⅃⅃ REGNECENTRALEN

Title: READALLOLI and STD TABLE

Keywords: RC 4000, Software, Character Reading, Olivetti Tapes,
Intable, Code Procedure

Abstract: These code procedures provide reading of a number as a
reverse sequence of digits (Olivetti tapes), and initialize
an integer array with the standard alphabet used by the
read-procedures. Confer Algol 6 User's Manual, RCSL 31-D322,
especially sections 9.32 and 9.53. 4 pages.

READALLOLI

The purpose of readalloli is to read textfiles on which digits occur in the reverse sequence of which is normal.

The readig is performed in the same way as by readall with the following exeptions:

1. A sequence of class 2 characters (digits) are interpreted as a number with the digits in reverse sequence.

2. Characters with class 4 and 5 are prohibited and will terminate the run with

    class X
    called from readalloli
    called from line XXX

    Insert your own alphabet without characters of class 4 or 5 with "intable".

3. Syntactically wrong numbers do not lead to insertion of a max.-value in the array val. The digits read are interpreted as a wrong number and are stored as a binary value in array val, so in that way they may be printed in an error list.

4. Wrong placed signs recieve kind 3 and the value read is placed in val. A succeding sign will make the proceding digits to be a syntactically wrong number (kind = 1) and the sign will be placed in the succeding element with kind = 3.

5. On return because of a filled array the last read character is repeated by "repeatchar" and will be the first read in a new call of readalloli.

Call: read_all_oli (Z, val, kind, index)

read_all_oli   (return value, integer)

The number of elements in val to which items have been assigned. If read_all_oli terminates because val or kind is full, the value of read_all_oli is minus number of elements.

z   (call and return value, zone)

Specifies the document, the buffering, and the position of the document.

val   (return value, long array)

The items are stored in val (index), val (index + 1) and so on. For arrays of more than one dimension the lexicographical ordering is used.

kind   (return value, integer array)

The kind of the items are stored here, so that kind (i) decribes the content of val (i).

Kind = 1: Syntactically wrong number or more than 14 digits.

Kind = 2: Binary number.

Kind = 3: Single sign or sign succeding digits. Characters with class = 3 and value 45 are minus signs.
All other class 3 characters are positive signs.

Kind = 4: Can not occur.

Kind = 5: Can not occur.

Kind = 6: Text string

Kind = 7: Delimiter

Kind = 8: Terminator

Kind 8: Class of the character which is treated as a delimiter.

index   (call value, integer)

See decription of val above.

The purpose of stdtable is to initialize an array with the standard alphabet, used by the read-procedures. Then you may make your own corrections and make the alphabet active by a call of "intable".

call: stdtable (table)

table   (return value, integerarray)

                        The character classes and values are placed in
                        element no. 0 thru 127 as class shift 12 add va-
                        lue.