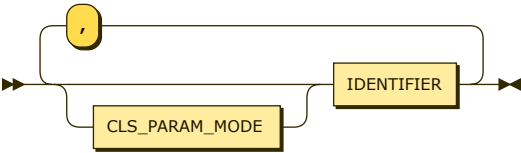
CLS\_PARAMS  
 ::= '(' CLS\_PARAM\_ID\_LIST? CLS\_NON\_REQ\_PARAMS? REST\_PARAM? ')'

referenced by:

- [CLASS\\_DECL](#)



**CLS\_PARAM\_ID\_LIST:**

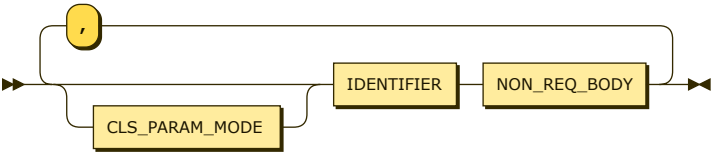


CLS\_PARAM\_ID\_LIST ::= CLS\_PARAM\_MODE? IDENTIFIER ( ',' CLS\_PARAM\_MODE? IDENTIFIER )\*

referenced by:

- [CLS\\_PARAMS](#)

**CLS\_NON\_REQ\_PARAMS:**

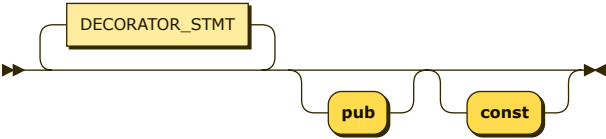


CLS\_NON\_REQ\_PARAMS ::= CLS\_PARAM\_MODE? IDENTIFIER NON\_REQ\_BODY ( ',' CLS\_PARAM\_MODE? IDENTIFIER NON\_REQ\_BODY )\*

referenced by:

- [CLS\\_PARAMS](#)

**CLS\_PARAM\_MODE:**

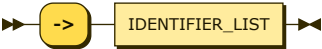


CLS\_PARAM\_MODE ::= DECORATOR\_STMT\* 'pub'? 'const'?

referenced by:

- [CLS\\_NON\\_REQ\\_PARAMS](#)
- [CLS\\_PARAM\\_ID\\_LIST](#)

**CLS\_EXTEND:**

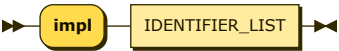


CLS\_EXTEND ::= '->' IDENTIFIER\_LIST

referenced by:

- [CLASS\\_DECL](#)

**CLS\_IMPL:**

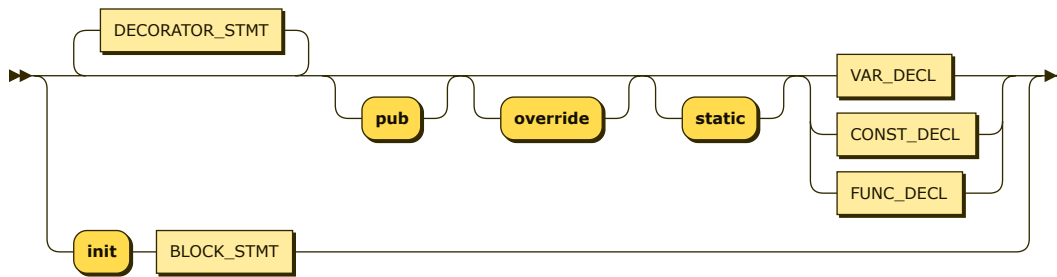


CLS\_IMPL ::= 'impl' IDENTIFIER\_LIST

referenced by:

- [CLASS\\_DECL](#)

**CLS\_MEMBER:**

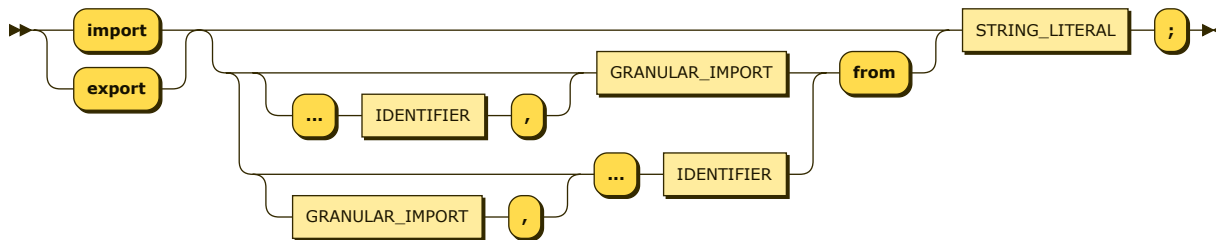


CLS\_MEMBER  
 ::= DECORATOR\_STMT\* 'pub'? 'override'? 'static'? ( VAR\_DECL | CONST\_DECL | FUNC\_DECL )  
 | 'init' BLOCK\_STMT

referenced by:

- CLASS\_DECL

#### IMPORT\_EXPORT\_DECL:

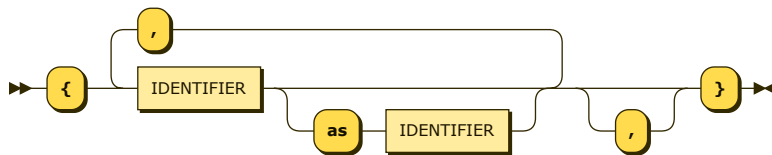


IMPORT\_EXPORT\_DECL  
 ::= ( 'import' | 'export' ) ( ( ( '...' IDENTIFIER ',' )? GRANULAR\_IMPORT | ( GRANULAR\_IMPORT ',' )? '...' IDENTIFIER ) 'from' )? STRING\_LITERAL

referenced by:

- STATEMENT

#### GRANULAR\_IMPORT:

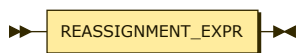


GRANULAR\_IMPORT  
 ::= '{' IDENTIFIER ( 'as' IDENTIFIER )? ( ',' IDENTIFIER ( 'as' IDENTIFIER )? )\* ',' '?' '}'

referenced by:

- IMPORT\_EXPORT\_DECL

#### EXPRESSION:



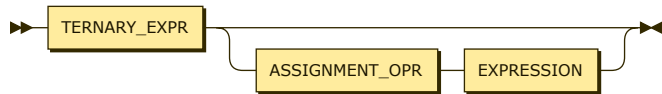
EXPRESSION  
 ::= REASSIGNMENT\_EXPR

referenced by:

- ARR\_TPL\_LIST
- ARR\_TPL\_REPEAT
- BREAK\_STMT
- CALL\_EXPR
- COMPACT\_ARR\_TPL
- COMPACT\_FOR\_LOOP
- CONST\_DECL
- CONTINUE\_STMT
- 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\_BODY
- 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:

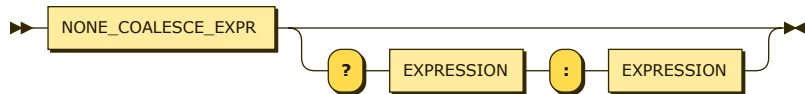


REASSIGNMENT\_EXPR  
 ::= TERNARY\_EXPR ( ASSIGNMENT\_OPR EXPRESSION ) ?

referenced by:

- EXPRESSION

#### TERNARY\_EXPR:

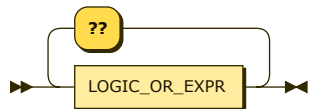


TERNARY\_EXPR  
 ::= NONE\_COALESCE\_EXPR ( '?' EXPRESSION ':' EXPRESSION ) ?

referenced by:

- REASSIGNMENT\_EXPR

#### NONE\_COALESCE\_EXPR:

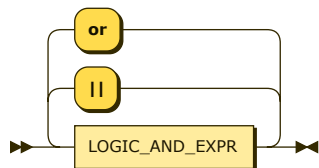


NONE\_COALESCE\_EXPR  
 ::= LOGIC\_OR\_EXPR ( '??' LOGIC\_OR\_EXPR ) \*

referenced by:

- TERNARY\_EXPR

#### LOGIC\_OR\_EXPR:

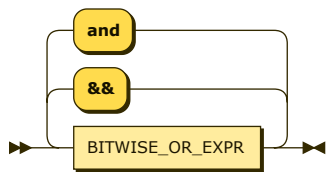


LOGIC\_OR\_EXPR  
 ::= LOGIC\_AND\_EXPR ( ( '||' | 'or' ) LOGIC\_AND\_EXPR ) \*

referenced by:

- NONE\_COALESCE\_EXPR

#### LOGIC\_AND\_EXPR:

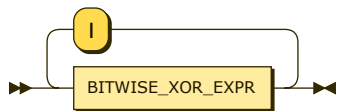


LOGIC\_AND\_EXPR  
 ::= BITWISE\_OR\_EXPR ( ( '&&' | 'and' ) BITWISE\_OR\_EXPR )\*

referenced by:

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

#### **BITWISE\_OR\_EXPR:**

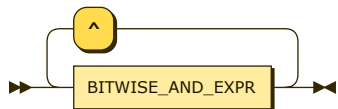


BITWISE\_OR\_EXPR  
 ::= BITWISE\_XOR\_EXPR ( '|' BITWISE\_XOR\_EXPR )\*

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:**

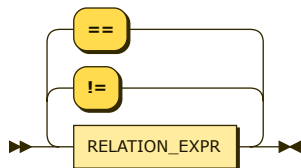


BITWISE\_AND\_EXPR  
 ::= EQUALITY\_EXPR ( '&' EQUALITY\_EXPR )\*

referenced by:

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

#### **EQUALITY\_EXPR:**

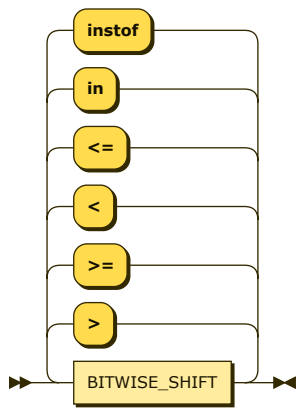


EQUALITY\_EXPR  
 ::= RELATION\_EXPR ( ( '!=' | '==' ) RELATION\_EXPR )\*

referenced by:

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

#### **RELATION\_EXPR:**

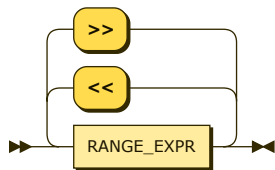


RELATION\_EXPR  
 ::= BITWISE\_SHIFT ( ( '>' | '>=' | '<' | '<=' | 'in' | 'instof' ) BITWISE\_SHIFT )\*

referenced by:

- EQUALITY\_EXPR

#### BITWISE\_SHIFT:

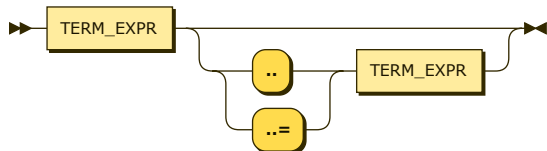


BITWISE\_SHIFT  
 ::= RANGE\_EXPR ( ( '<<' | '>>' ) RANGE\_EXPR )\*

referenced by:

- RELATION\_EXPR

#### RANGE\_EXPR:

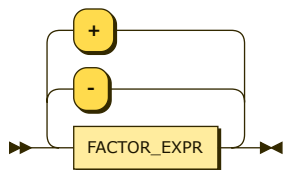


RANGE\_EXPR  
 ::= TERM\_EXPR ( ( '..' | '..=' ) TERM\_EXPR )?

referenced by:

- BITWISE\_SHIFT

#### TERM\_EXPR:

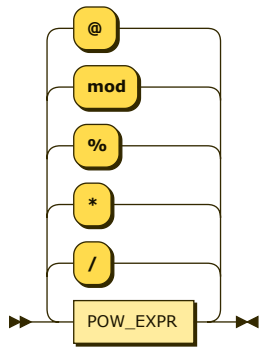


TERM\_EXPR  
 ::= FACTOR\_EXPR ( ( '-' | '+' ) FACTOR\_EXPR )\*

referenced by:

- RANGE\_EXPR

#### FACTOR\_EXPR:

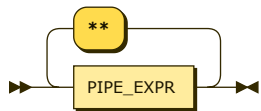


FACTOR\_EXPR  
 ::= POW\_EXPR ( ( '/' | '\*' | '%' | 'mod' | '@' ) POW\_EXPR )\*

referenced by:

- TERM\_EXPR

#### POW\_EXPR:

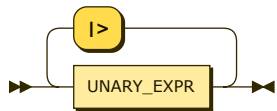


POW\_EXPR ::= PIPE\_EXPR ( '\*\*' PIPE\_EXPR )\*

referenced by:

- FACTOR\_EXPR

#### PIPE\_EXPR:

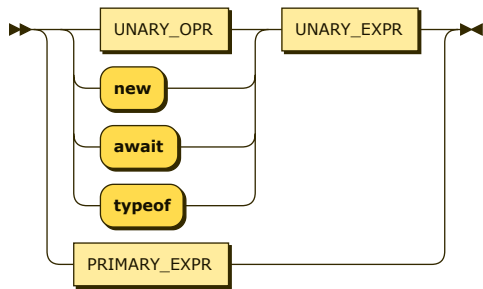


PIPE\_EXPR  
 ::= UNARY\_EXPR ( '|>' UNARY\_EXPR )\*

referenced by:

- POW\_EXPR

#### UNARY\_EXPR:

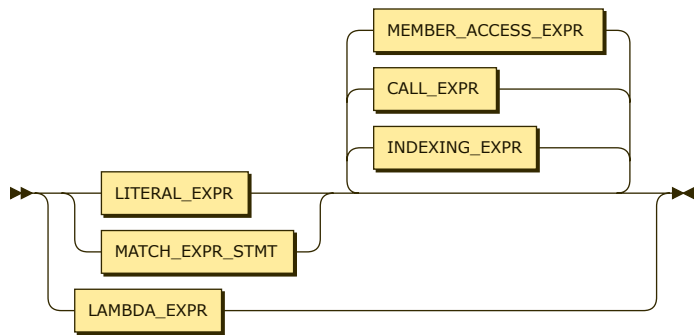


UNARY\_EXPR  
 ::= ( UNARY\_OPR | 'new' | 'await' | 'typeof' ) UNARY\_EXPR  
 | PRIMARY\_EXPR

referenced by:

- PIPE\_EXPR
- UNARY\_EXPR

#### PRIMARY\_EXPR:

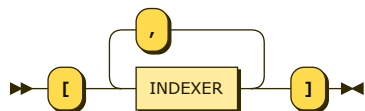


PRIMARY\_EXPR  
 ::= LAMBDA\_EXPR  
 | ( LITERAL\_EXPR | MATCH\_EXPR\_STMT ) ( INDEXING\_EXPR | CALL\_EXPR | MEMBER\_ACCESS\_EXPR )\*

referenced by:

- UNARY\_EXPR

### INDEXING\_EXPR:

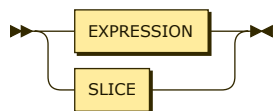


INDEXING\_EXPR  
 ::= '[' INDEXER ( ',' INDEXER )\* ']'

referenced by:

- PRIMARY\_EXPR

### INDEXER:

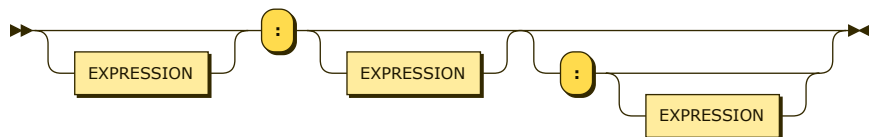


INDEXER ::= EXPRESSION  
 | SLICE

referenced by:

- INDEXING\_EXPR

### SLICE:

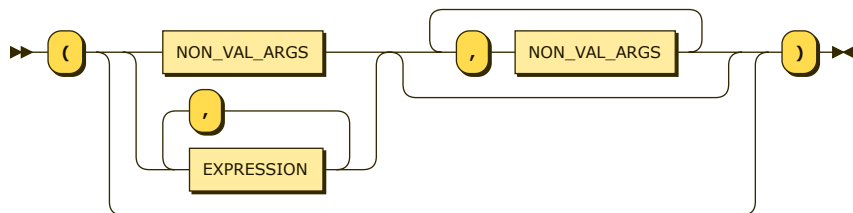


SLICE ::= EXPRESSION? ':' EXPRESSION? ( ':' EXPRESSION? )?

referenced by:

- INDEXER

### CALL\_EXPR:



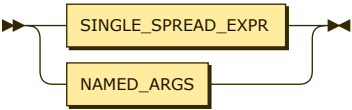
CALL\_EXPR

`::= '(' ( ( NON_VAL_ARGS | EXPRESSION ( ',' EXPRESSION )* ) ( ',' NON_VAL_ARGS )* )? ')'`

referenced by:

- DECORATOR\_BDY
- PRIMARY\_EXPR

**NON\_VAL\_ARGS:**

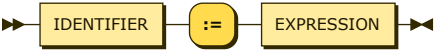


`NON_VAL_ARGS`  
`::= SINGLE_SPREAD_EXPR`  
`| NAMED_ARGS`

referenced by:

- CALL\_EXPR

**NAMED\_ARGS:**

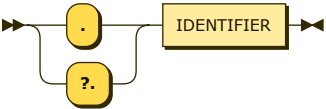


`NAMED_ARGS`  
`::= IDENTIFIER ':' '=' EXPRESSION`

referenced by:

- NON\_VAL\_ARGS

**MEMBER\_ACCESS\_EXPR:**

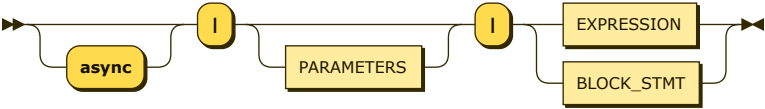


`MEMBER_ACCESS_EXPR`  
`::= ( '.' | '?.' ) IDENTIFIER`

referenced by:

- PRIMARY\_EXPR

**LAMBDA\_EXPR:**



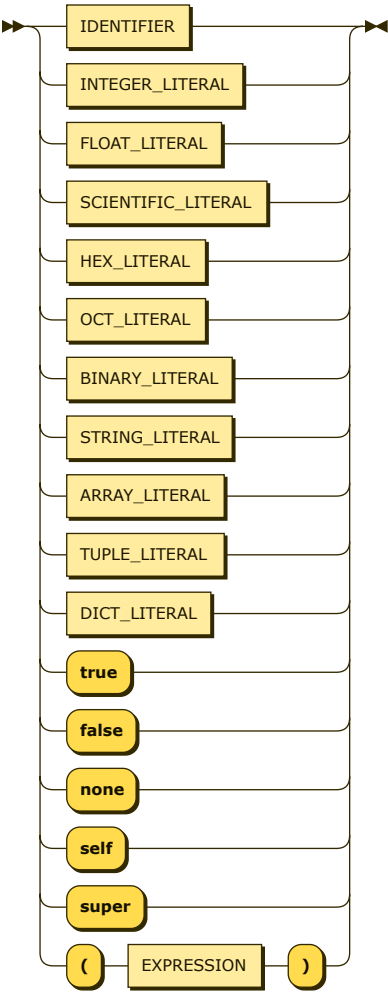
`LAMBDA_EXPR`  
`::= 'async'? '|' PARAMETERS? '|' ( EXPRESSION | BLOCK_STMT )`

referenced by:

- PRIMARY\_EXPR

**LITERAL\_EXPR:**



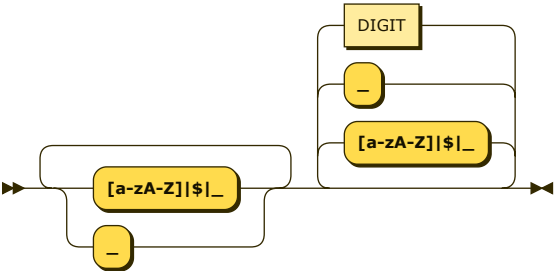


```
LITERAL_EXPR
 ::= IDENTIFIER
    | INTEGER_LITERAL
    | FLOAT_LITERAL
    | SCIENTIFIC_LITERAL
    | HEX_LITERAL
    | OCT_LITERAL
    | BINARY_LITERAL
    | STRING_LITERAL
    | ARRAY_LITERAL
    | TUPLE_LITERAL
    | DICT_LITERAL
    | 'true'
    | 'false'
    | 'none'
    | 'self'
    | 'super'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

referenced by:

- MATCH\_PATT\_ARM
- PRIMARY\_EXPR

**IDENTIFIER:**

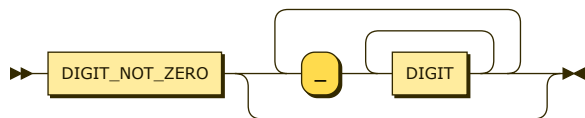


```
IDENTIFIER
 ::= ( '[a-zA-Z]|$|_' | '_' )+ ( '[a-zA-Z]|$|_' | '_' | DIGIT )*
```

referenced by:

- [CLASS\\_DECL](#)
- [CLS\\_NON\\_REQ\\_PARAMS](#)
- [CLS\\_PARAM\\_ID\\_LIST](#)
- [CONST\\_DECL](#)
- [DECORATOR\\_BDY](#)
- [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](#)
- [REST\\_PARAM](#)
- [UNPACK\\_PATTERN](#)
- [VAR\\_DECL](#)
- [WHILE\\_LOOP\\_STMT](#)
- [WITH\\_STMT\\_HEAD](#)

## INTEGER\_LITERAL:

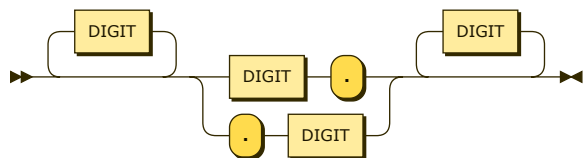


INTEGER\_LITERAL  
 ::= DIGIT\_NOT\_ZERO ( '-' DIGIT+ )\*

referenced by:

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

## FLOAT\_LITERAL:

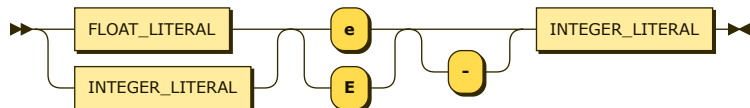


FLOAT\_LITERAL  
 ::= DIGIT\* ( DIGIT '.' | '.' DIGIT ) DIGIT\*

referenced by:

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

## SCIENTIFIC\_LITERAL:

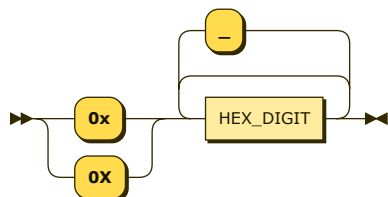


SCIENTIFIC\_LITERAL  
 ::= ( FLOAT\_LITERAL | INTEGER\_LITERAL ) ( 'e' | 'E' ) '-'? INTEGER\_LITERAL

referenced by:

- [LITERAL\\_EXPR](#)

## HEX\_LITERAL:

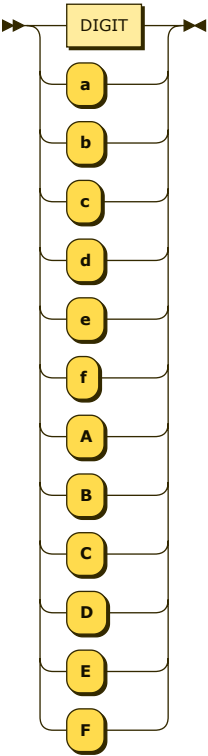


HEX\_LITERAL  
 ::= ( '0x' | '0X' ) HEX\_DIGIT ( '\_'? HEX\_DIGIT )\*

referenced by:

- KEY\_VAL\_PAR
- LITERAL\_EXPR

HEX\_DIGIT:



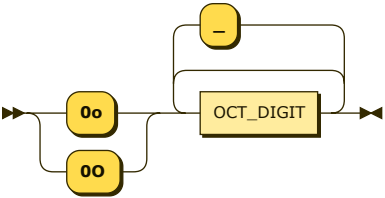
```

    HEX_DIGIT
    ::= DIGIT
       | 'a'
       | 'b'
       | 'c'
       | 'd'
       | 'e'
       | 'f'
       | 'A'
       | 'B'
       | 'C'
       | 'D'
       | 'E'
       | 'F'
  
```

referenced by:

- HEX\_LITERAL

OCT\_LITERAL:



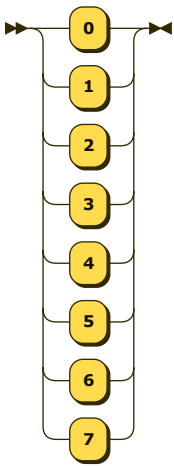
```

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

referenced by:

- KEY\_VAL\_PAR
- LITERAL\_EXPR

OCT\_DIGIT:

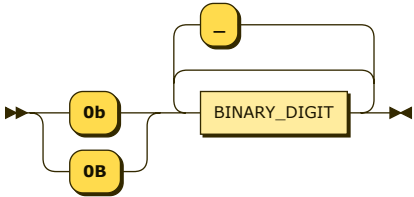


OCT\_DIGIT ::= '0'  
          | '1'  
          | '2'  
          | '3'  
          | '4'  
          | '5'  
          | '6'  
          | '7'

referenced by:

- OCT\_LITERAL

**BINARY\_LITERAL:**

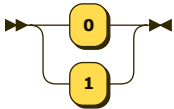


BINARY\_LITERAL ::= ( '0b' | '0B' ) BINARY\_DIGIT ( '\_'? BINARY\_DIGIT )\*

referenced by:

- KEY\_VAL\_PAR
- LITERAL\_EXPR

**BINARY\_DIGIT:**

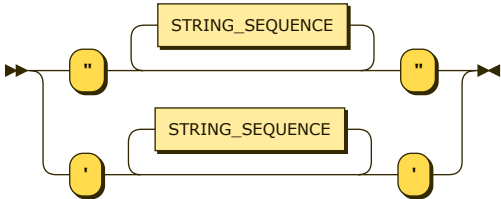


BINARY\_DIGIT ::= '0'  
          | '1'

referenced by:

- BINARY\_LITERAL

**STRING\_LITERAL:**



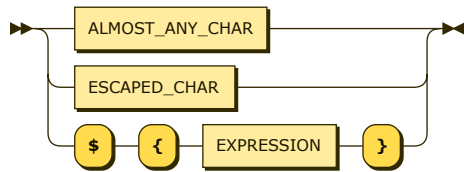
STRING\_LITERAL ::= ''' STRING\_SEQUENCE\* '''

| `""" STRING_SEQUENCE* """`

referenced by:

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

#### STRING\_SEQUENCE:

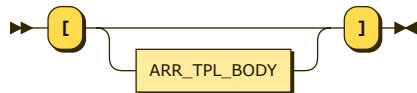


```
STRING_SEQUENCE
  ::= ALMOST_ANY_CHAR
     | ESCAPED_CHAR
     | '$' '{' EXPRESSION '}'
```

referenced by:

- [STRING\\_LITERAL](#)

#### ARRAY\_LITERAL:

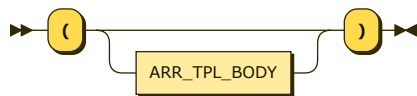


```
ARRAY_LITERAL
  ::= '[' ARR_TPL_BODY? ']'
```

referenced by:

- [LITERAL\\_EXPR](#)

#### TUPLE\_LITERAL:

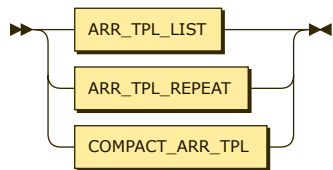


```
TUPLE_LITERAL
  ::= '(' ARR_TPL_BODY? ')'
```

referenced by:

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

#### ARR\_TPL\_BODY:

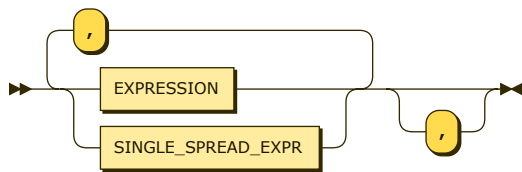


```
ARR_TPL_BODY
  ::= ARR_TPL_LIST
     | ARR_TPL_REPEAT
     | COMPACT_ARR_TPL
```

referenced by:

- [ARRAY\\_LITERAL](#)
- [TUPLE\\_LITERAL](#)

#### ARR\_TPL\_LIST:

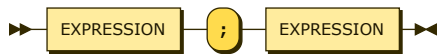


ARR\_TPL\_LIST  
 ::= ( EXPRESSION | SINGLE\_SPREAD\_EXPR ) ( ',' ( EXPRESSION | SINGLE\_SPREAD\_EXPR ) )\* ','?

referenced by:

- [ARR\\_TPL\\_BODY](#)

#### ARR\_TPL\_REPEAT:

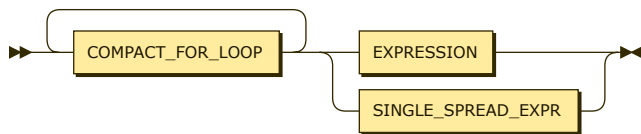


ARR\_TPL\_REPEAT  
 ::= EXPRESSION ';' EXPRESSION

referenced by:

- [ARR\\_TPL\\_BODY](#)

#### COMPACT\_ARR\_TPL:

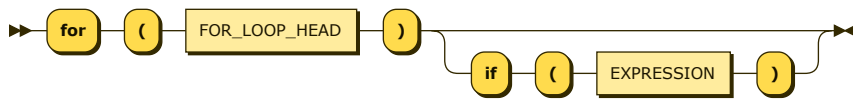


COMPACT\_ARR\_TPL  
 ::= COMPACT\_FOR\_LOOP+ ( EXPRESSION | SINGLE\_SPREAD\_EXPR )

referenced by:

- [ARR\\_TPL\\_BODY](#)

#### COMPACT\_FOR\_LOOP:

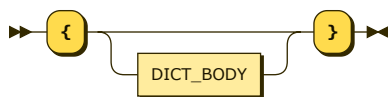


COMPACT\_FOR\_LOOP  
 ::= 'for' '(' FOR\_LOOP\_HEAD ')' ( 'if' '(' EXPRESSION ')' )?

referenced by:

- [COMPACT\\_ARR\\_TPL](#)
- [COMPACT\\_DICT](#)

#### DICT\_LITERAL:

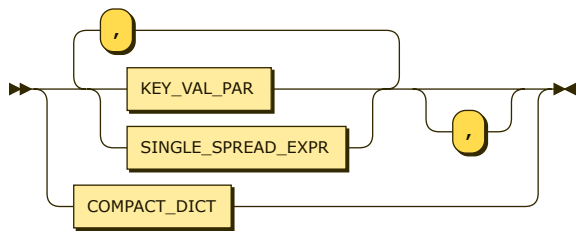


DICT\_LITERAL  
 ::= '{' DICT\_BODY? '}'

referenced by:

- [LITERAL\\_EXPR](#)

#### DICT\_BODY:

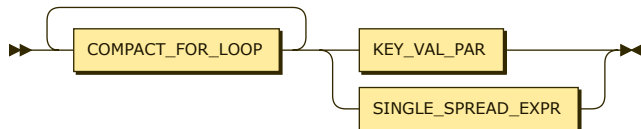


DICT\_BODY  
 ::= ( KEY\_VAL\_PAR | SINGLE\_SPREAD\_EXPR ) ( ',' ( KEY\_VAL\_PAR | SINGLE\_SPREAD\_EXPR ) )\* ',' '?'  
 | COMPACT\_DICT

referenced by:

- [DICT\\_LITERAL](#)

#### COMPACT\_DICT:

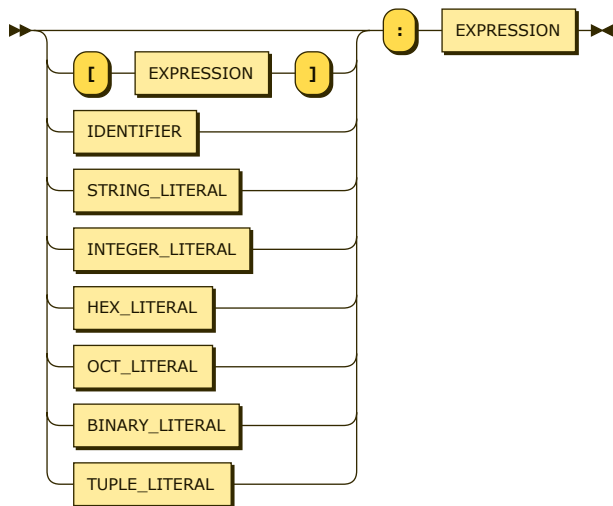


COMPACT\_DICT  
 ::= COMPACT\_FOR\_LOOP+ ( KEY\_VAL\_PAR | SINGLE\_SPREAD\_EXPR )

referenced by:

- [DICT\\_BODY](#)

#### KEY\_VAL\_PAR:



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

referenced by:

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

#### SINGLE\_SPREAD\_EXPR:

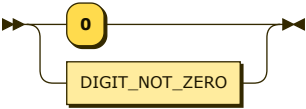


SINGLE\_SPREAD\_EXPR  
 ::= '...' EXPRESSION

referenced by:

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

**DIGIT:**

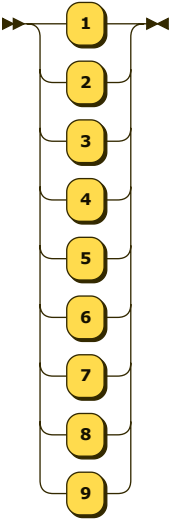


DIGIT ::= '0'  
          | DIGIT\_NOT\_ZERO

referenced by:

- Float Literal
- Hex Digit
- Identifier
- Integer Literal

**DIGIT\_NOT\_ZERO:**

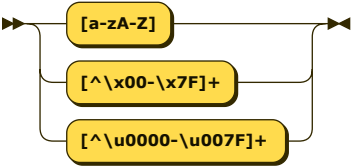


DIGIT\_NOT\_ZERO ::= '1'  
                  | '2'  
                  | '3'  
                  | '4'  
                  | '5'  
                  | '6'  
                  | '7'  
                  | '8'  
                  | '9'

referenced by:

- DIGIT
- Integer Literal

**ALMOST\_ANY\_CHAR:**



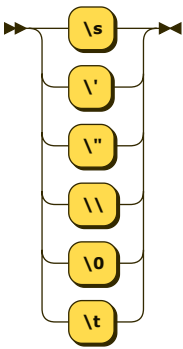
ALMOST\_ANY\_CHAR ::= '[a-zA-Z]'  
                  | '[^\x00-\x7F]+'

referenced by:

- String Sequence

**ESCAPED\_CHAR:**



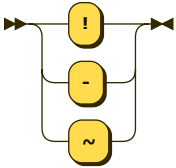


ESCAPED\_CHAR  
::= '\s'  
      | '\s'  
      | '\"'  
      | '\s'  
      | '\s'  
      | '\0'  
      | '\t'

referenced by:

- STRING\_SEQUENCE

**UNARY\_OPR:**

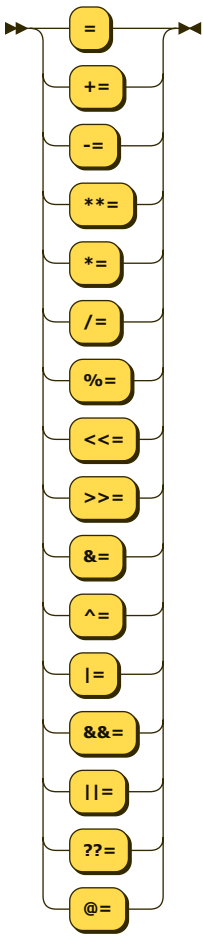


UNARY\_OPR  
::= '!'  
      | '-'  
      | '~'

referenced by:

- UNARY\_EXPR

**ASSIGNMENT\_OPR:**



```
ASSIGNMENT_OPR
::= '='
    '+'
    '-'
    '**='
    '*='
    '/='
    '%='
    '<<='
    '>>='
    '&='
    '^='
    '|='
    '&&='
    '||='
    '??='
    '@='
```

referenced by:

- REASSIGNMENT\_EXPR