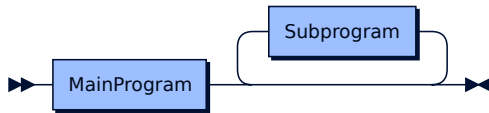
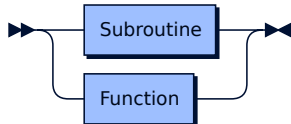


**ExecutableProgram:**

```
ExecutableProgram
  ::= MainProgram Subprogram*
```

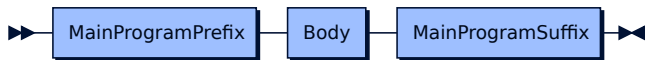
no references

**Subprogram:**

```
Subprogram
  ::= Subroutine
     | Function
```

referenced by:

- ExecutableProgram

**MainProgram:**

```
MainProgram
  ::= MainProgramPrefix Body MainProgramSuffix
```

referenced by:

- ExecutableProgram

**Subroutine:**

```
Subroutine
  ::= SubroutinePrefix '(' ParameterList ')' Body SubroutineSuffix
```

referenced by:

- Subprogram

**Function:**

```
Function ::= FunctionPrefix '(' ParameterList ')' Body FunctionSuffix
```

referenced by:

- Subprogram

**MainProgramPrefix:**

MainProgramPrefix  
 ::= 'PROGRAM' Name

referenced by:

- MainProgram

**MainProgramSuffix:**

MainProgramSuffix  
 ::= 'STOP' 'END'

referenced by:

- MainProgram

**SubroutinePrefix:**

SubroutinePrefix  
 ::= 'SUBROUTINE' Name

referenced by:

- Subroutine

**SubroutineSuffix:**

SubroutineSuffix  
 ::= 'RETURN' 'END'

referenced by:

- Subroutine

**FunctionPrefix:**

FunctionPrefix  
 ::= Type 'FUNCTION' Name

referenced by:

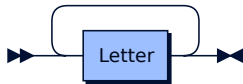
- Function

**FunctionSuffix:**

FunctionSuffix  
 ::= 'RETURN' 'END'

referenced by:

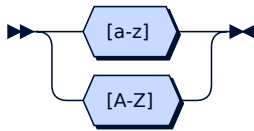
- Function

**Name:**

Name  
 ::= Letter+

referenced by:

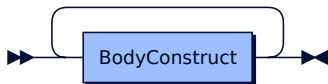
- CallStatement
- FunctionPrefix
- MainProgramPrefix
- SubroutinePrefix

**Letter:**

Letter  
 ::= [a-zA-Z]

referenced by:

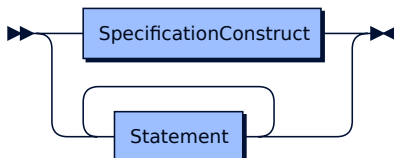
- Alphanumeric
- Identifier
- Name

**Body:**

Body  
 ::= BodyConstruct+

referenced by:

- Function
- MainProgram
- Subroutine

**BodyConstruct:**

```

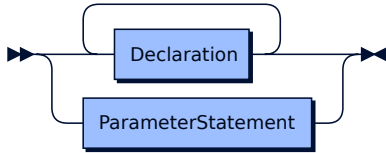
BodyConstruct
  ::= SpecificationConstruct
  | Statement+

```

referenced by:

- Body

### SpecificationConstruct:



```

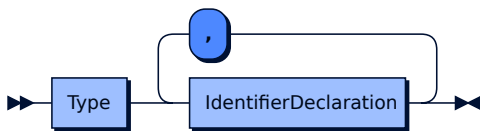
SpecificationConstruct
  ::= Declaration+
  | ParameterStatement

```

referenced by:

- BodyConstruct

### Declaration:



```

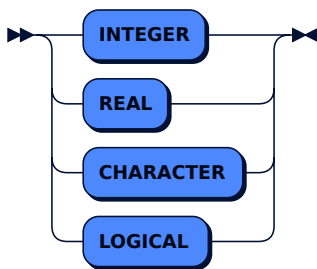
Declaration
  ::= Type IdentifierDeclaration ( ',' IdentifierDeclaration ) *

```

referenced by:

- SpecificationConstruct

### Type:



```

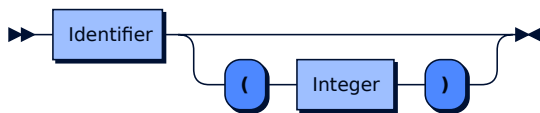
Type
  ::= 'INTEGER'
  | 'REAL'
  | 'CHARACTER'
  | 'LOGICAL'

```

referenced by:

- Declaration
- FunctionPrefix

### IdentifierDeclaration:

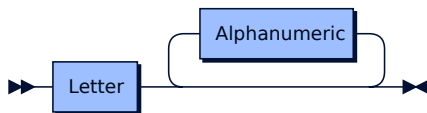


IdentifierDeclaration  
 ::= Identifier ( '(' Integer ')' )?

referenced by:

- [Declaration](#)

### Identifier:

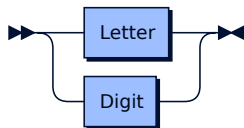


Identifier  
 ::= Letter Alphanumeric\*

referenced by:

- [AssignmentStatement](#)
- [ConstantDefinition](#)
- [DoLoopControl](#)
- [IdentifierDeclaration](#)
- [Term](#)

### Alphanumeric:

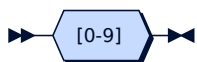


Alphanumeric  
 ::= Letter  
   | Digit

referenced by:

- [Identifier](#)

### Digit:

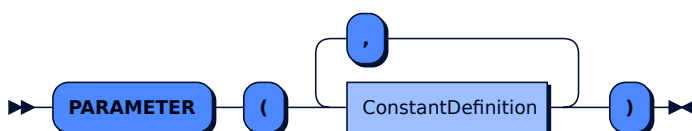


Digit ::= [0-9]

referenced by:

- [Alphanumeric](#)
- [Integer](#)

### ParameterStatement:



```

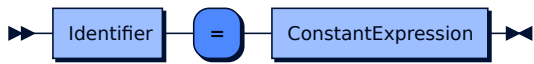
ParameterStatement
  ::= 'PARAMETER' '(' ConstantDefinition ( ',' ConstantDefinition )* ')'

```

referenced by:

- [SpecificationConstruct](#)

### ConstantDefinition:



```

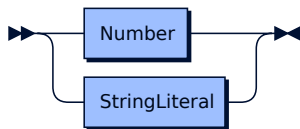
ConstantDefinition
  ::= Identifier '=' ConstantExpression

```

referenced by:

- [ParameterStatement](#)

### ConstantExpression:



```

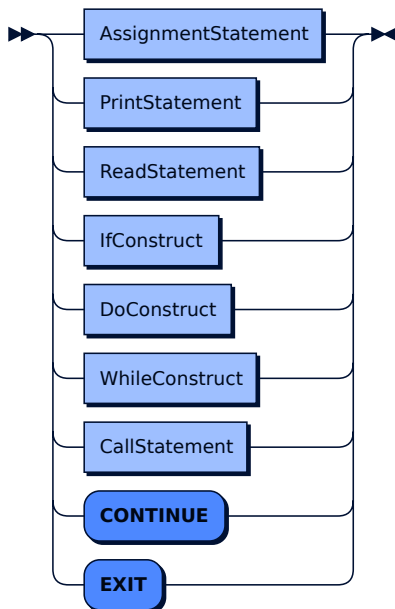
ConstantExpression
  ::= Number
  | StringLiteral

```

referenced by:

- [ConstantDefinition](#)

### Statement:



```

Statement
  ::= AssignmentStatement
  | PrintStatement
  | ReadStatement
  | IfConstruct

```

```

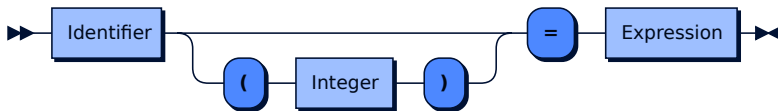
| DoConstruct
| WhileConstruct
| CallStatement
| 'CONTINUE'
| 'EXIT'

```

referenced by:

- [BodyConstruct](#)
- [EndDoStatement](#)
- [EndWhileStatement](#)
- [ThenConstruct](#)

### AssignmentStatement:



```

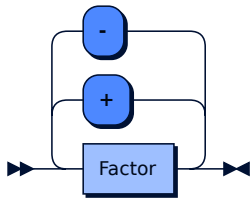
AssignmentStatement
::= Identifier ( '(' Integer ')' )? '=' Expression

```

referenced by:

- [Statement](#)

### Expression:



```

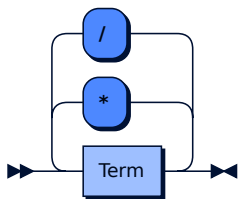
Expression
::= Factor ( ( '+' | '-' ) Factor )*

```

referenced by:

- [AssignmentStatement](#)
- [DoLoopControl](#)
- [ElseConstruct](#)
- [ElseIfStatement](#)
- [LogicalExpression](#)
- [PrintItem](#)
- [Term](#)

### Factor:



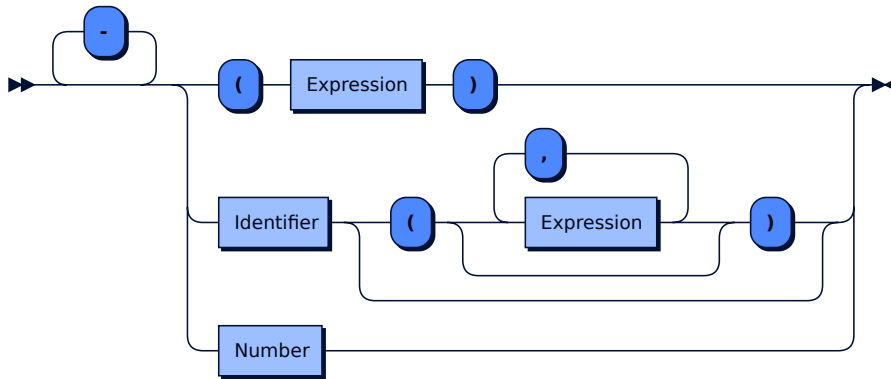
```

Factor ::= Term ( ( '*' | '/' ) Term )*

```

referenced by:

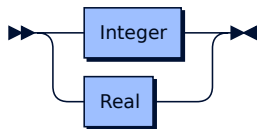
- [Expression](#)

**Term:**

Term ::= '-'\* ( '(' Expression ')' | Identifier ( '(' ( Expression ( ',' Expression )\* )? ')' )? | Number )

referenced by:

- Factor

**Number:**

Number ::= Integer  
          | Real

referenced by:

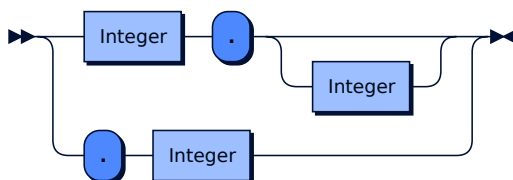
- ConstantExpression
- Term

**Integer:**

Integer ::= Digit+

referenced by:

- AssignmentStatement
- IdentifierDeclaration
- Number
- Real

**Real:**

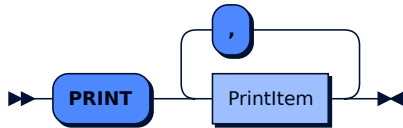
Real ::= Integer '.' Integer?  
      | '.' Integer



referenced by:

- Number

### PrintStatement:



```
PrintStatement
    ::= 'PRINT' PrintItem ( ',' PrintItem )*
```

referenced by:

- Statement

### PrintItem:



```
PrintItem
    ::= StringLiteral
       | Expression
```

referenced by:

- PrintStatement

### StringLiteral:

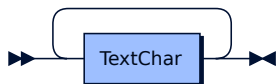


```
StringLiteral
    ::= '"' Text '"'
```

referenced by:

- ConstantExpression
- PrintItem

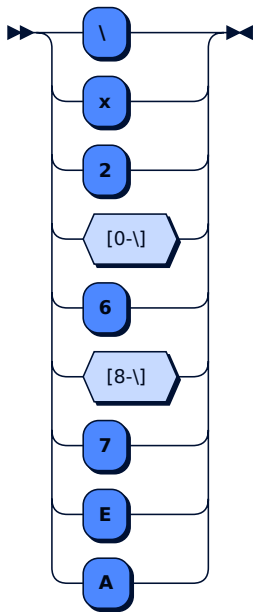
### Text:



```
Text    ::= TextChar+
```

no references

### TextChar:

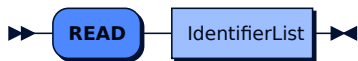


TextChar ::= [\x20-\68-\7EA]

referenced by:

- Text

#### ReadStatement:



ReadStatement  
::= 'READ' IdentifierList

referenced by:

- Statement

#### IfConstruct:

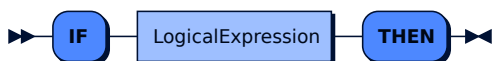


IfConstruct  
::= IfThenStatement ThenConstruct

referenced by:

- Statement

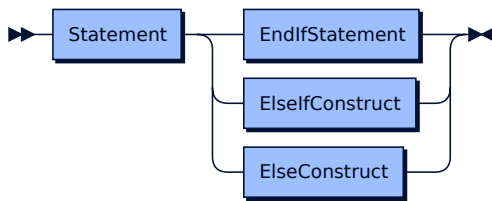
#### IfThenStatement:



IfThenStatement  
::= 'IF' LogicalExpression 'THEN'

referenced by:

- IfConstruct

**ThenConstruct:**

ThenConstruct  
 ::= Statement ( EndIfStatement | ElseIfConstruct | ElseConstruct )

referenced by:

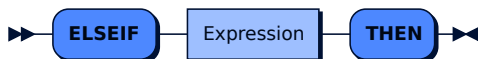
- ElseIfConstruct
- IfConstruct

**ElseIfConstruct:**

ElseIfConstruct  
 ::= ElseIfStatement ThenConstruct

referenced by:

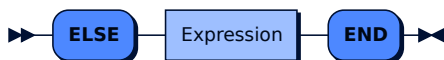
- ThenConstruct

**ElseIfStatement:**

ElseIfStatement  
 ::= 'ELSEIF' Expression 'THEN'

referenced by:

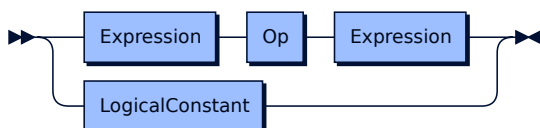
- ElseIfConstruct

**ElseConstruct:**

ElseConstruct  
 ::= 'ELSE' Expression 'END'

referenced by:

- ThenConstruct

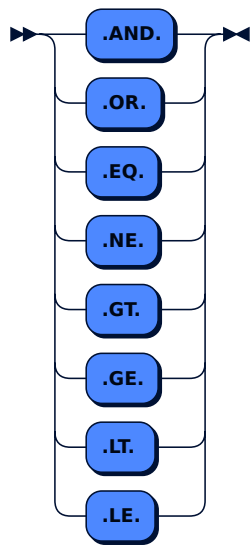
**LogicalExpression:**

LogicalExpression ::= Expression Op Expression  
                  | LogicalConstant

referenced by:

- [IfThenStatement](#)
- [WhileStatement](#)

**Op:**

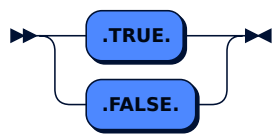


Op ::= '.AND.'  
     |.OR.'  
     |.EQ.'  
     |.NE.'  
     |.GT.'  
     |.GE.'  
     |.LT.'  
     |.LE.'

referenced by:

- [LogicalExpression](#)

**LogicalConstant:**

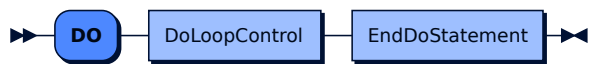


LogicalConstant ::= '.TRUE.'  
                  |.FALSE.'

referenced by:

- [LogicalExpression](#)

**DoConstruct:**

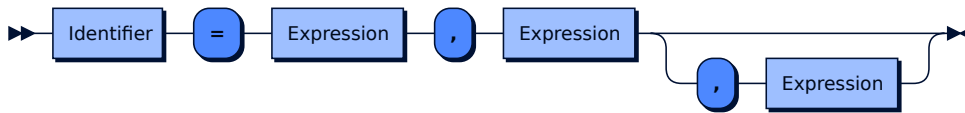


DoConstruct  
 ::= 'D0' DoLoopControl EndDoStatement

referenced by:

- [Statement](#)

#### DoLoopControl:



DoLoopControl  
 ::= Identifier '=' Expression ',' Expression ( ',' Expression )?

referenced by:

- [DoConstruct](#)

#### EndDoStatement:



EndDoStatement  
 ::= Statement 'ENDD0'

referenced by:

- [DoConstruct](#)

#### WhileConstruct:

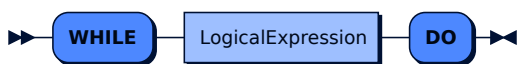


WhileConstruct  
 ::= WhileStatement EndWhileStatement

referenced by:

- [Statement](#)

#### WhileStatement:



WhileStatement  
 ::= 'WHILE' LogicalExpression 'D0'

referenced by:

- [WhileConstruct](#)

#### EndWhileStatement:

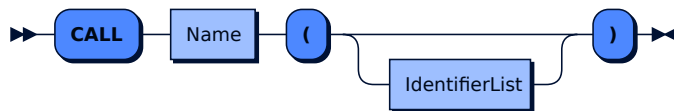


```
EndWhileStatement  
  ::= Statement 'ENDDO'
```

referenced by:

- [WhileConstruct](#)

### CallStatement:



```
CallStatement  
  ::= 'CALL' Name '(' IdentifierList? ')'
```

referenced by:

- [Statement](#)

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... generated by [Railroad Diagram Generator](#) ☒