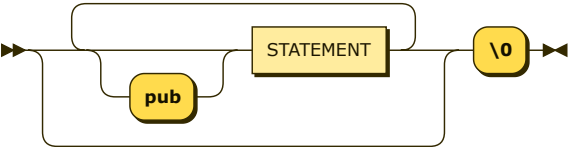


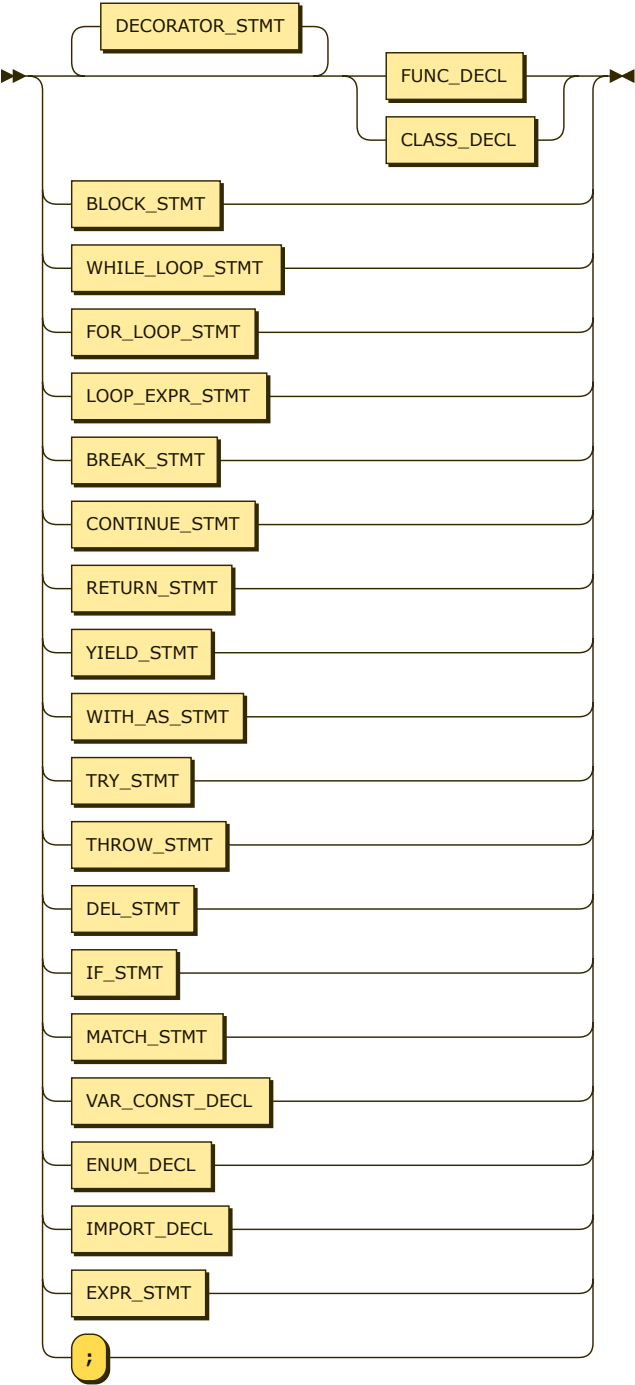
MODULE:



MODULE ::= ( 'pub'? STATEMENT )\* '\0'

no references

STATEMENT:



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

```

| BREAK_STMT
| CONTINUE_STMT
| RETURN_STMT
| YIELD_STMT
| WITH_AS_STMT
| TRY_STMT
| THROW_STMT
| DEL_STMT
| IF_STMT
| MATCH_STMT
| VAR_CONST_DECL
| ENUM_DECL
| IMPORT_DECL
| DECORATOR_STMT* ( FUNC_DECL | CLASS_DECL )
| EXPR_STMT
| ';'

```

referenced by:

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

## BLOCK\_STMT:



```

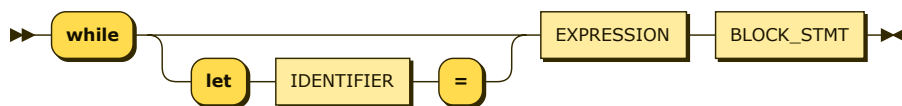
BLOCK_STMT
::= '{' STATEMENT* '}'

```

referenced by:

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

## WHILE\_LOOP\_STMT:



```

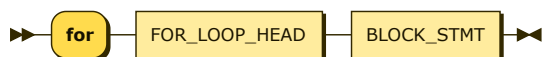
WHILE_LOOP_STMT
::= 'while' ( 'let' IDENTIFIER '=' )? EXPRESSION BLOCK_STMT

```

referenced by:

- [STATEMENT](#)

## FOR\_LOOP\_STMT:



```

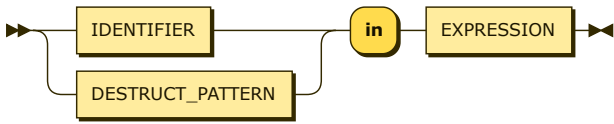
FOR_LOOP_STMT
::= 'for' FOR_LOOP_HEAD BLOCK_STMT

```

referenced by:

- [STATEMENT](#)

## FOR\_LOOP\_HEAD:

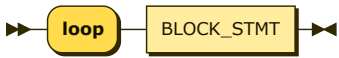


FOR\_LOOP\_HEAD  
 ::= ( IDENTIFIER | DESTRUCT\_PATTERN ) 'in' EXPRESSION

referenced by:

- COMPACT\_FOR\_LOOP
- FOR\_LOOP\_STMT

### LOOP\_EXPR\_STMT:

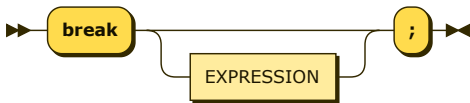


LOOP\_EXPR\_STMT  
 ::= 'loop' BLOCK\_STMT

referenced by:

- LARGE\_EXPR
- STATEMENT

### 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:**

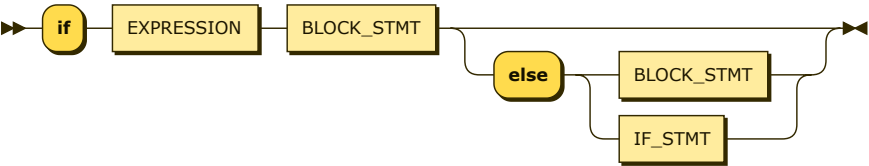


DEL\_STMT ::= 'del' EXPRESSION ';' ;

referenced by:

- [STATEMENT](#)

**IF\_STMT:**

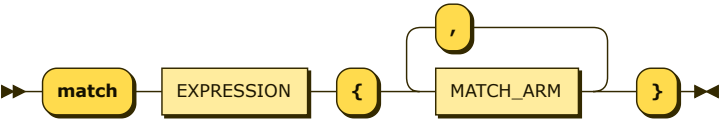


IF\_STMT ::= 'if' EXPRESSION BLOCK\_STMT ( 'else' ( BLOCK\_STMT | IF\_STMT ) ) ?

referenced by:

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

**MATCH\_STMT:**

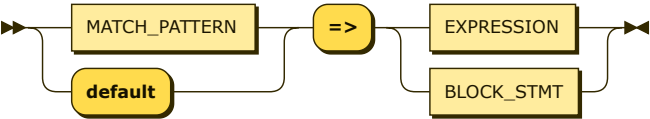


MATCH\_STMT  
::= 'match' EXPRESSION '{' MATCH\_ARM ( ',' MATCH\_ARM )\* '}'

referenced by:

- [STATEMENT](#)

**MATCH\_ARM:**

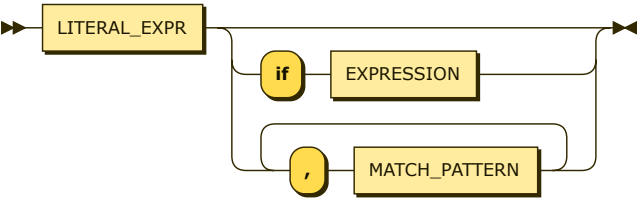


MATCH\_ARM  
::= ( MATCH\_PATTERN | 'default' ) '=>' ( EXPRESSION | BLOCK\_STMT )

referenced by:

- [MATCH\\_STMT](#)

**MATCH\_PATTERN:**

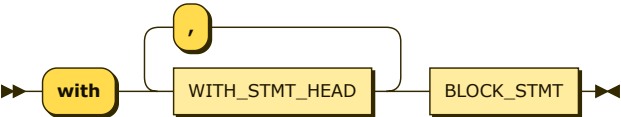


MATCH\_PATTERN  
 ::= LITERAL\_EXPR ( 'if' EXPRESSION | ( ',' MATCH\_PATTERN )\* )

referenced by:

- MATCH\_ARM
- MATCH\_EXPR\_ARM
- MATCH\_PATTERN

**WITH\_AS\_STMT:**



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

referenced by:

- STATEMENT

**WITH\_STMT\_HEAD:**

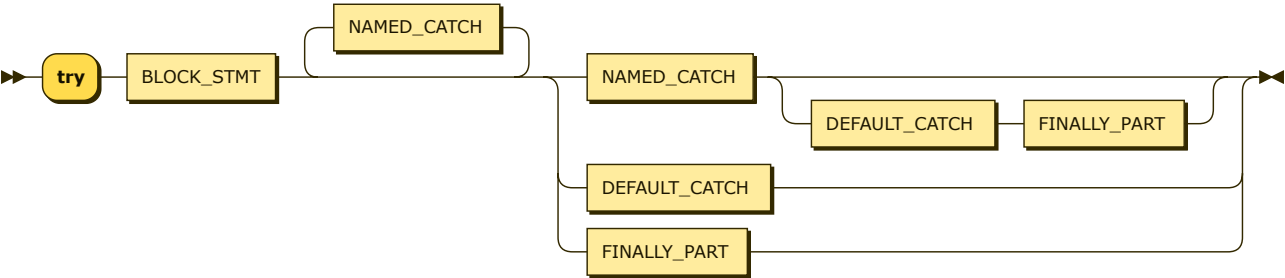


WITH\_STMT\_HEAD  
 ::= EXPRESSION 'as' IDENTIFIER

referenced by:

- WITH\_AS\_STMT

**TRY\_STMT:**

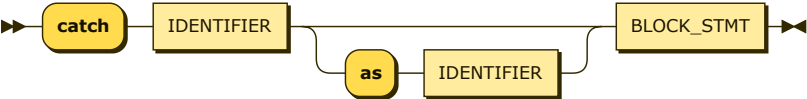


TRY\_STMT ::= 'try' BLOCK\_STMT NAMED\_CATCH\* ( NAMED\_CATCH ( DEFAULT\_CATCH FINALLY\_PART )? | DEFAULT\_CATCH | FINALLY\_PART )

referenced by:

- STATEMENT

**NAMED\_CATCH:**

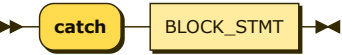


NAMED\_CATCH  
 ::= 'catch' IDENTIFIER ( 'as' IDENTIFIER )? BLOCK\_STMT

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:

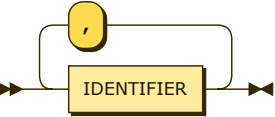


EXPR\_STMT  
 ::= EXPRESSION ';'

referenced by:

- STATEMENT

IDENTIFIER\_LIST:

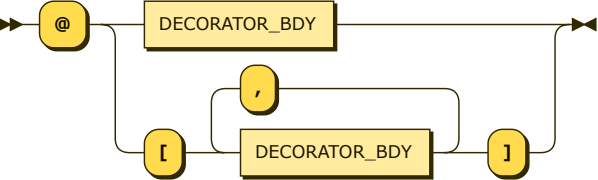


IDENTIFIER\_LIST  
 ::= IDENTIFIER ( ',' IDENTIFIER )\*

referenced by:

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

DECORATOR\_STMT:



```

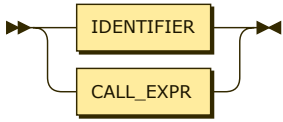
DECORATOR_STMT
    ::= '@' ( DECORATOR_BDY | '[' DECORATOR_BDY ( ',' DECORATOR_BDY )* ']' )

```

referenced by:

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

#### DECORATOR\_BDY:



```

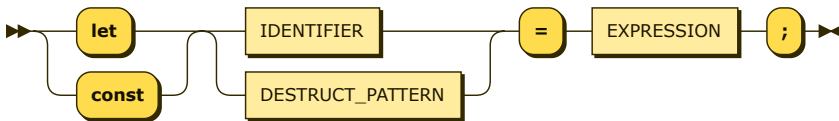
DECORATOR_BDY
    ::= IDENTIFIER
    | CALL_EXPR

```

referenced by:

- [DECORATOR\\_STMT](#)

#### VAR\_CONST\_DECL:



```

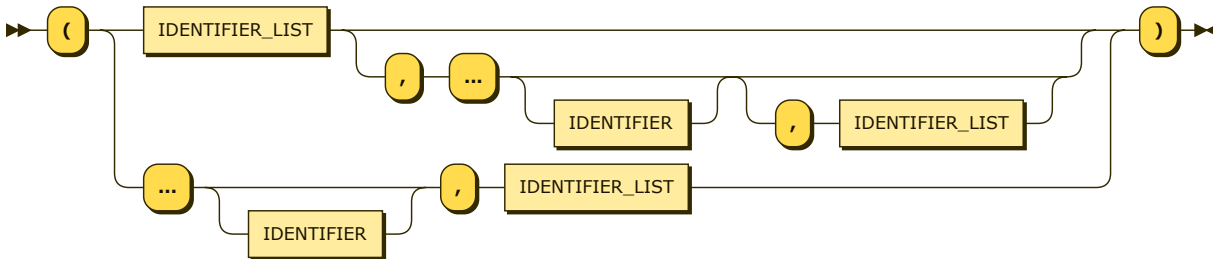
VAR_CONST_DECL
    ::= ( 'let' | 'const' ) ( IDENTIFIER | DESTRUCT_PATTERN ) '=' EXPRESSION ';'

```

referenced by:

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

#### DESTRUCT\_PATTERN:



```

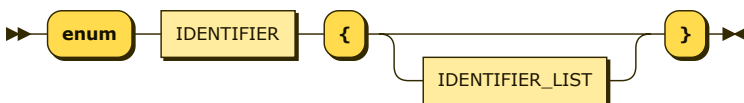
DESTRUCT_PATTERN
    ::= '(' ( IDENTIFIER_LIST ( ',' '...' IDENTIFIER? ( ',' IDENTIFIER_LIST )? )? | '...' IDENTIFIER? ',' IDENTIFIER_LIST ) ')'

```

referenced by:

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

#### ENUM\_DECL:



```

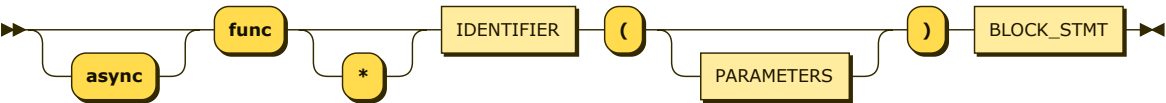
ENUM_DECL
    ::= 'enum' IDENTIFIER '{' IDENTIFIER_LIST? '}'

```

referenced by:

- [STATEMENT](#)

**FUNC\_DECL:**

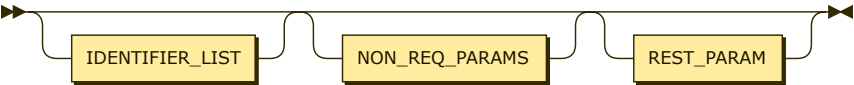


FUNC\_DECL ::= 'async'? 'func' '\*'? IDENTIFIER '(' PARAMETERS? ')' BLOCK\_STMT

referenced by:

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

**PARAMETERS:**

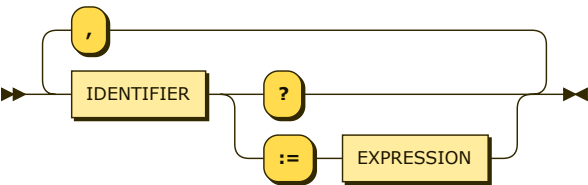


PARAMETERS ::= IDENTIFIER\_LIST? NON\_REQ\_PARAMS? REST\_PARAM?

referenced by:

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

**NON\_REQ\_PARAMS:**



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

referenced by:

- [PARAMETERS](#)

**REST\_PARAM:**

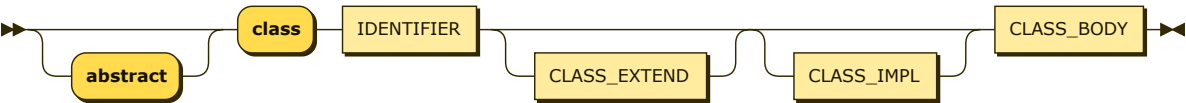


REST\_PARAM ::= '...' IDENTIFIER

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:**

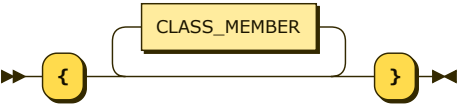


CLASS\_IMPL ::= 'impl' IDENTIFIER\_LIST

referenced by:

- CLASS\_DECL

**CLASS\_BODY:**

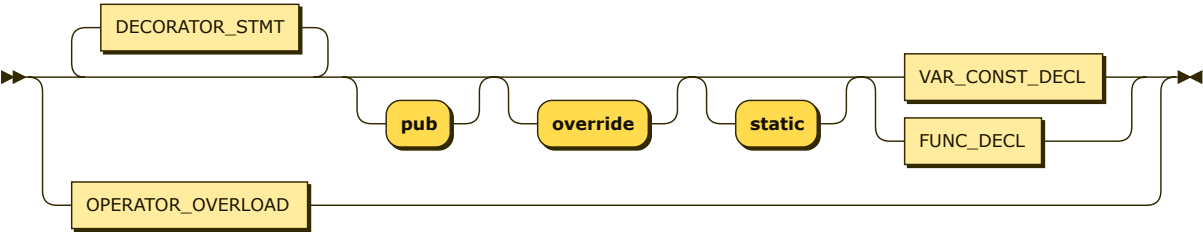


CLASS\_BODY ::= '{' CLASS\_MEMBER\* '}'

referenced by:

- CLASS\_DECL

**CLASS\_MEMBER:**

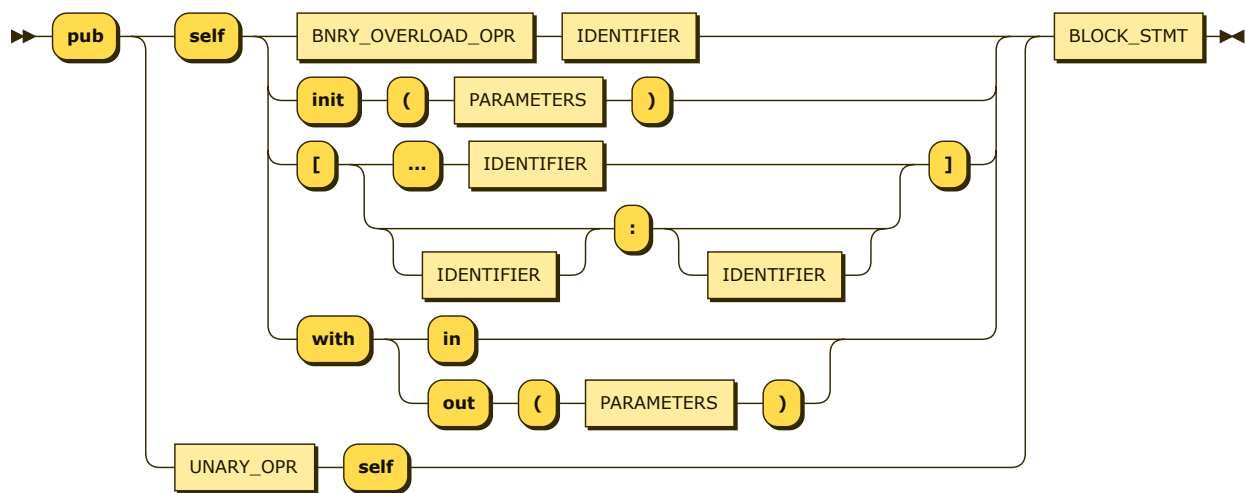


CLASS\_MEMBER ::= DECORATOR\_STMT\* 'pub'? 'override'? 'static'? ( VAR\_CONST\_DECL | FUNC\_DECL ) | OPERATOR\_OVERLOAD

referenced by:

- CLASS\_BODY

**OPERATOR\_OVERLOAD:**



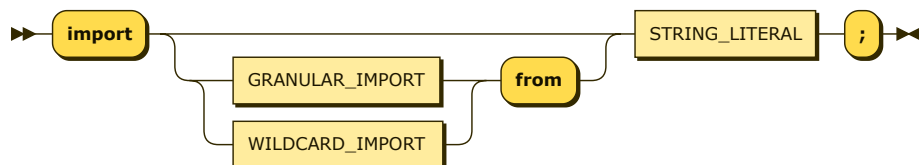
OPERATOR\_OVERLOAD

::= '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\_DECL:



IMPORT\_DECL

::= 'import' ( ( GRANULAR\_IMPORT | WILDCARD\_IMPORT ) 'from' )? STRING\_LITERAL ';' ;

referenced by:

- [STATEMENT](#)

### GRANULAR\_IMPORT:



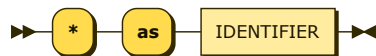
GRANULAR\_IMPORT

::= '{' IDENTIFIER\_LIST '}'

referenced by:

- [IMPORT\\_DECL](#)

### WILDCARD\_IMPORT:



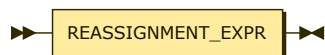
WILDCARD\_IMPORT

::= '\*' 'as' IDENTIFIER

referenced by:

- [IMPORT\\_DECL](#)

### EXPRESSION:

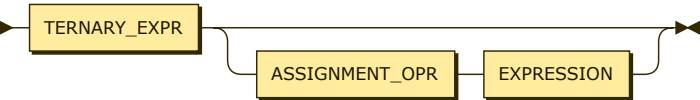


EXPRESSION  
 ::= REASSIGNMENT\_EXPR

referenced by:

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

**REASSIGNMENT\_EXPR:**

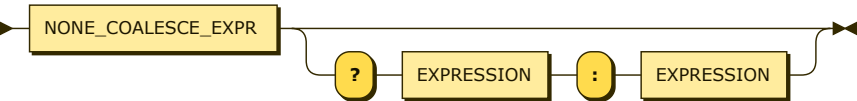


REASSIGNMENT\_EXPR  
 ::= TERNARY\_EXPR ( ASSIGNMENT\_OPR EXPRESSION )?

referenced by:

- EXPRESSION

**TERNARY\_EXPR:**

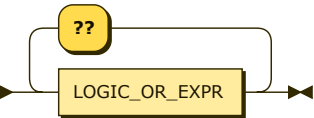


TERNARY\_EXPR  
 ::= NONE\_COALESCE\_EXPR ( '?' EXPRESSION ':' EXPRESSION )?

referenced by:

- REASSIGNMENT\_EXPR

**NONE\_COALESCE\_EXPR:**

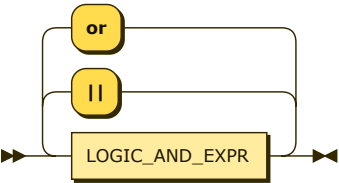


NONE\_COALESCE\_EXPR  
 ::= LOGIC\_OR\_EXPR ( '??' LOGIC\_OR\_EXPR )\*

referenced by:

- TERNARY\_EXPR

**LOGIC\_OR\_EXPR:**

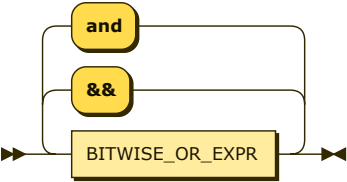


```
LOGIC_OR_EXPR
    ::= LOGIC_AND_EXPR ( ( '||' | 'or' ) LOGIC_AND_EXPR )*
```

referenced by:

- NONE\_COALESCE\_EXPR

**LOGIC\_AND\_EXPR:**

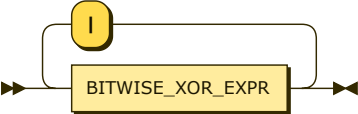


```
LOGIC_AND_EXPR
    ::= BITWISE_OR_EXPR ( ( '&&' | 'and' ) BITWISE_OR_EXPR )*
```

referenced by:

- LOGIC\_OR\_EXPR

**BITWISE\_OR\_EXPR:**

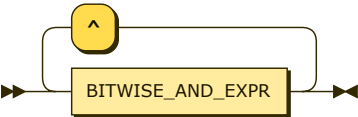


```
BITWISE_OR_EXPR
    ::= BITWISE_XOR_EXPR ( '|' BITWISE_XOR_EXPR )*
```

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:**



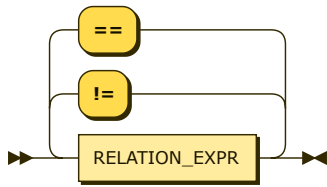
```
BITWISE_AND_EXPR
```

`::= EQUALITY_EXPR ( ' & ' EQUALITY_EXPR )*`

referenced by:

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

### EQUALITY\_EXPR:

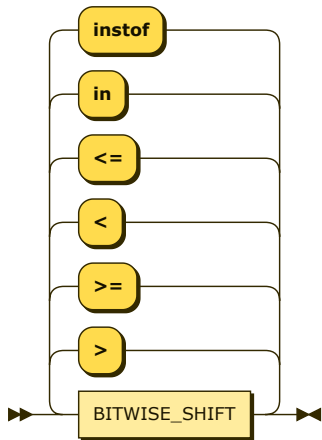


`EQUALITY_EXPR`  
`::= RELATION_EXPR ( ( ' != ' | ' == ' ) RELATION_EXPR )*`

referenced by:

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

### RELATION\_EXPR:

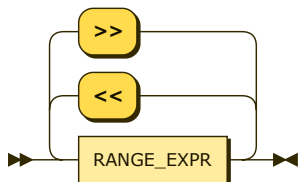


`RELATION_EXPR`  
`::= BITWISE_SHIFT ( ( ' > ' | ' > = ' | ' < ' | ' < = ' | ' in ' | ' instof ' ) BITWISE_SHIFT )*`

referenced by:

- [EQUALITY\\_EXPR](#)

### BITWISE\_SHIFT:

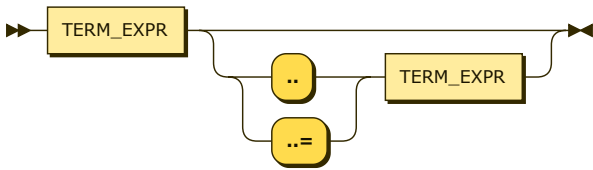


`BITWISE_SHIFT`  
`::= RANGE_EXPR ( ( ' << ' | ' >> ' ) RANGE_EXPR )*`

referenced by:

- [RELATION\\_EXPR](#)

### RANGE\_EXPR:

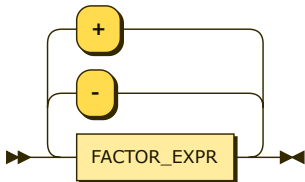


RANGE\_EXPR  
 ::= TERM\_EXPR ( ( '...' | '..=' ) TERM\_EXPR )?

referenced by:

- BITWISE\_SHIFT

#### TERM\_EXPR:

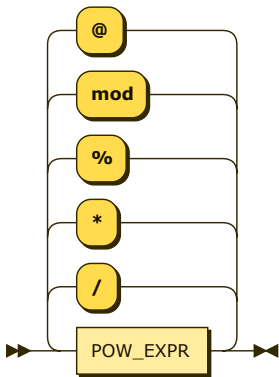


TERM\_EXPR  
 ::= FACTOR\_EXPR ( ( '-' | '+' ) FACTOR\_EXPR )\*

referenced by:

- RANGE\_EXPR

#### FACTOR\_EXPR:

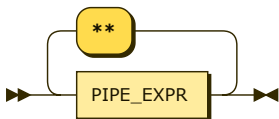


FACTOR\_EXPR  
 ::= POW\_EXPR ( ( '/' | '\*' | '%' | 'mod' | '@' ) POW\_EXPR )\*

referenced by:

- TERM\_EXPR

#### POW\_EXPR:

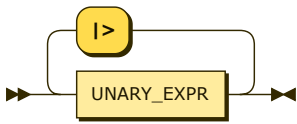


POW\_EXPR ::= PIPE\_EXPR ( '\*\*' PIPE\_EXPR )\*

referenced by:

- FACTOR\_EXPR

#### PIPE\_EXPR:

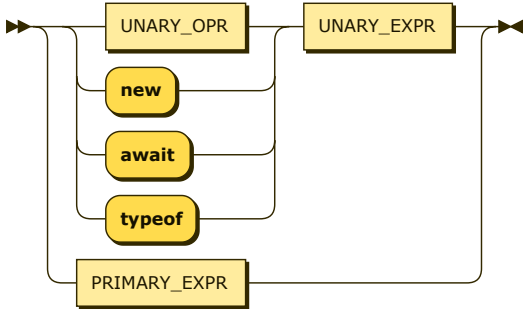


```
PIPE_EXPR
  ::= UNARY_EXPR ( '|>' UNARY_EXPR )*
```

referenced by:

- [POW\\_EXPR](#)

**UNARY\_EXPR:**

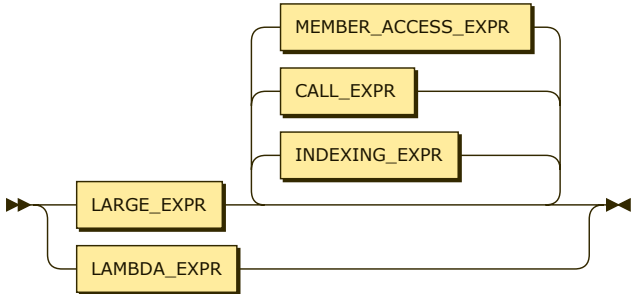


```
UNARY_EXPR
  ::= ( UNARY_OPR | 'new' | 'await' | 'typeof' ) UNARY_EXPR
      | PRIMARY_EXPR
```

referenced by:

- [PIPE\\_EXPR](#)
- [UNARY\\_EXPR](#)

**PRIMARY\_EXPR:**

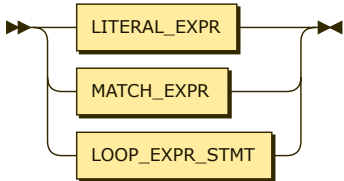


```
PRIMARY_EXPR
  ::= LAMBDA_EXPR
      | LARGE_EXPR ( INDEXING_EXPR | CALL_EXPR | MEMBER_ACCESS_EXPR )*
```

referenced by:

- [UNARY\\_EXPR](#)

**LARGE\_EXPR:**

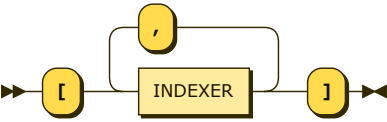


```
LARGE_EXPR
  ::= LITERAL_EXPR
      | MATCH_EXPR
      | LOOP_EXPR_STMT
```

referenced by:

- PRIMARY\_EXPR

INDEXING\_EXPR:

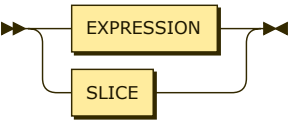


INDEXING\_EXPR ::= '[' INDEXER ( ',' INDEXER )\* ']'

referenced by:

- PRIMARY\_EXPR

INDEXER:

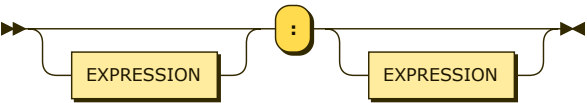


INDEXER ::= EXPRESSION  
          | SLICE

referenced by:

- INDEXING\_EXPR

SLICE:

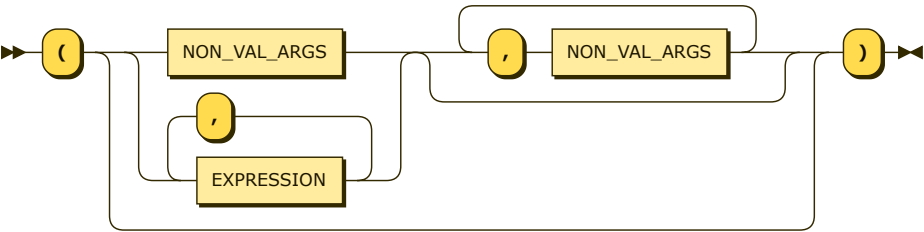


SLICE ::= EXPRESSION? ':' EXPRESSION?

referenced by:

- INDEXER

CALL\_EXPR:

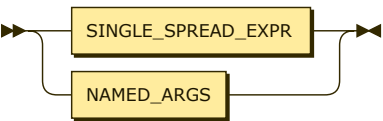


CALL\_EXPR ::= '(' ( ( NON\_VAL\_ARGS | EXPRESSION ( ',' EXPRESSION )\* ) ( ',' NON\_VAL\_ARGS )\* )? ')'

referenced by:

- DECORATOR\_BDY
- PRIMARY\_EXPR

NON\_VAL\_ARGS:





```

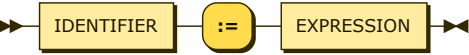
NON_VAL_ARGS
  ::= SINGLE_SPREAD_EXPR
    | NAMED_ARGS

```

referenced by:

- [CALL\\_EXPR](#)

### NAMED\_ARGS:



```

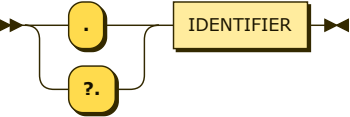
NAMED_ARGS
  ::= IDENTIFIER ':' '=' EXPRESSION

```

referenced by:

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

### MEMBER\_ACCESS\_EXPR:



```

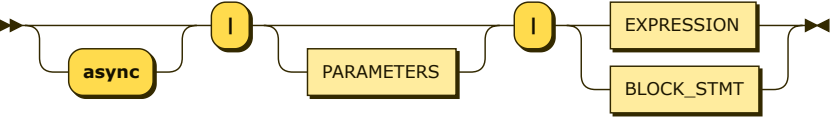
MEMBER_ACCESS_EXPR
  ::= ( '.' | '?' ) IDENTIFIER

```

referenced by:

- [PRIMARY\\_EXPR](#)

### LAMBDA\_EXPR:



```

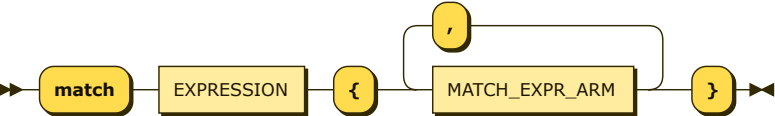
LAMBDA_EXPR
  ::= 'async'? '|' PARAMETERS? '|' ( EXPRESSION | BLOCK_STMT )

```

referenced by:

- [PRIMARY\\_EXPR](#)

### MATCH\_EXPR:



```

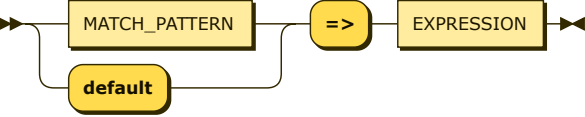
MATCH_EXPR
  ::= 'match' EXPRESSION '{' MATCH_EXPR_ARM ( ',' MATCH_EXPR_ARM )* '}'

```

referenced by:

- [LARGE\\_EXPR](#)

### MATCH\_EXPR\_ARM:



```

MATCH_EXPR_ARM

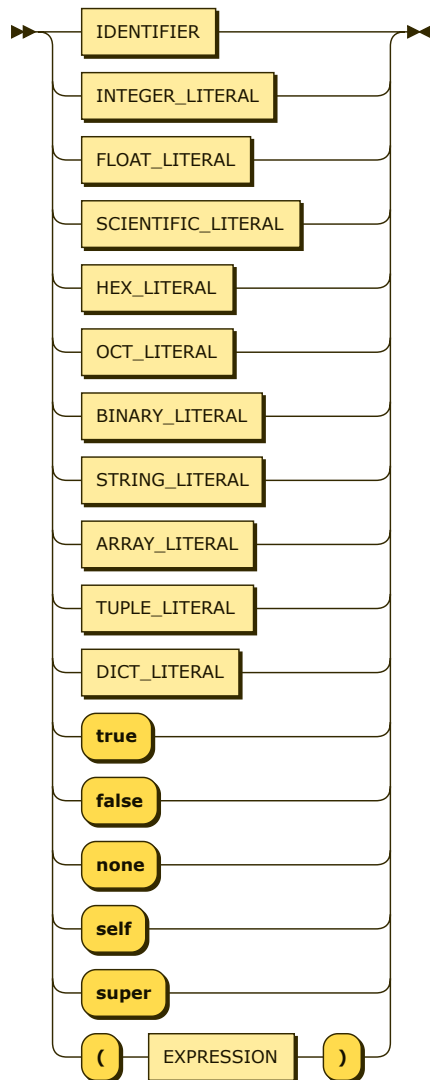
```

`::= ( MATCH_PATTERN | 'default' ) '=>' EXPRESSION`

referenced by:

- [MATCH\\_EXPR](#)

#### LITERAL\_EXPR:

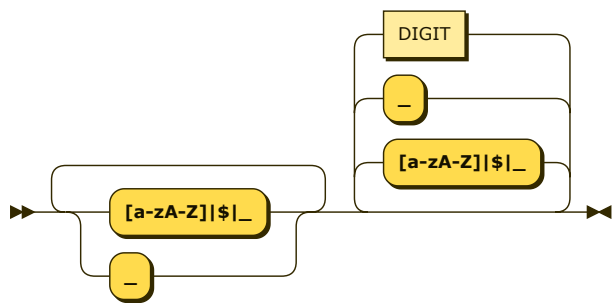


```
LITERAL_EXPR
::= IDENTIFIER
    | INTEGER_LITERAL
    | FLOAT_LITERAL
    | SCIENTIFIC_LITERAL
    | HEX_LITERAL
    | OCT_LITERAL
    | BINARY_LITERAL
    | STRING_LITERAL
    | ARRAY_LITERAL
    | TUPLE_LITERAL
    | DICT_LITERAL
    | 'true'
    | 'false'
    | 'none'
    | 'self'
    | 'super'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

referenced by:

- [LARGE\\_EXPR](#)
- [MATCH\\_PATTERN](#)

#### IDENTIFIER:

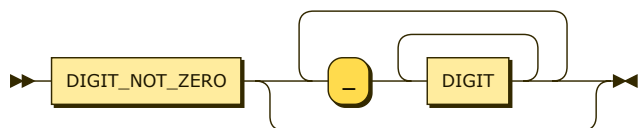


IDENTIFIER  
 ::= ( '[a-zA-Z]|\$|\_' | '\_' )+ ( '[a-zA-Z]|\$|\_' | '\_' | DIGIT )\*

referenced by:

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

#### INTEGER\_LITERAL:

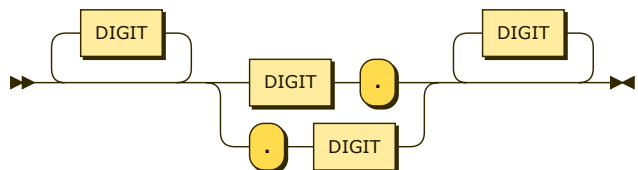


INTEGER\_LITERAL  
 ::= DIGIT\_NOT\_ZERO ( '\_' DIGIT+ )\*

referenced by:

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

#### FLOAT\_LITERAL:

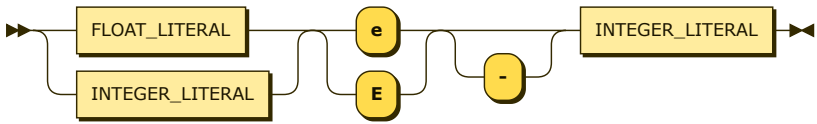


FLOAT\_LITERAL  
 ::= DIGIT\* ( DIGIT '.' | '.' DIGIT ) DIGIT\*

referenced by:

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

#### SCIENTIFIC\_LITERAL:

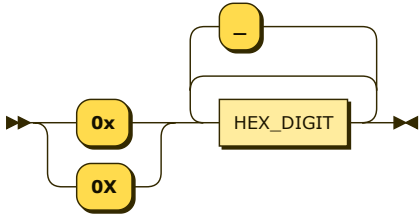


SCIENTIFIC\_LITERAL  
 ::= ( FLOAT\_LITERAL | INTEGER\_LITERAL ) ( 'e' | 'E' ) '-'? INTEGER\_LITERAL

referenced by:

- LITERAL\_EXPR

**HEX\_LITERAL:**

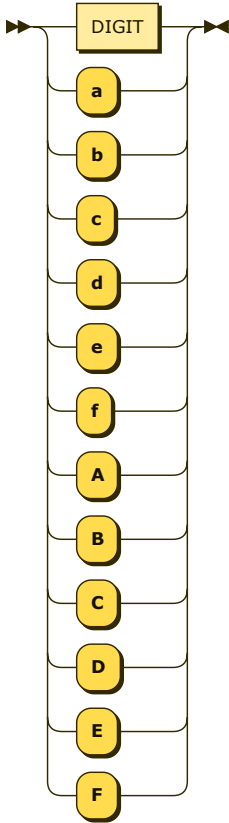


HEX\_LITERAL  
 ::= ( '0x' | '0X' ) HEX\_DIGIT ( '-'? HEX\_DIGIT )\*

referenced by:

- KEY\_VAL\_PAR
- LITERAL\_EXPR

**HEX\_DIGIT:**



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

```

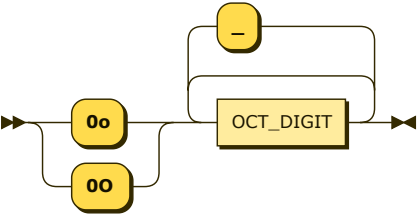
| 'B'
| 'C'
| 'D'
| 'E'
| 'F'

```

referenced by:

- HEX\_LITERAL

**OCT\_LITERAL:**



```

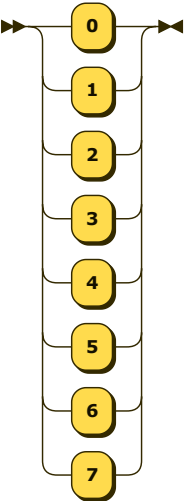
OCT_LITERAL
    ::= ( '0o' | '0O' ) OCT_DIGIT ( '_'? OCT_DIGIT )*

```

referenced by:

- KEY\_VAL\_PAR
- LITERAL\_EXPR

**OCT\_DIGIT:**



```

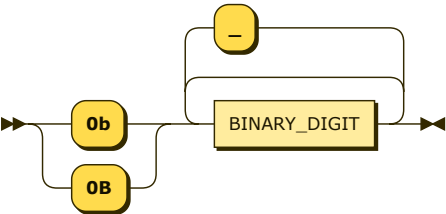
OCT_DIGIT
    ::= '0'
    | '1'
    | '2'
    | '3'
    | '4'
    | '5'
    | '6'
    | '7'

```

referenced by:

- OCT\_LITERAL

**BINARY\_LITERAL:**



```

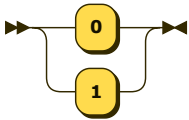
BINARY_LITERAL
    ::= ( '0b' | '0B' ) BINARY_DIGIT ( '_'? BINARY_DIGIT )*

```

referenced by:

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

**BINARY\_DIGIT:**



```

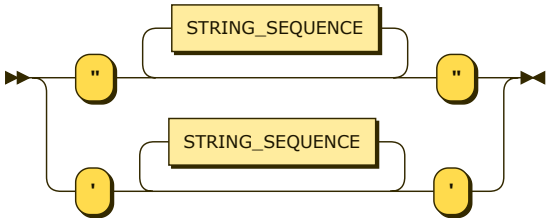
BINARY_DIGIT
    ::= '0'
    | '1'

```

referenced by:

- [BINARY\\_LITERAL](#)

**STRING\_LITERAL:**



```

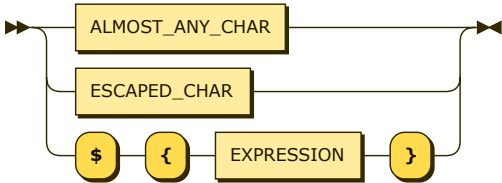
STRING_LITERAL
    ::= "'" STRING_SEQUENCE* "'"
    | '"' STRING_SEQUENCE* '"'

```

referenced by:

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

**STRING\_SEQUENCE:**



```

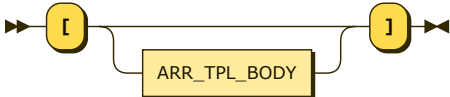
STRING_SEQUENCE
    ::= ALMOST_ANY_CHAR
    | ESCAPED_CHAR
    | '$' '{' EXPRESSION '}'

```

referenced by:

- [STRING\\_LITERAL](#)

**ARRAY\_LITERAL:**



```

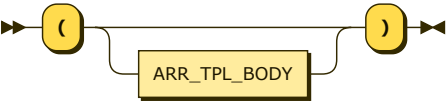
ARRAY_LITERAL
    ::= '[' ARR_TPL_BODY? ']'

```

referenced by:

- LITERAL\_EXPR

**TUPLE\_LITERAL:**

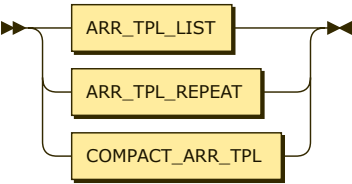


TUPLE\_LITERAL  
::= '(' ARR\_TPL\_BODY? ')'

referenced by:

- KEY\_VAL\_PAR
- LITERAL\_EXPR

**ARR\_TPL\_BODY:**

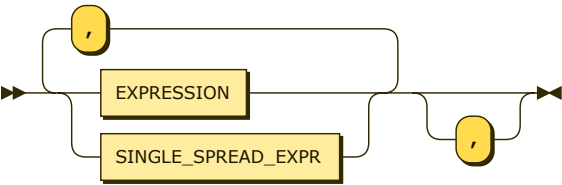


ARR\_TPL\_BODY  
::= ARR\_TPL\_LIST  
| ARR\_TPL\_REPEAT  
| COMPACT\_ARR\_TPL

referenced by:

- ARRAY\_LITERAL
- TUPLE\_LITERAL

**ARR\_TPL\_LIST:**

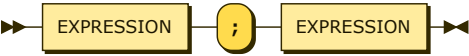


ARR\_TPL\_LIST  
::= ( EXPRESSION | SINGLE\_SPREAD\_EXPR ) ( ',' ( EXPRESSION | SINGLE\_SPREAD\_EXPR ) )\* ','?

referenced by:

- ARR\_TPL\_BODY

**ARR\_TPL\_REPEAT:**

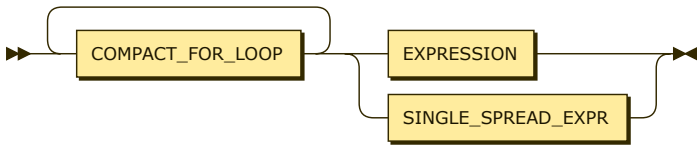


ARR\_TPL\_REPEAT  
::= EXPRESSION ';' EXPRESSION

referenced by:

- ARR\_TPL\_BODY

**COMPACT\_ARR\_TPL:**

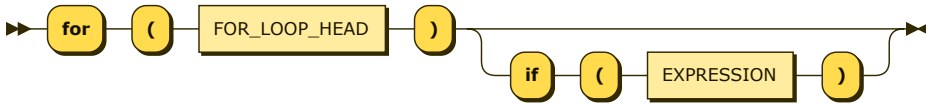


COMPACT\_ARR\_TPL  
 ::= COMPACT\_FOR\_LOOP+ ( EXPRESSION | SINGLE\_SPREAD\_EXPR )

referenced by:

- ARR\_TPL\_BODY

#### COMPACT\_FOR\_LOOP:

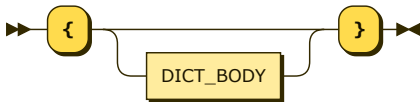


COMPACT\_FOR\_LOOP  
 ::= 'for' '(' FOR\_LOOP\_HEAD ')' ( 'if' '(' EXPRESSION ')' ) ?

referenced by:

- COMPACT\_ARR\_TPL
- COMPACT\_DICT

#### DICT\_LITERAL:

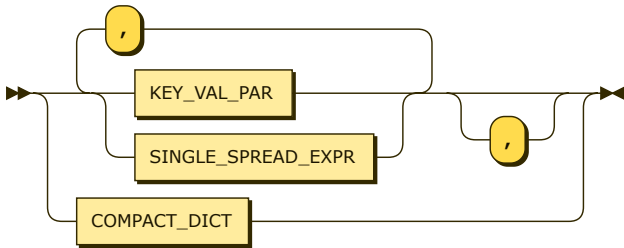


DICT\_LITERAL  
 ::= '{' DICT\_BODY? '}'

referenced by:

- LITERAL\_EXPR

#### DICT\_BODY:

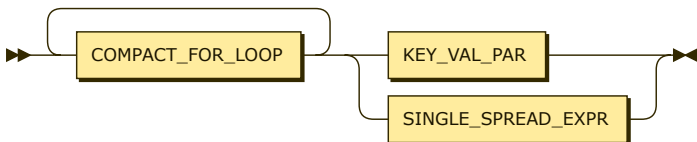


DICT\_BODY  
 ::= ( KEY\_VAL\_PAR | SINGLE\_SPREAD\_EXPR ) ( ',' ( KEY\_VAL\_PAR | SINGLE\_SPREAD\_EXPR ) ) \* ',' ?  
 | COMPACT\_DICT

referenced by:

- DICT\_LITERAL

#### COMPACT\_DICT:



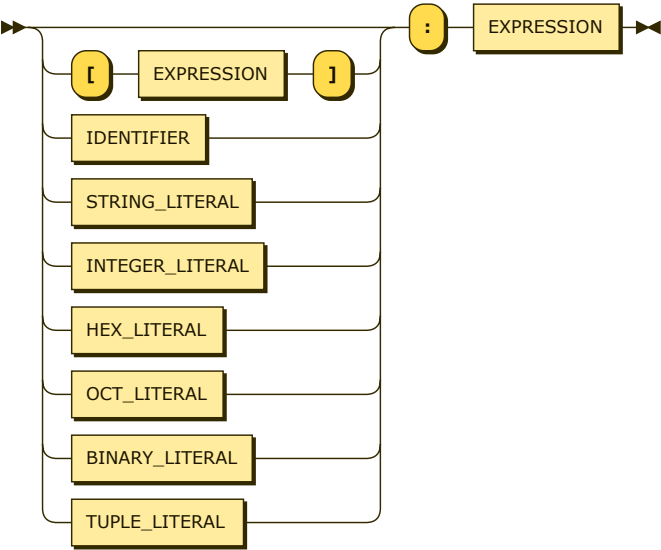
COMPACT\_DICT  
 ::= COMPACT\_FOR\_LOOP+ ( KEY\_VAL\_PAR | SINGLE\_SPREAD\_EXPR )



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:**

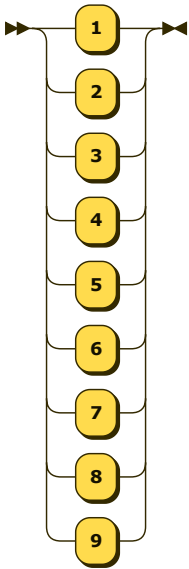


DIGIT ::= '0' | DIGIT\_NOT\_ZERO

referenced by:

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

**DIGIT\_NOT\_ZERO:**

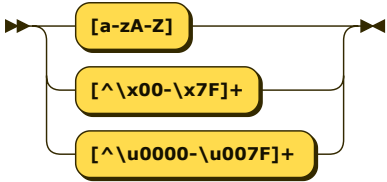


DIGIT\_NOT\_ZERO  
::= '1'  
      |  
      | '2'  
      |  
      | '3'  
      |  
      | '4'  
      |  
      | '5'  
      |  
      | '6'  
      |  
      | '7'  
      |  
      | '8'  
      |  
      | '9'

referenced by:

- DIGIT
- INTEGER\_LITERAL

**ALMOST\_ANY\_CHAR:**

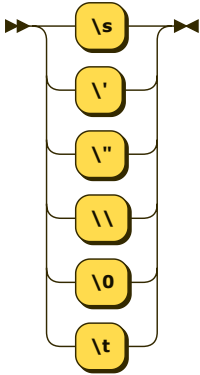


ALMOST\_ANY\_CHAR  
::= '[a-zA-Z]'  
      |  
      | '[^\x00-\x7F]+'

referenced by:

- STRING\_SEQUENCE

**ESCAPED\_CHAR:**



ESCAPED\_CHAR

```

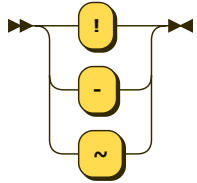
::= '\s'
    | '\"'
    | '\''
    | '\\\''
    | '\0'
    | '\t'

```

referenced by:

- STRING\_SEQUENCE

#### UNARY\_OPR:



```

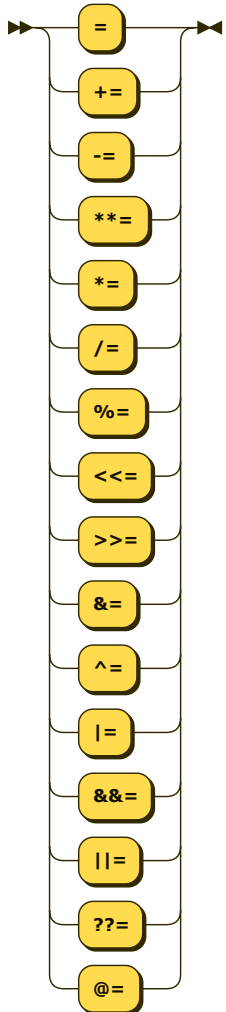
UNARY_OPR
::= '!'
    | '-'
    | '~'

```

referenced by:

- OPERATOR\_OVERLOAD
- UNARY\_EXPR

#### ASSIGNMENT\_OPR:



```

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

```

```

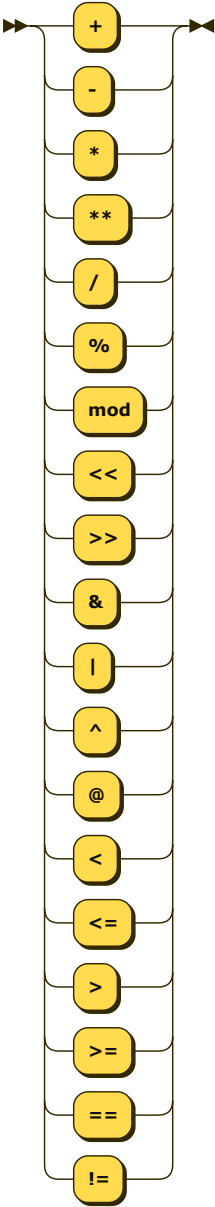
' -= '
' *= '
' *= '
' /= '
' %= '
' <<= '
' >>= '
' &= '
' ^= '
' |= '
' &&= '
' ||= '
' ??= '
' @= '

```

referenced by:

- REASSIGNMENT\_EXPR

**BNRY\_OVERLOAD\_OPR:**



```

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

```



referenced by:

- OPERATOR OVERLOAD