

Procedure declaration

$\langle \text{type specification} \rangle ::= \langle \text{type declaration} \rangle$
 $\langle \text{array specification} \rangle ::= \langle \text{array declaration} \rangle$
 $\langle \text{label list} \rangle ::= \langle \text{label} \rangle | \langle \text{label list} \rangle , \langle \text{label} \rangle$
 $\langle \text{label specification} \rangle ::= \underline{\text{label}} (\langle \text{label list} \rangle)$
 $\langle \text{identifier list} \rangle ::= \langle \text{identifier} \rangle | \langle \text{identifier list} \rangle , \langle \text{identifier} \rangle$
 $\langle \text{switch specification} \rangle ::= \underline{\text{switch}} (\langle \text{identifier list} \rangle)$
 $\langle \text{function form} \rangle ::= \langle \text{function} \rangle |$
 $\qquad \qquad \qquad \langle \text{function} \rangle (\langle \text{identifier list} \rangle)$
 $\langle \text{function form list} \rangle ::= \langle \text{function form} \rangle |$
 $\qquad \qquad \qquad \langle \text{function form list} \rangle , \langle \text{function form} \rangle$
 $\langle \text{function specification} \rangle ::= \underline{\text{function}} (\langle \text{function form list} \rangle) |$
 $\langle \text{type} \rangle \underline{\text{function}} (\langle \text{function form list} \rangle)$
 $\langle \text{procedure form} \rangle ::= \langle \text{procedure} \rangle | \langle \text{procedure} \rangle (\langle \text{identifier list} \rangle) |$
 $\langle \text{procedure} \rangle = : \langle \text{identifier list} \rangle | \langle \text{procedure} \rangle (\langle \text{identifier list} \rangle) = \{ \langle \text{identifier list} \rangle \}$
 $\langle \text{procedure form list} \rangle ::= \langle \text{procedure form} \rangle |$
 $\langle \text{procedure form list} \rangle , \langle \text{procedure form} \rangle$
 $\langle \text{procedure specification} \rangle ::= \underline{\text{procedure}} (\langle \text{procedure form list} \rangle)$
 ~~$\langle \text{input form} \rangle ::= \langle \text{input format} \rangle (\langle \text{identifier list} \rangle)$~~
NB ~~$\langle \text{input form list} \rangle ::= \langle \text{input form} \rangle | \langle \text{input form list} \rangle , \langle \text{input form} \rangle$~~
 ~~$\langle \text{input specification} \rangle ::= \underline{\text{input format}} (\langle \text{input form list} \rangle)$~~

3. Semantics

A procedure declaration defines the meaning of a procedure, i.e. an identifier which may through a procedure statement be used to initiate the execution of a closed process.

4. The procedure compound

The details of the process are defined through the procedure compound. This is an ordinary compound statement with the following additional features :

1. It must contain at least one return statement
2. Besides local and global identifiers it works with entities represented through the identifiers listed in the formal part of the declaration. In using these formal identifiers inside the procedure compound all the characteristics listed in the formal specification part must be observed. During the actual execution, these formal identifiers will be replaced by actual identifiers according to the rules given in section

5. Formal identifiers

A formal input identifiers may in the formal specification part be specified to represent :

- a) a variable
- b) an array
- c) a function
- d) a procedure
- e) an input format
- f) an output format

A formal output identifier may be specified to represent :

- g) a variable
- h) an array
- i) a label
- j) a switch

6. The formal identification part

The formal identification part must in any case give complete information concerning types, dimensions, subscript bounds and number of parameter positions for all formal identifiers. This is realized as follows :

The first specification list of the formal specification part must specify the character of all formal identifiers. In case of functions, procedures, input or output formats, the specification will make use of dummy identifiers for completing the specification.

The dummy identifiers of the first specification list will be further specified in the second specification list.

PN/js

1.11.1960