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CTSS BULLETIN #42

TSS Library: New entries

The following routines have been modified:

CØMARG, GCLC, GNAM, MØVE1, .READ, CØMFL

The following new entries have been added:

GTNAM, DEFBC, DELBC, DERBC, ØCABC, ØCDBC, ØCLBC, ØCRBC, BZEL, ZEL, RJUST, CØLT, TRACE, STRACE.

1- CØMARG, is now usable from FØRTRAN compiled routines

2- CØMFL, is now usable from FØRTRAN compiled routines, and also as a function.
M = CØMFL (N) M = 0 if the switching has been performed
or M = BCD number of the programmer using the common file N

3- GCLC, SCLC, GCLS, SCLS, now handles FØRTRAN type calls. SCLS and GCLS expects FØRTRAN arrays, when called from FORTRAN, i.e. stored backwards. (not forwards, as in Hollerith strings)

4- GNAM allows now the use of all F's primary name for disk files handled by the TSS library routines. This case is no longer interpreted as a previous setting by SETNAM, which usually resulted in a protection mode violation. However, this does not mean that the use of all F's as a name is free of trouble, and the purpose of the modification is primarily to make it easier to declare an unexpected file.

5- MOVE1, MOVE2, MOVE3
This is a utility routine mainly used by the library routine themselves. The modification provides more facilities, when dealing with Mad list arguments.

6- .READ, .PRINT, etc...
Used by Input-Output Mad statements. There was a bug in the processing of MAD list arguments going forwards. This bug has been corrected.

7- GTNAM M = GTNAM.($_CLASS$) (similar in FØRTRAN)
Searches for the first file which does not exist in the

series ...001, ...002, etc..., with secondary name CLASS, then tries to delete the following file, if any, then returns into M the first BCD primary name available in the series of files CLASS.

8- CØLT Utility routine mainly used by library routines. It provides a standard roof for the handling of variable length calling sequences.

9- DEFBC, DERBC, DELBC
Converts binary integer into a decimal BCD number with leading zeros. Usable by MAD or FORTRAN programs.
M = DEFBC.(K) the full word K is converted into M M is modulo gggggg
M = DELBC.(K) the left half of K is used.
M = DERBC.(K) the right half of K is used.

10- ØCABC, ØCDBC, ØCLBC, ØCRBC
Converts binary numbers into a printable octal representation.
M = ØCABC. (K) converts address field of K
M = OCDBC. (K) converts decrement field of K
both the above routines yield 6 digits. (0 - 7) usable in FØRTRAN with similar calls.

11- BZEL blanks out leading zeros. Yields 0 if argument is null.
M = BZEL. (K) or M = BZEL (K)
returns into M the content of K after replacing leading zero with blanks. A right justified zero is produced if K = 0.

12- ZEL Zeros out leading blanks.
M = ZEL. (K) or M = ZEL (K)
similar to BZEL

13- RJUST right justifies a BCD word.
M = FJUST. (K) or M = RJUST (K)
returns into M the content of K right justified with leading blanks. Yields a right justified when K is all blanks.
(N.B. There is already LJUST in the library)

14- TRACE, STRACE Tracing and debugging tool.
May be called as a subroutine, or by the command STRACE typed on the console. Please refer to the coming out Memo for more information.