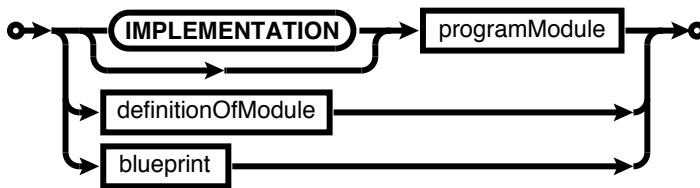


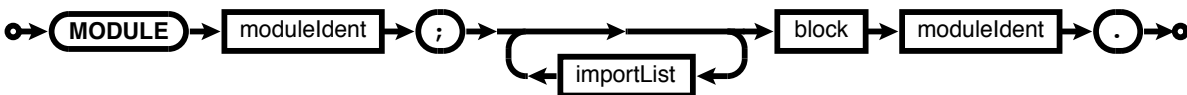
## Appendix B: Syntax Diagrams

### B.1 Non-Terminal Symbols

#### #1 Compilation Unit



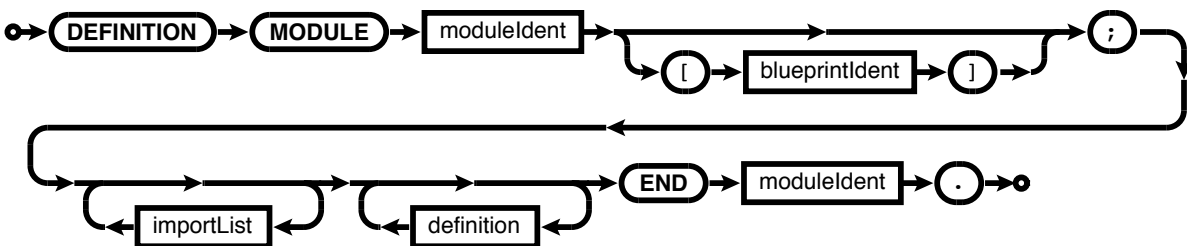
#### #2 Program Module



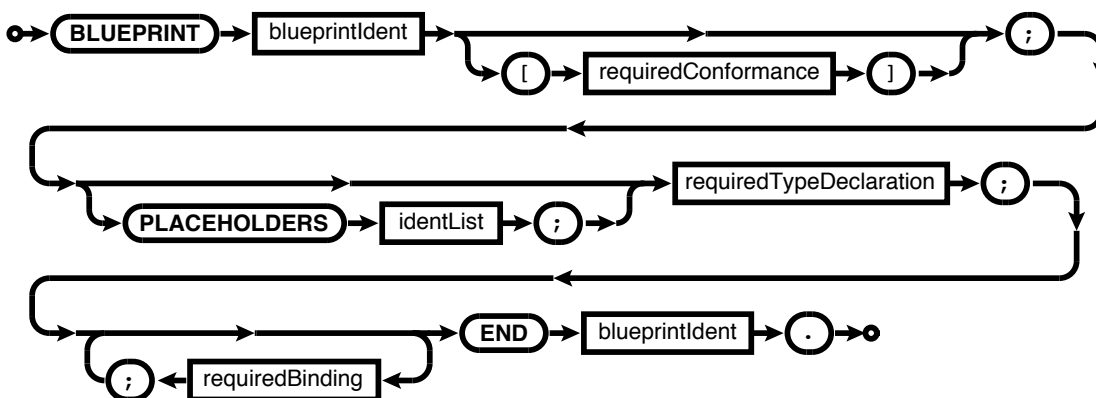
#### #2.1 Module Identifier



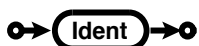
#### #3 Definition Of Module



#### #4 Blueprint



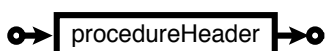
#### #4.1 Blueprint Identifier



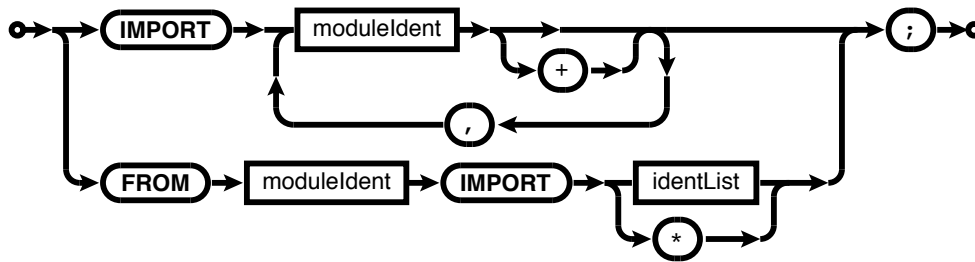
#### #4.2 Required Conformance



#### #4.3 Required Binding



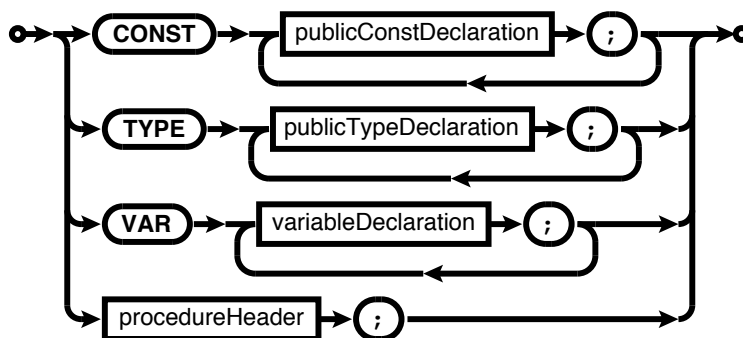
## #5 Import List



## #6 Block



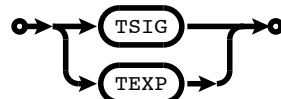
## #7 Definition



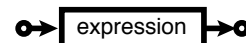
## #8 Public Constant Declaration



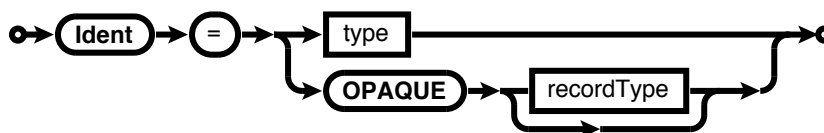
## #8.1 CONST Bindable Identifier



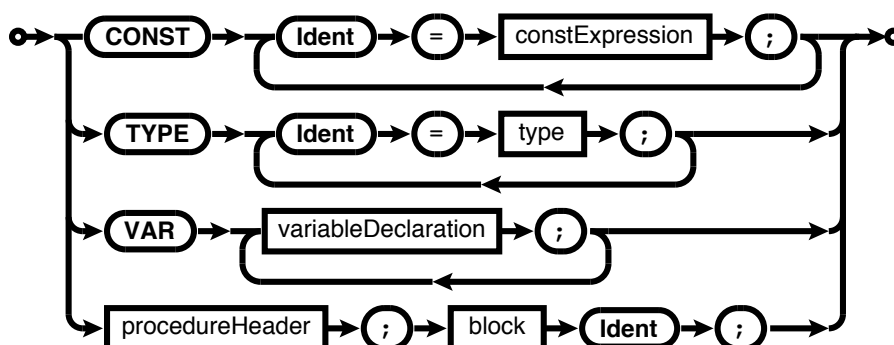
## #8.2 Constant Expression

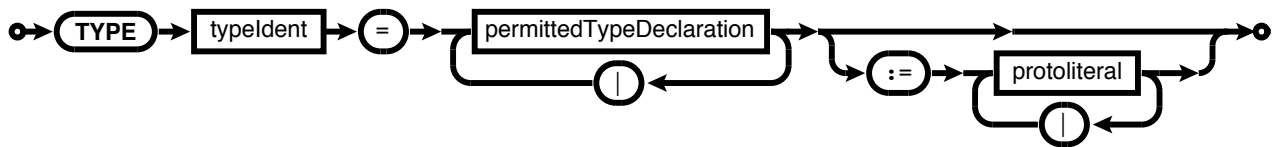
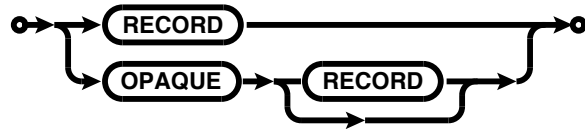
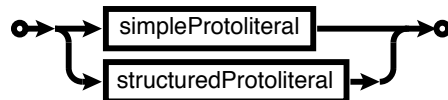
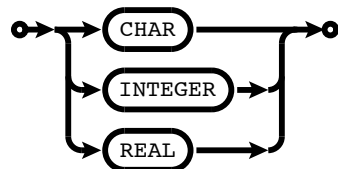
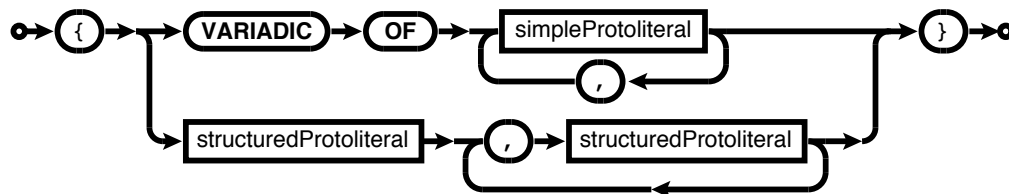
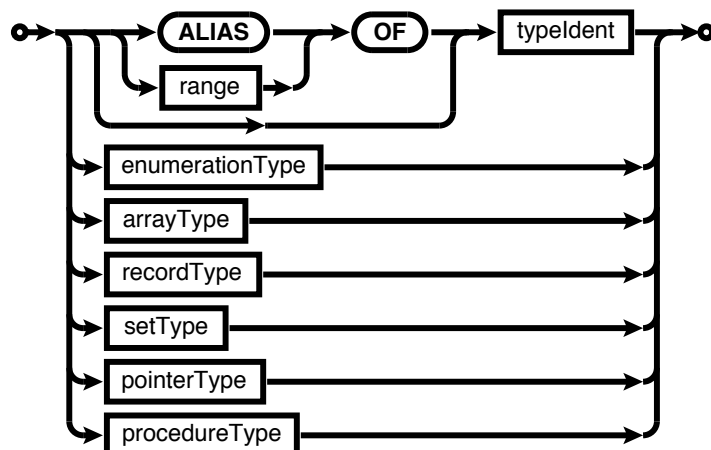
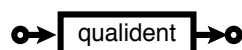


## #9 Public Type Declaration



## #10 Declaration

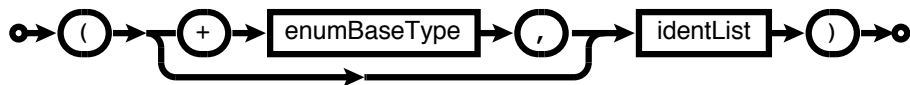


**#11 Required Type Declaration****#12 Permitted Type Declaration****#13 Proto-Literal****#13.1 Simple Proto-Literal****#14 Structured Proto-Literal****#15 Type****#15.1 Type Identifier**

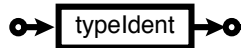
## #16 Range



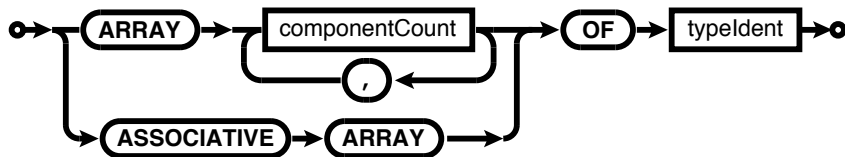
## #17 Enumeration Type



## #17.1 Enumeration Base Type



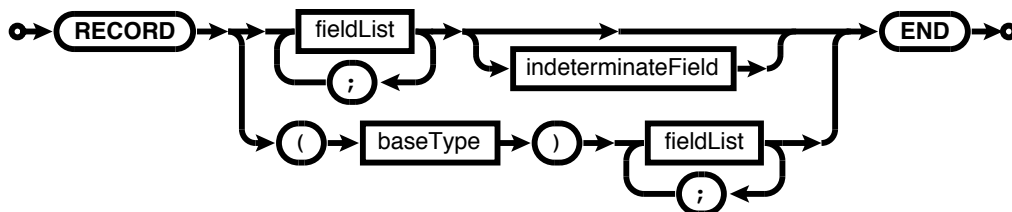
## #18 Array Type



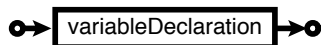
## #18.1 Component Count



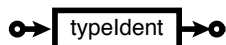
## #19 Record Type



## #19.1 Field List



## #19.2 Base Type



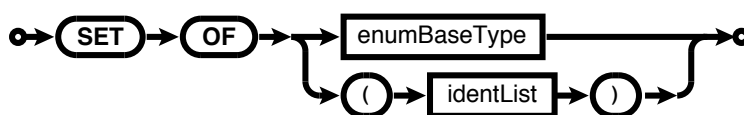
## #20 Indeterminate Field



## #20.1 Discriminant Field Identifier



## #21 Set Type



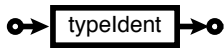
## #22 Pointer Type



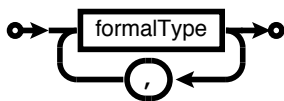
## #23 Procedure Type



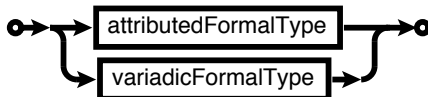
## #23.1 Returned Type



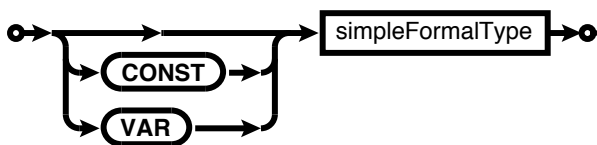
## #24 Formal Type List



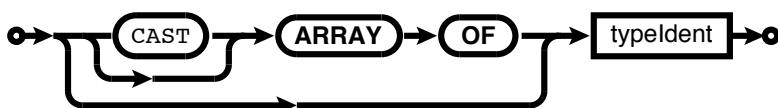
## #25 Formal Type



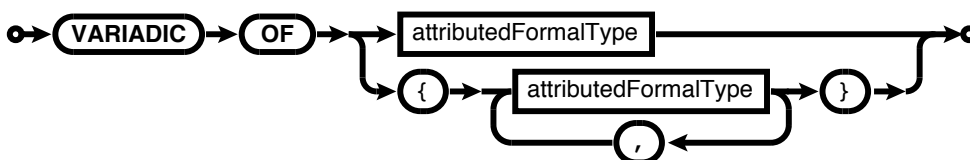
## #26 Attributed Formal Type



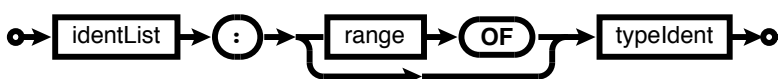
## #27 Simple Formal Type

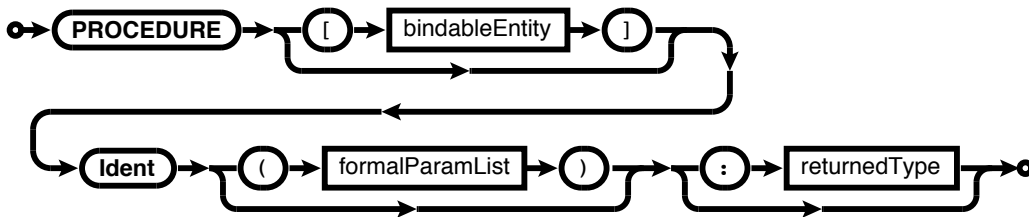
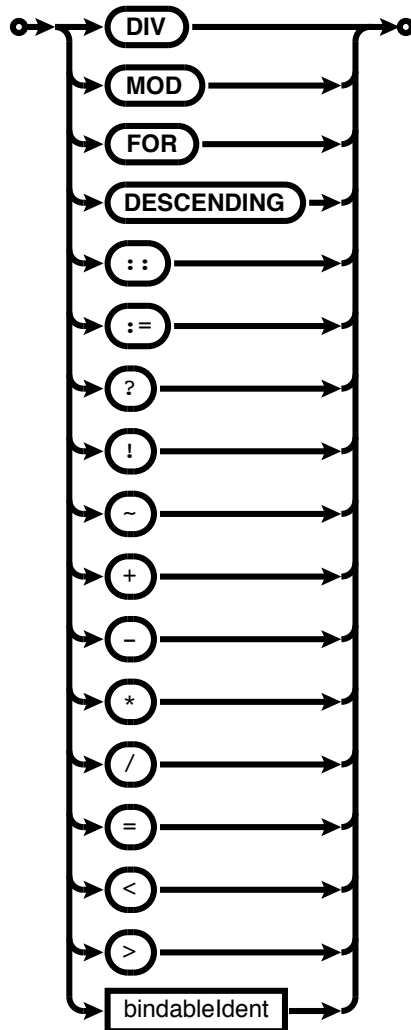
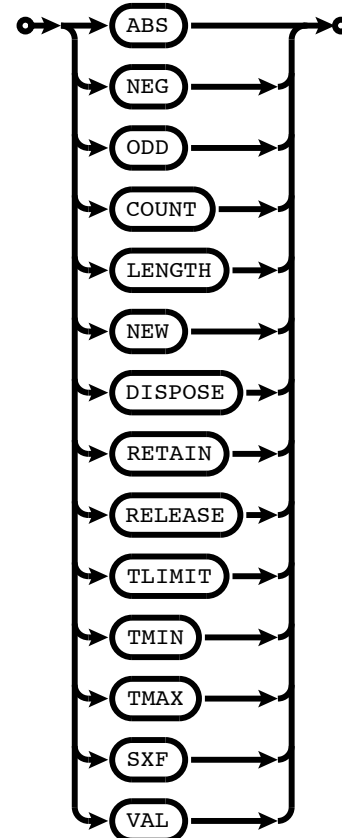
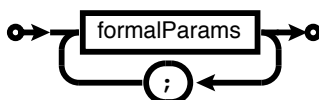
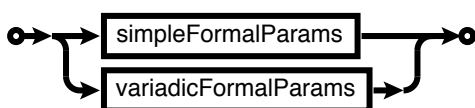


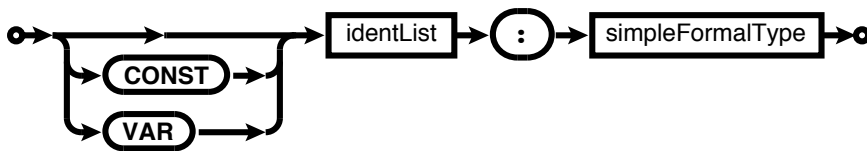
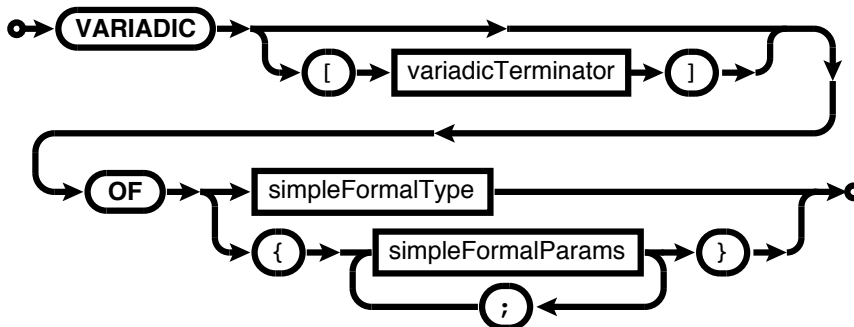
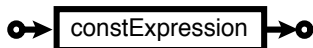
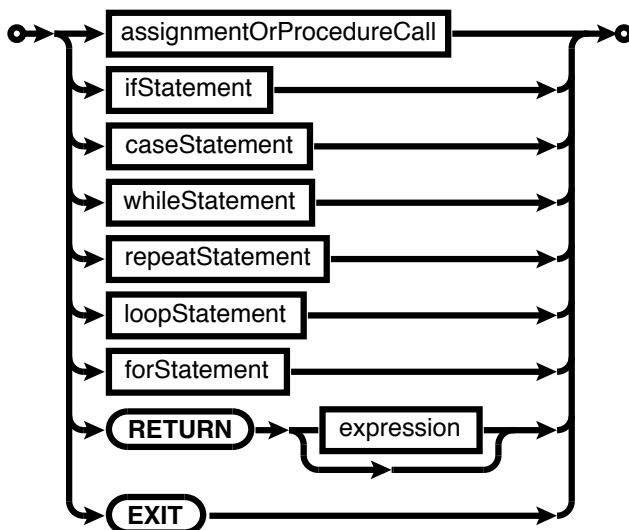
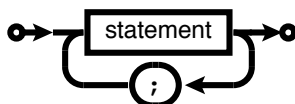
## #28 Variadic Formal Type

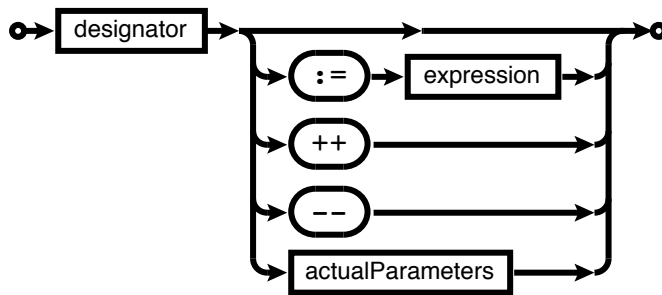
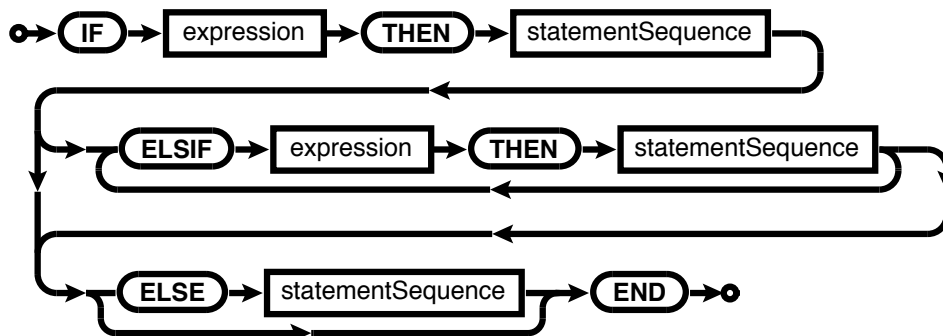
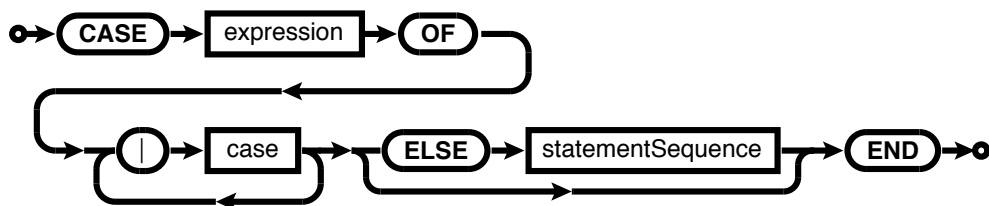
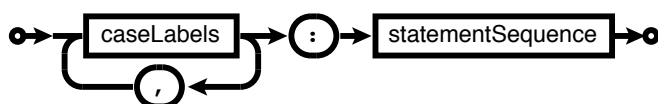
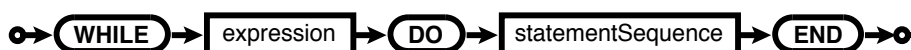
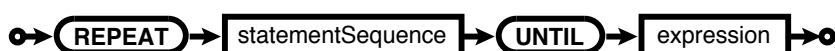
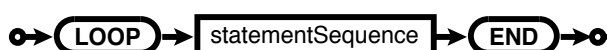


## #29 Variable Declaration



**#30 Procedure Header****#31 Bindable Entity****#31.1 Bindable Identifier****#32 Formal Parameter List****#33 Formal Parameters**

**#34 Simple Formal Parameters****#35 Variadic Formal Parameters****#35.1 Variadic Terminator****#36 Statement****#37 StatementSequence**

**#38 Assignment Or Procedure Call****#39 IF Statement****#40 CASE Statement****#41 Case****#42 Case Labels****#43 WHILE Statement****#44 REPEAT Statement****#45 LOOP Statement**



## #46 FOR Statement



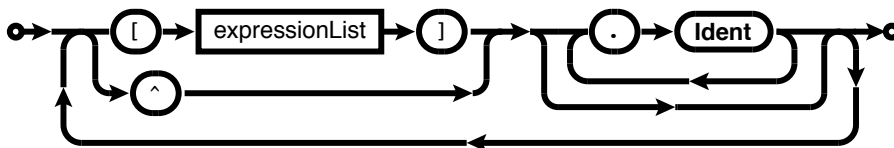
## #46.1 Control Variable



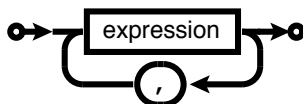
## #47 Designator



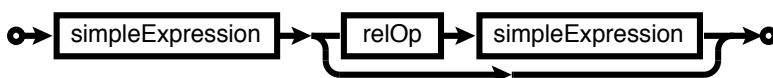
## #48 Designator Tail



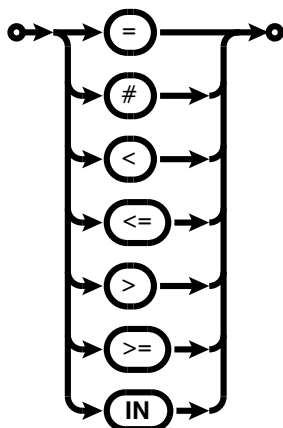
## #49 Expression List

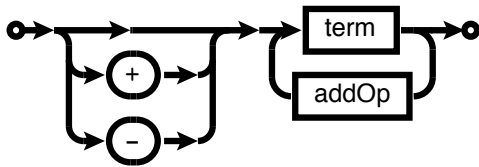
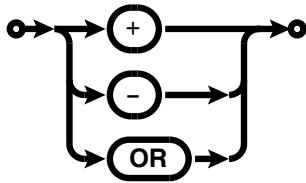
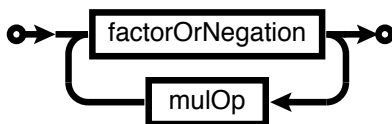
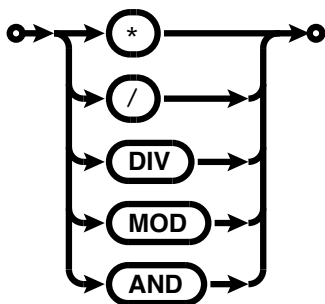
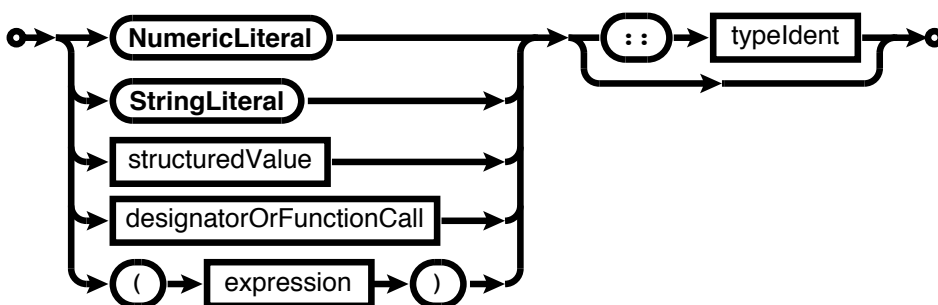


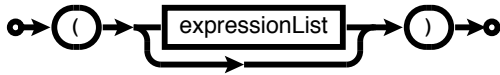
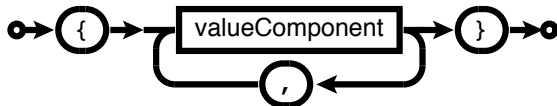
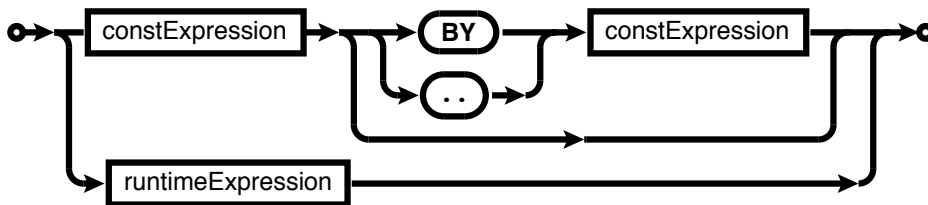
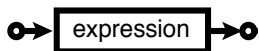
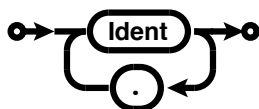
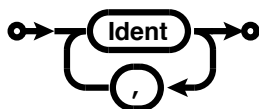
## #50 Expression



## #50.1 Relational Operator

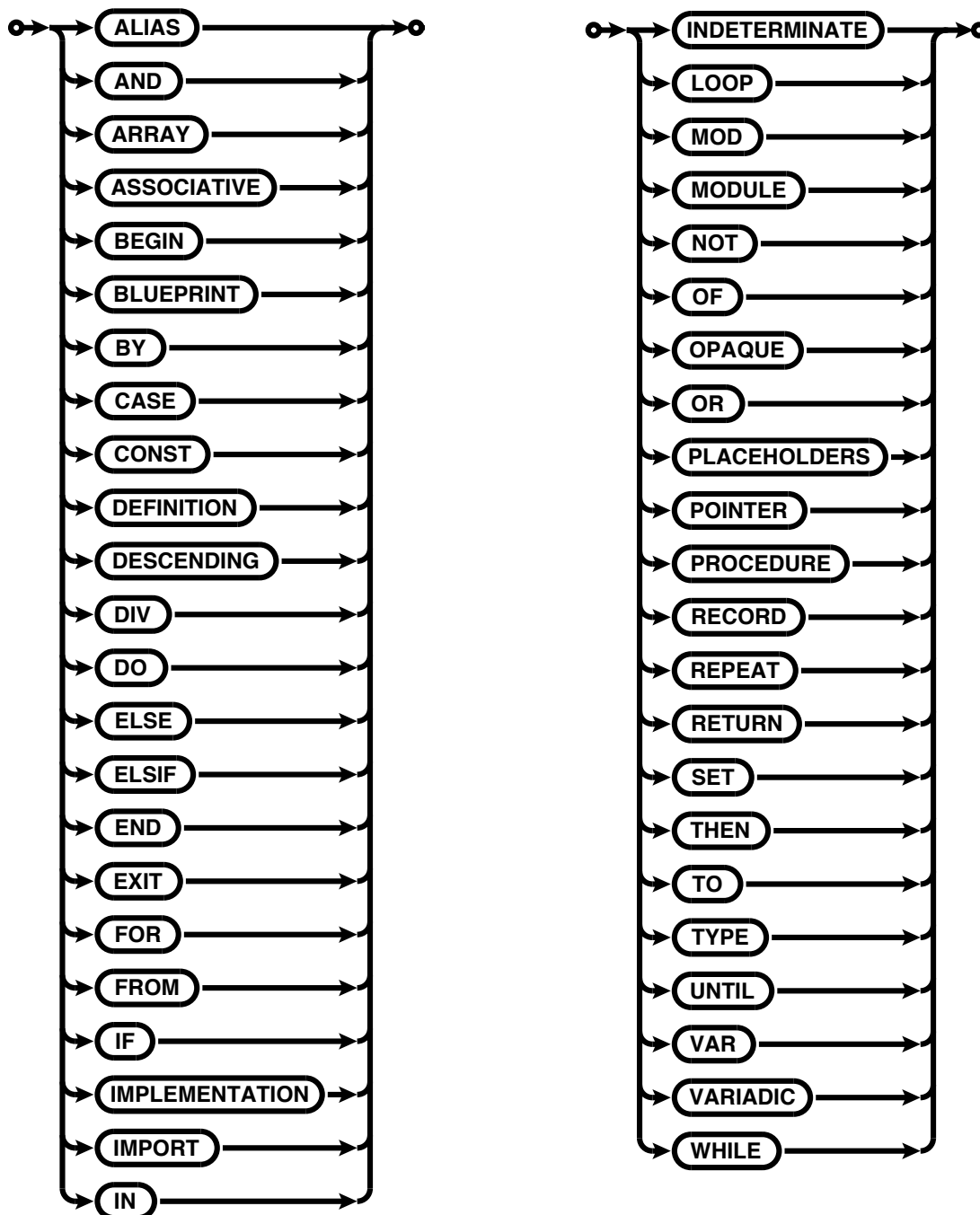


**#51 Simple Expression****#51.1 Add Operator****#52 Term****#52.1 Multiply Operator****#53 Factor Or Negation****#54 Factor**

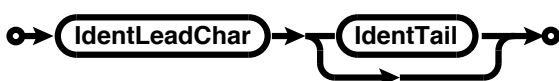
**#55 Designator Or Function Call****#56 Actual Parameters****#57 Structured Value****#58 Value Component****#58.1 Runtime Expression****#59 Qualified Identifier****#60 Identifier List**

## B.2 Terminal Symbols

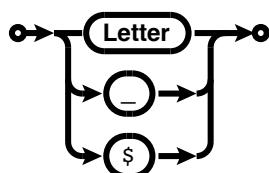
### #1 Reserved Words



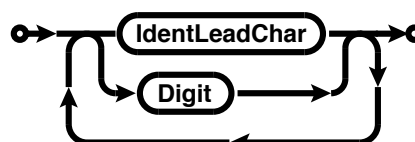
### #2 Identifier

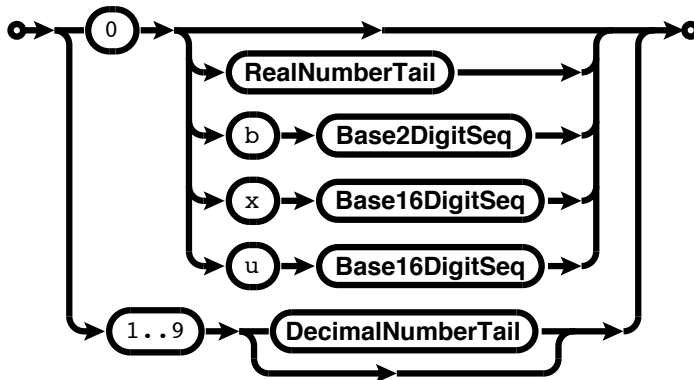
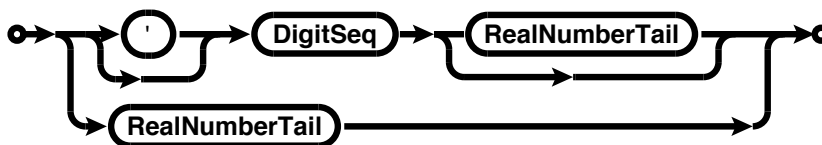
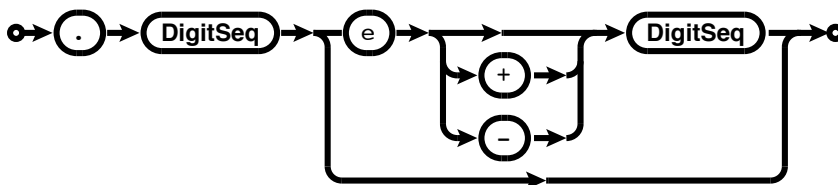
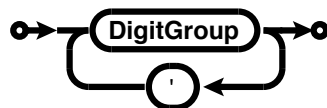
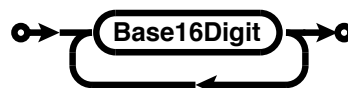


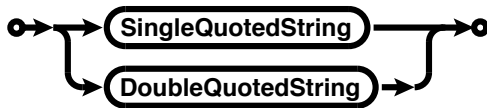
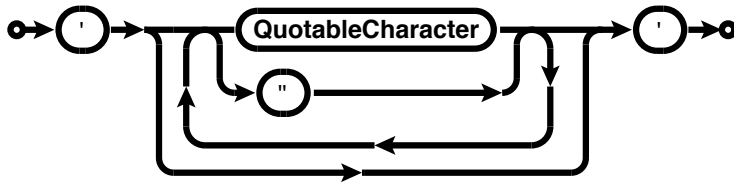
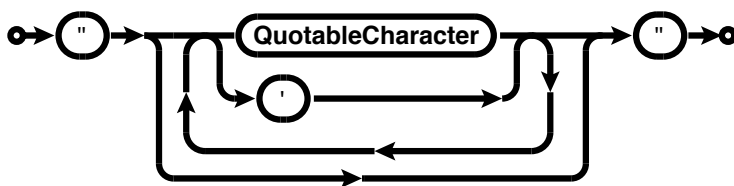
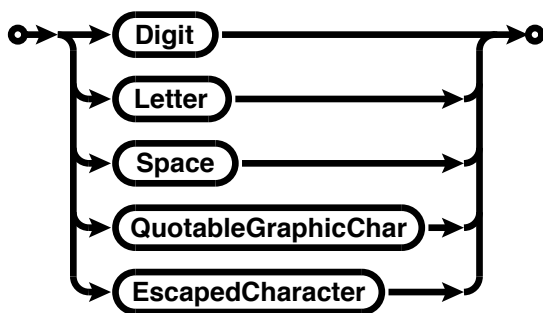
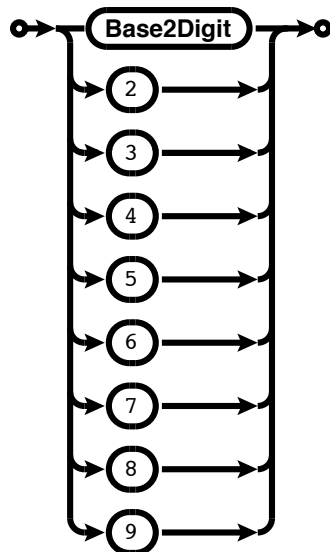
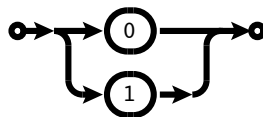
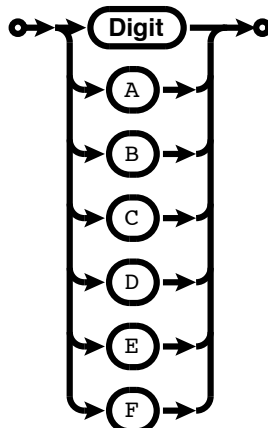
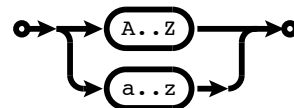
#### #2.1 Identifier Lead Character



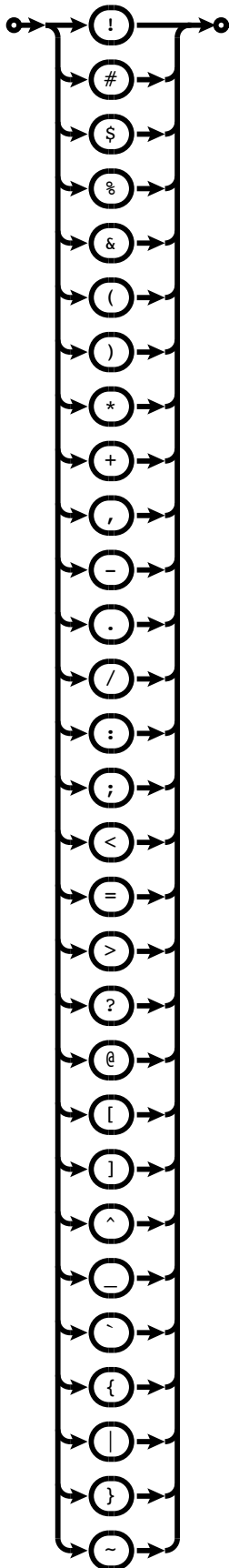
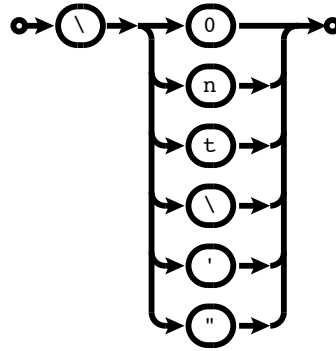
#### #2.2 Identifier Tail



**#3 Numeric Literal****#3.1 Decimal Number Tail****#3.2 Real Number Tail****#3.3 Digit Sequence****#3.3b Digit Group****#3.4 Base-2 Digit Sequence****#3.4b Base-2 Digit Group****#3.5 Base-16 Digit Sequence****#3.5b Base-16 Digit Group**

**#4 String Literal****#4.1 Single Quoted String****#4.2 Double Quoted String****#4.3 Quotable Character****#4.4 Digit****#4.5 Base-2 Digit****#4.6 Base-16 Digit****#4.7 Letter****#4.8 Space**

CONST Space = CHR(32)

**#4.9 Quotable Graphic Character****#4.10 Escaped Character**

## B.3 Ignore Symbols

### #1 Whitespace



#### #1.1 ASCII Tabulator

```
CONST ASCII_TAB = CHR(8)
```

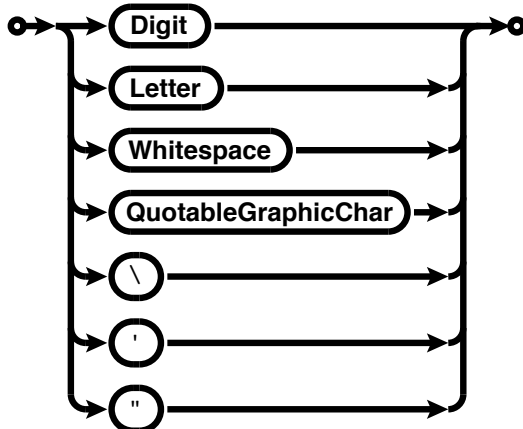
### #2 Single-line Comment



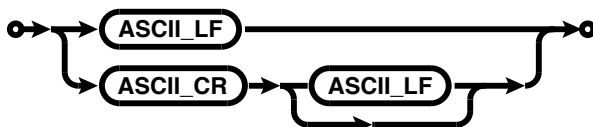
### #3 Multi-line Comment



#### #3.1 Comment Character



### #4 End Of Line Marker



#### #4.1 ASCII Line Feed

```
CONST ASCII_LF = CHR(10)
```

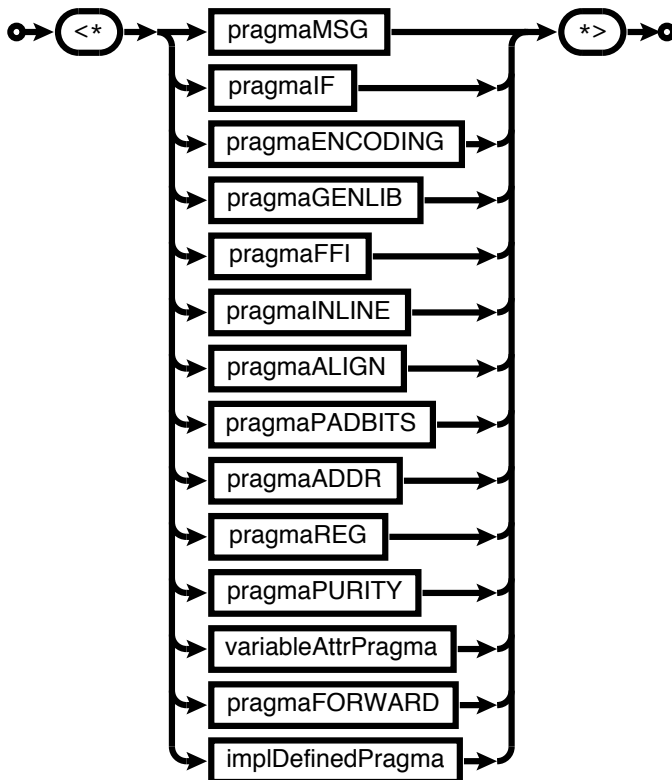
#### #4.2 ASCII Carriage Return

```
CONST ASCII_CR = CHR(13)
```

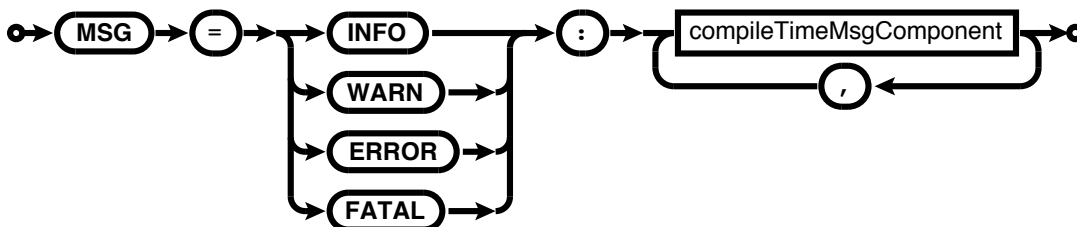


## B.4 Pragma Grammar

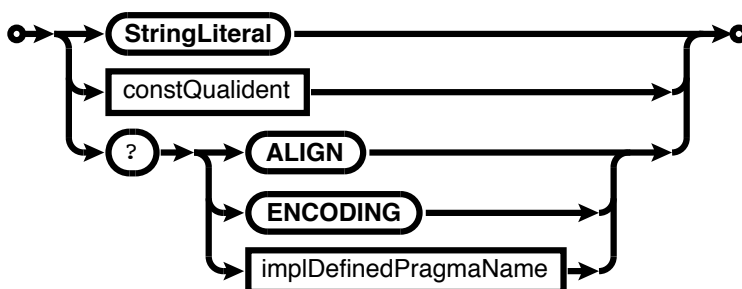
### #1 Pragma



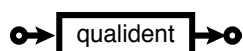
### #2 Body Of Compile Time Message Pragma



### #3 Compile Time Message Component

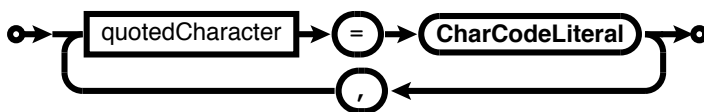
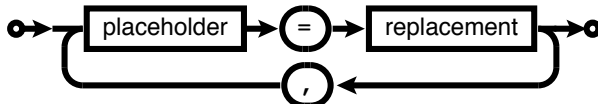
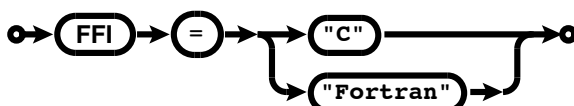
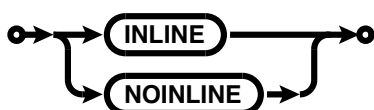


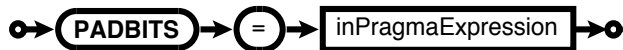
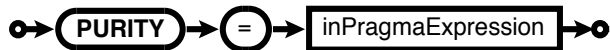
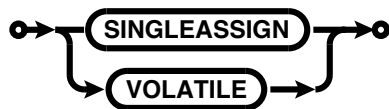
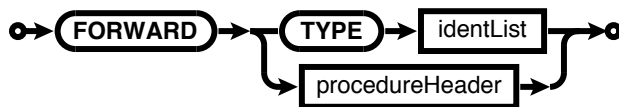
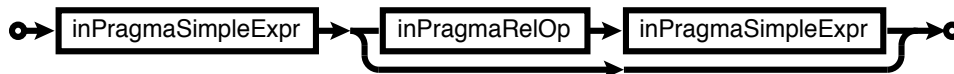
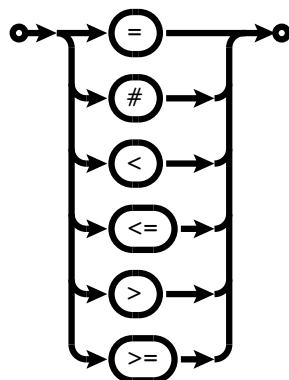
#### #3.1 Constant Qualified Identifier

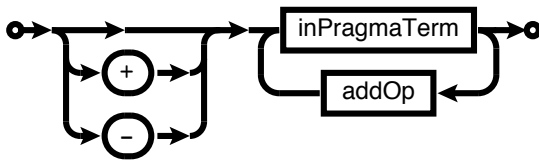
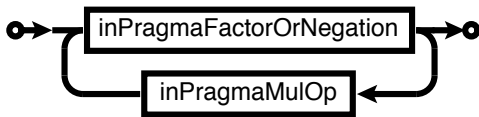
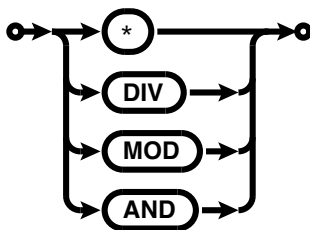
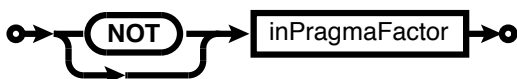
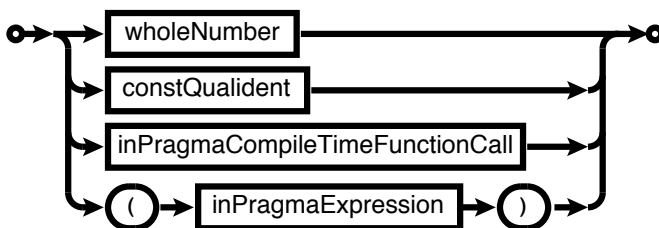


#### #3.2 Implementation Defined Pragma Name



**#4 Body Of Conditional Compilation Pragma****#5 Body Of Character Encoding Pragma****#6 Code Point Sample List****#6.1 Quoted Character****#6.2 Character Code Literal****#7 Body Of Library Template Expansion Pragma****#8 Template Parameter List****#8.1 Placeholder****#8.2 Replacement****#9 Body Of Foreign Function Interface Pragma****#10 Body Of Procedure Inlining Pragma****#11 Body Of Memory Alignment Pragma**

**#12 Body Of Bit Padding Pragma****#13 Body Of Memory Mapping Pragma****#14 Body Of Register Mapping Pragma****#15 Body Of Purity Attribute Pragma****#16 Body Of Variable Attribute Pragma****#17 Body Of Forward Declaration Pragma****#18 Body Of Implementation Defined Pragma****#19 In-Pragma Expression****#19.1 In-Pragma Relational Operator**

**#20 In-Pragma Simple Expression****#21 In-Pragma Term****#21.1 In-Pragma Multiply Operator****#22 In-Pragma Factor Or Negation****#23 In-Pragma Factor****#23.1 Whole Number****#24 In-Pragma Compile-Time Function Call**