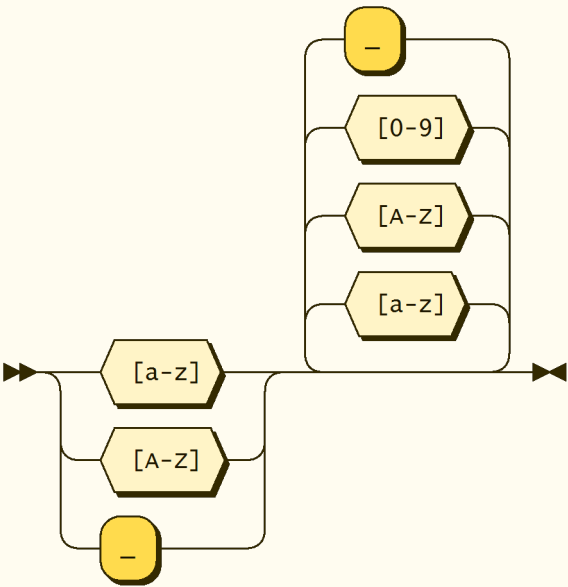


identifier:

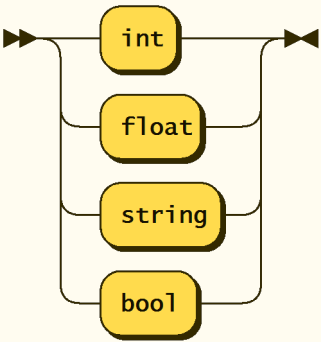


identifier ::= [a-zA-Z_] [a-zA-Z0-9_]*

referenced by:

- assignment
- forLoop
- functionDef
- function_call
- parameter
- variableDef

type:

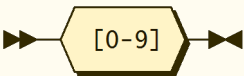


type ::= 'int' | 'float' | 'string' | 'bool'

referenced by:

- functionDef
- variableDef

digit:

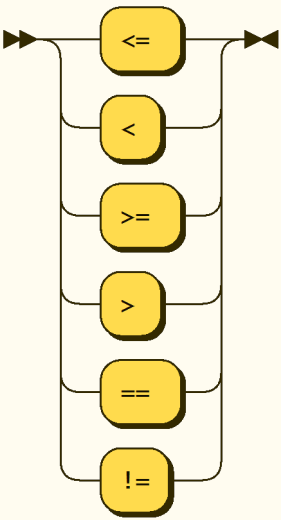


digit ::= [0-9]

referenced by:

- decimalConstant
- integerConstant

logicalUnaryOperator:

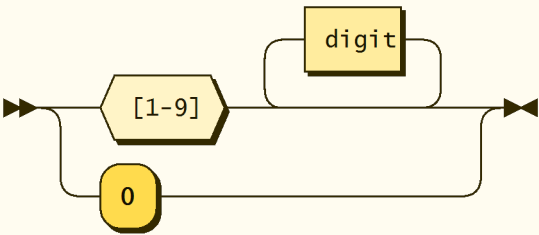


logicalUnaryOperator
 ::= '<='
 | '<'
 | '>='
 | '>'
 | '=='
 | '!='

referenced by:

- logicalFormula
- recursiveLogicalExpression

integerConstant:

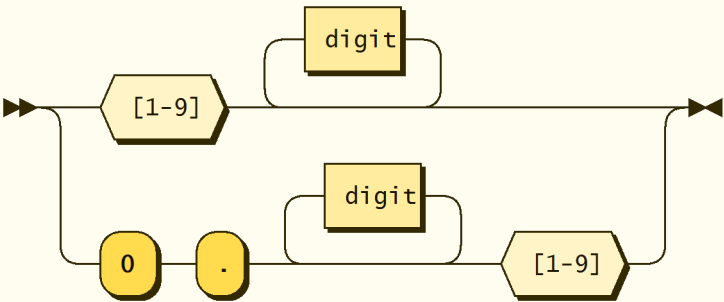


integerConstant
 ::= '[1-9] digit*'
 | '0'

referenced by:

- forLoop
- value

decimalConstant:

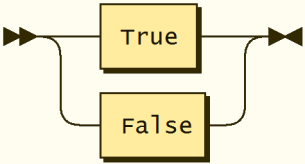


decimalConstant
 ::= '[1-9] digit*'
 | '0' '.' digit* '[1-9]'

referenced by:

- value

logicalConstant:

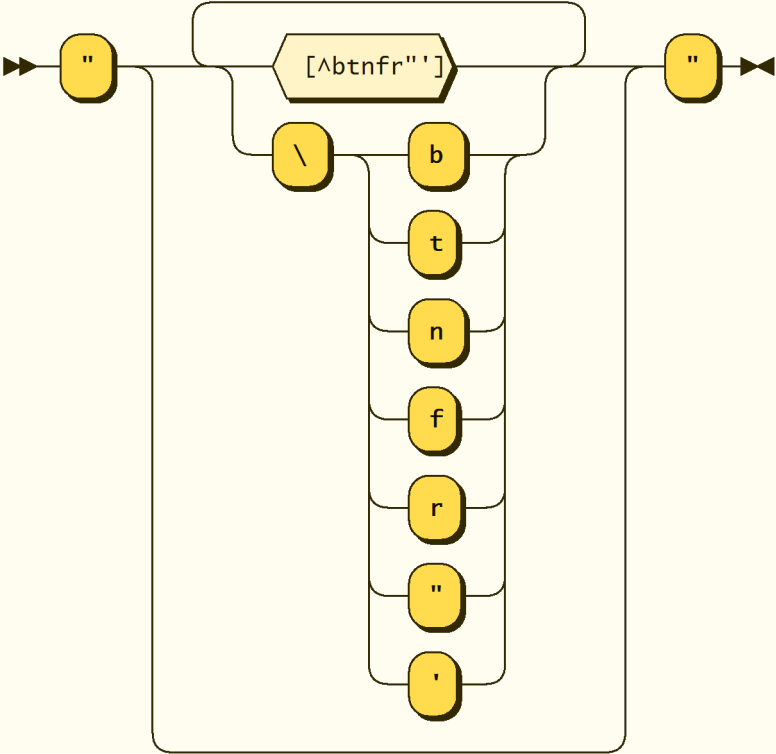


logicalConstant
 ::= True
 | False

referenced by:

- value

string:

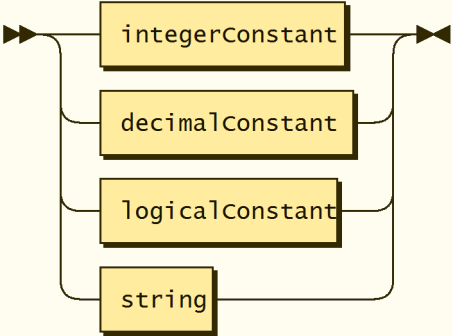


string ::= '"' ([^btnfr"'] | '\' [btnfr"']) * '"'

referenced by:

- value

value:

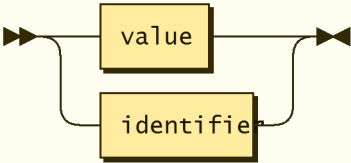


value ::= integerConstant
 | decimalConstant
 | logicalConstant
 | string

referenced by:

- assignment
- parameter

parameter:

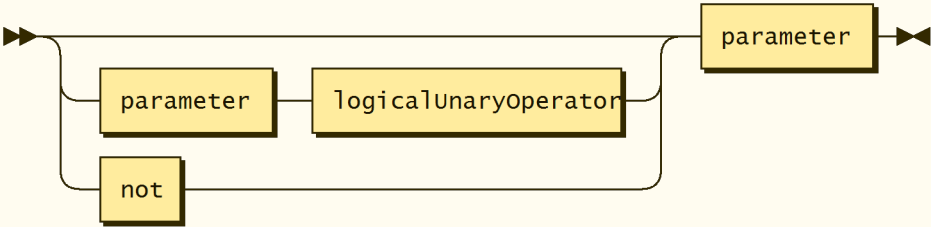


parameter ::= value
 | identifier

referenced by:

- arithmeticExpression
- function_call
- logicalFormula
- variableDef

logicalFormula:

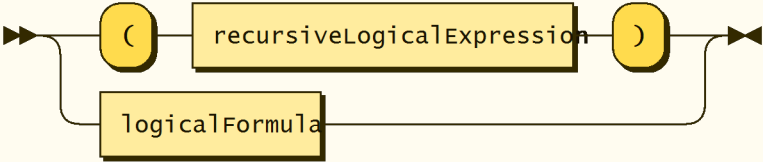


logicalFormula ::= (parameter logicalUnaryOperator | not)? parameter

referenced by:

- logicalExpression

logicalExpression:

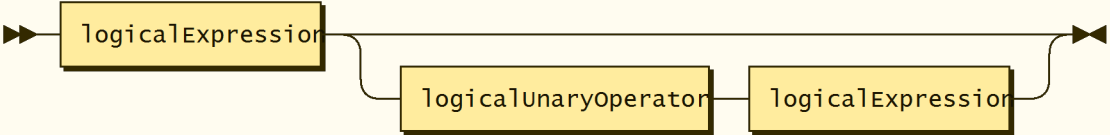


logicalExpression ::= '(' recursiveLogicalExpression ')'
 | logicalFormula

referenced by:

- assignment
- ifStatement
- recursiveLogicalExpression
- whileLoop

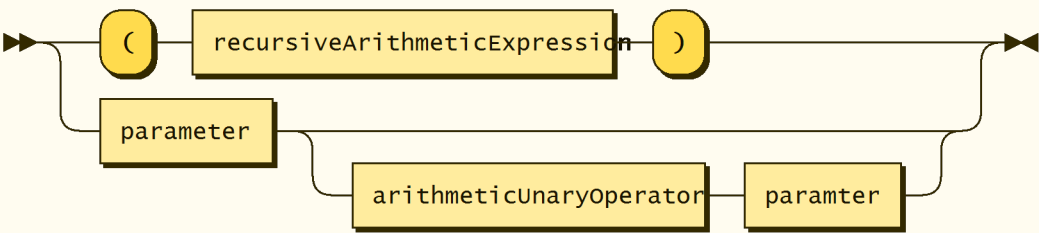
recursiveLogicalExpression:



```
recursiveLogicalExpression ::= logicalExpression ( logicalUnaryOperator logicalExpression )?
```

- referenced by:
- logicalExpression

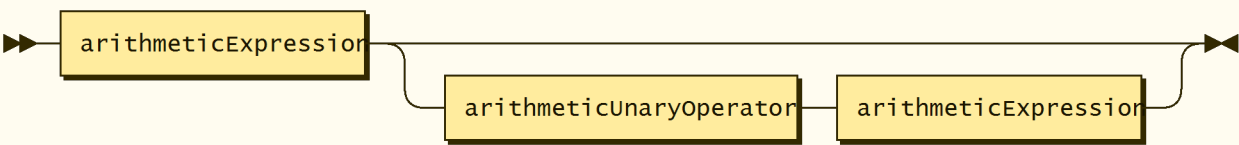
arithmeticExpression:



```
arithmeticExpression ::= '(' recursiveArithmeticExpression ')' | parameter ( arithmeticUnaryOperator paramter )?
```

- referenced by:
- assignment
 - recursiveArithmeticExpression

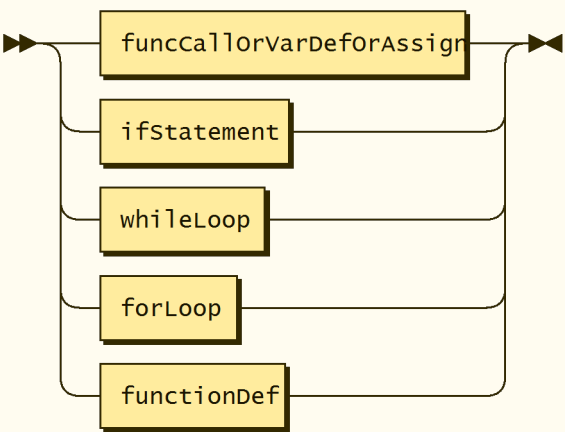
recursiveArithmeticExpression:



```
recursiveArithmeticExpression ::= arithmeticExpression ( arithmeticUnaryOperator arithmeticExpression )?
```

- referenced by:
- arithmeticExpression

statement:



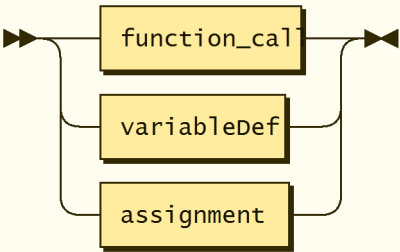
```
statement ::= funcCallorVarDeforAssign | ifStatement | whileLoop | forLoop
```

| functionDef

referenced by:

- forLoop
- functionDef
- ifStatement
- program
- whileLoop

funcCallorVarDeforAssign:

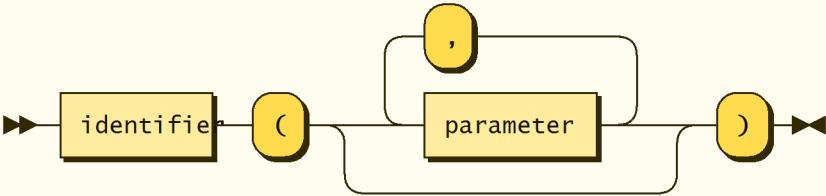


```
funcCallorVarDeforAssign ::= function_call  
                           | variableDef  
                           | assignment
```

referenced by:

- statement

function_call:

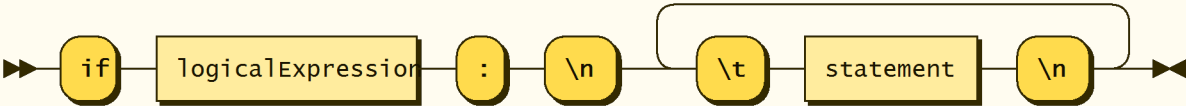


```
function_call ::= identifier '(' ( parameter ( ',' parameter )* )? ')''
```

referenced by:

- assignment
- funcCallorVarDeforAssign

ifStatement:

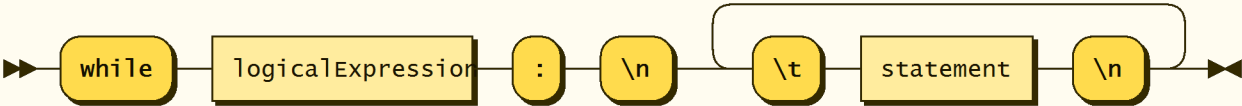


```
ifStatement ::= 'if' logicalExpression ':' '\n' ( '\t' statement '\n' )+
```

referenced by:

- statement

whileLoop:

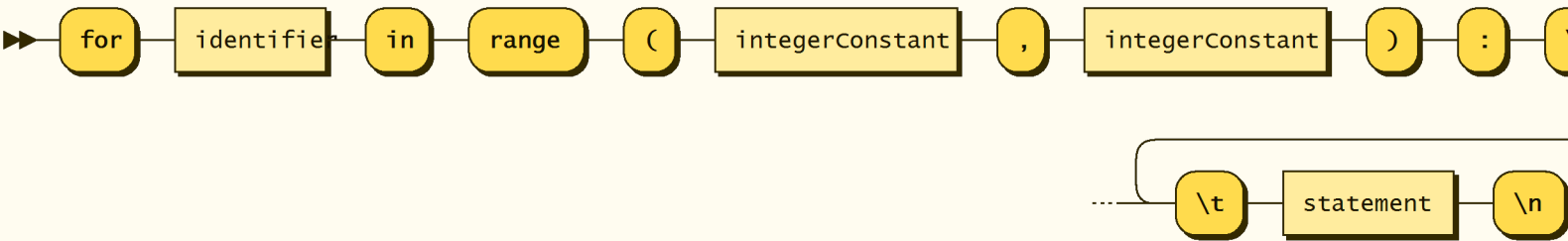


```
whileLoop ::= 'while' logicalExpression ':' '\n' ( '\t' statement '\n' )+
```

referenced by:

- statement

forLoop:

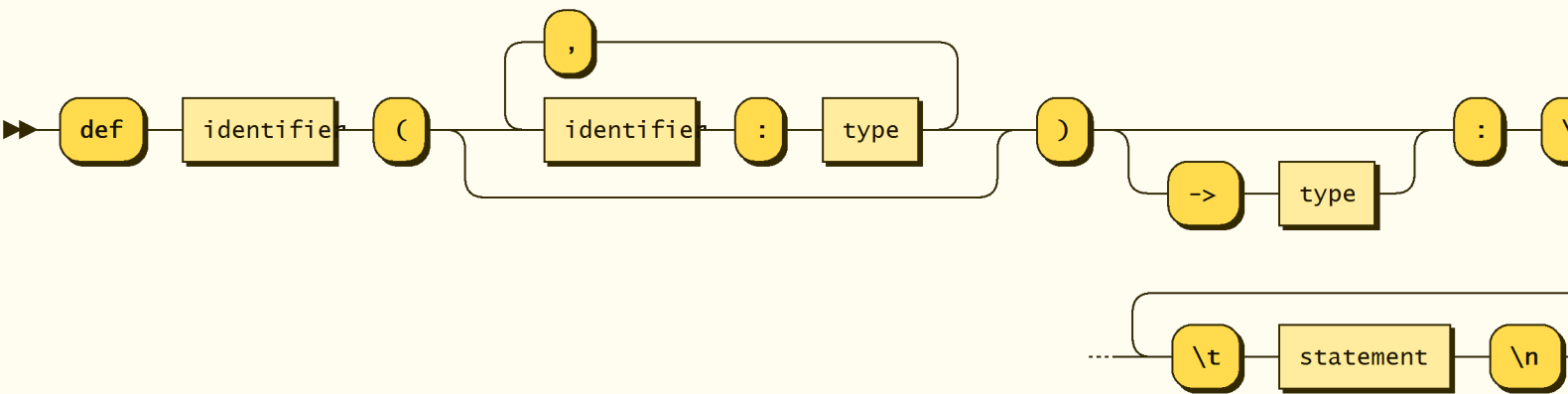


```
forLoop ::= 'for' identifier 'in' 'range' '(' integerConstant ',' integerConstant ')' ':' '\n' ( '\t' state
```

referenced by:

- statement

functionDef:

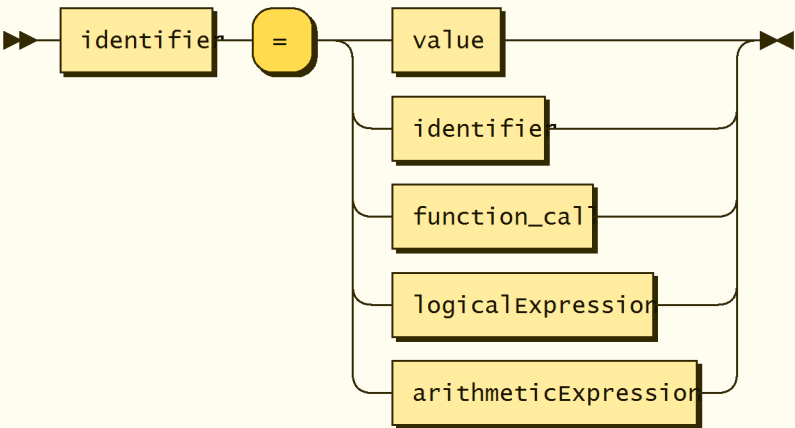


```
functionDef ::= 'def' identifier '(' ( identifier ':' type ( ',' identifier ':' type )* )? ')' ( '->' type )? '\n' )+
```

referenced by:

- statement

assignment:

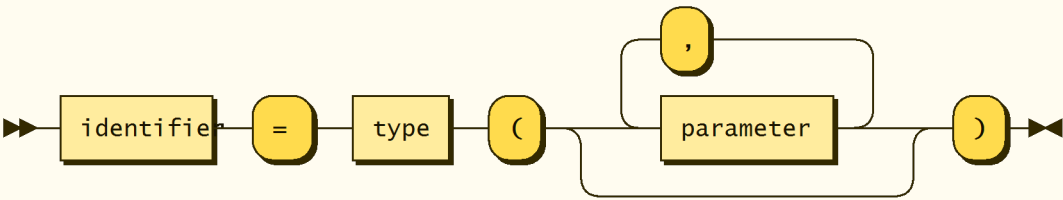


```
assignment ::= identifier '=' ( value | identifier | function_call | logicalExpression | arithmeticExpression
```

referenced by:

- [funcCallorVarDeforAssign](#)

variableDef:

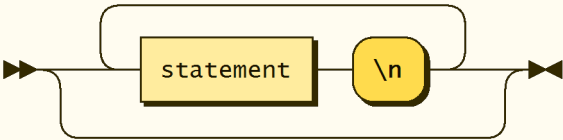


`variableDef`
`::= identifier '=' type '(' (parameter (',' parameter)*)? ')'`

referenced by:

- [funcCallorVarDeforAssign](#)

program:



`program` `::= (statement '\n')*`

no references