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Program -> [PROGRAM Ident ';' ]
           Block '.'
Block -> [DeclSection]
           CompoundStmt
DeclSection -> LabelDeclSection
               -> ConstSection
               -> TypeSection
               -> VarSection
               -> ProcedureDeclSection
ConstSection -> CONST (ConstantDecl ';' )...
ConstantDecl -> Ident '=' ConstExpr
               -> Ident ':' typeId '=' TypedConstant
TypeSection -> TYPE (TypeDecl ';' )
TypeDecl -> Ident '=' [TYPE] Type
ArrayConstant -> '(' TypedConstant ',' ' ' ')'
RecordConstant -> '(' RecordFieldConstant ';' ... ')'
Type -> SimpleType
        -> StructType
        -> PointerType
        -> StringType
        -> ProcedureType

SimpleType -> (OrdinalType | RealType)
RealType -> REAL
           -> SINGLE
           -> DOUBLE
           -> EXTENDED
OrdinalType -> (SubrangeType | EnumeratedType | OrdIdent)
OrdIdent -> SHORTINT
           -> INTEGER
           -> BYTE
           -> LONGINT
           -> INT64
           -> WORD
           -> BOOLEAN
           -> CHAR
           -> LONGWORD

SubrangeType -> ConstExpr '..' ConstExpr
EnumeratedType -> '(' EnumeratedTypeElement ',' ... ')'
EnumeratedTypeElement -> Ident [ '=' ConstExpr ]
StringType -> STRING

StructType -> [PACKED] (ArrayType | RecType [PACKED])
ArrayType -> ARRAY ['[' OrdinalType ',' ... ']' ] OF Type
           [PortabilityDirective]
RecType -> RECORD [FieldList] END
FieldList -> FieldDecl ';' ...
FieldDecl -> IdentList ':' Type

PointerType -> '^' Type [PortabilityDirective]
ProcedureType -> (ProcedureHeading | FunctionHeading) [OF OBJECT]
VarSection -> VAR (VarDecl ';' )...
VarDecl On Windows -> IdentList ':' Type [ '=' ConstExpr ]

Expression -> SimpleExpression [RelOp SimpleExpression]...
SimpleExpression -> ['+' | '-'] Term [AddOp Term]...
Term -> Factor [MulOp Factor]...

Factor -> Designator ['(' ExprList ')']
           -> '@' Designator
           -> Number
           -> String
           -> NIL

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-> '(' Expression ')'
-> NOT Factor

RelOp -> '>'
      -> '<'
      -> '<='
      -> '>='
      -> '<>'

AddOp -> '+'
      -> '-'
      -> OR
      -> XOR

MulOp -> '*'
      -> '/'
      -> DIV
      -> MOD
      -> AND

Designator -> Ident ['.' Ident | '[' ExprList ']' | '^']...
Statement -> [SimpleStatement | StructStmt]
StmtList -> Statement ';'
SimpleStatement -> Designator ['(' [ExprList] ')']
                -> Designator ':=' Expression
StructStmt -> CompoundStmt
            -> ConditionalStmt
            -> LoopStmt
            -> WithStmt
CompoundStmt -> BEGIN StmtList END
ConditionalStmt -> IfStmt
                -> CaseStmt
IfStmt -> IF Expression THEN Statement [ELSE Statement]
CaseStmt -> CASE Expression OF CaseSelector ';'... [ELSE StmtList] [';'] END
CaseSelector -> CaseLabel ', '... ':' Statement
CaseLabel -> ConstExpr ['..' ConstExpr]
LoopStmt -> RepeatStmt
          -> WhileStmt
          -> ForStmt
RepeatStmt -> REPEAT Statement UNTIL Expression
WhileStmt -> WHILE Expression DO Statement
ForStmt -> FOR Ident ':=' Expression (TO | DOWNT0) Expression DO Statement

ProcedureDeclSection -> ProcedureDecl
                    -> FunctionDecl
ProcedureDecl -> ProcedureHeading ';'
              Block ';'
FunctionDecl -> FunctionHeading ';'
              Block ';'
FunctionHeading -> FUNCTION Ident [FormalParameters] ':' (SimpleType |
STRING)

ProcedureHeading -> PROCEDURE Ident [FormalParameters]
FormalParameters -> '(' [FormalParm ';'...] ')'
FormalParm -> [VAR | CONST | OUT] Parameter
Parameter -> IdentList ':' ([ARRAY OF] SimpleType | STRING | FILE)]
          -> Ident ':' SimpleType '=' ConstExpr

IdentList -> Ident ', '...
Ident -> <identifier>
ConstExpr -> <constant-expression>

Number -> <number>
String -> <string>

```