NON-PRINTING COMPILER

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A short communication regarding a compiler which, with the
1.4.0 compiler and successive
compiler printer versions' options' option, is described.

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(Stamp)
The listing of the LAP code produced by the MUC I.5 compiler is quite often a nuisance. Therefore, the compiler has been modified to give the user the option of suppressing the printout. Three of the functions which make up the compiler have been rewritten: compiler, com1, and com2. The execution of these functions accounts for only a small fraction of the time spent in compiling; therefore, we feel justified in interpreting these functions, rather than compiling and executing them as subroutines. This course of action avoids the difficulties of reassigning upper memory to the compiler and permanent list structures (this problem would arise because the new functions are longer than the functions they replace).

The new compiler is called by an expression of the form

\texttt{compiler(x;s), where } s \text{ is the list of functions to be compiled. If } x \text{ is NIL, then only the first line (identification) and LAP symbol table for the program will be printed. If } x \text{ is not NIL, then the entire LAP assembly will be listed. Thus, } \texttt{compiler(PRINT;functionlist)} \text{ is equivalent to } \texttt{compile(functionlist).}

The function \texttt{excise} is offered to simplify the task of eliminating all traces of the compiler from memory. \texttt{excise(x)} is identical to \texttt{excise(x)}, except that \texttt{excise} also removes the definitions of the \texttt{EXPR}-functions compiler, com1, and com2.

These functions are listed on the next page.
(LAMBDA (X) (HAPLIST (DEFINING X) (FUNCTION (LAMBDA (X))
(REMPROP (CAR X) (QUOTE SUER))
))))

(COMPILER (LAMBDA (X L) (HAPLIST L (FUNCTION (LAMBDA (X))
(COML (CAR J) (GET (CAR J) (QUOTE EXPR))
 (GET (CAR J) (QUOTE FEEXPR))
)
)))))

(COML (LAMBDA (N A B) PROG2
(COND
(A (COM2 (QUOTE SUB) (LENGTH (CADR A)) A N))
(B (COM2 (QUOTE FSUBR) (LENGTH (CADR B)) B N))
((OR (GET N (QUOTE SUBR)) (GET N (QUOTE FSUBR))) PROG2
 (PRINT N) (PRINT (QUOTE $$$ IS ALREADY DEFINED)))
))
(T (PROC2 (PRINT N) (PRINT (QUOTE $$$ IS UNDEFINED)))))

(SETQ N)

(COND (X (PROC2 (PRINT N) (PRINT (QUOTE $$$ IS UNDEFINED))))

(SETQ N)

(COND (X (PROC2 (PRINT N) (PRINT (QUOTE $$$ IS UNDEFINED))))

(DEFINITE)

(EXCISE (LAMBDA (X) (PROG ()
 (REMPROP COMPILER EXPR)
 (REMPROP COML EXPR)
 (REMPROP COM2 EXPR)
 (RETURN (EXCISE X))
)))

))}