**NAME**

m6 – general purpose macroprocessor

**SYNOPSIS**

**m6** [ name ]

**DESCRIPTION**

*M6* copies the standard input to the standard output, with substitutions for any macro calls that appear. When a file name argument is given, that file is read before the standard input.

The processor is as described in the reference with these exceptions:

*#def,arg1,arg2,arg3:* causes *arg1* to become a macro with defining text *arg2* and (optional) built-in serial number *arg3*.

*#del,arg1:* deletes the definition of macro *arg1*.

*#end:* is not implemented.

*#list,arg1:* sends the name of the macro designated by *arg1* to the current destination without recognition of any warning characters; *arg1* is 1 for the most recently defined macro, 2 for the next most recent, and so on. The name is taken to be empty when *arg1* doesn't make sense.

*#warn,arg1,arg2:* replaces the old warning character *arg1* by the new warning character *arg2*.

*#quote,arg1:* sends the definition text of macro *arg1* to the current destination without recognition of any warning characters.

*#serial,arg1:* delivers the built-in serial number associated with macro *arg1*.

*#source,arg1:* is not implemented.

*#trace,arg1:* with *arg1* = '1' causes a reconstruction of each later call to be placed on the standard output with a call level number; other values of *arg1* turn tracing off.

The built-in 'warn' may be used to replace inconvenient warning characters. The example below replaces '#' ':' '<' '>' by '[' ']' '{' '}'.

```
#warn,<#>,[:
[warn,<:>,]:
[warn,[substr,<<>>,1,1;,{]
[warn,[substr,{{>>,2,1;,}]
[now,{calls look like this}]
```

Every built-in function has a serial number, which specifies the action to be performed before the defining text is expanded. The serial numbers are: 1 gt, 2 eq, 3 ge, 4 lt, 5 ne, 6 le, 7 seq, 8 sne, 9 add, 10 sub, 11 mpy, 12 div, 13 exp, 20 if, 21 def, 22 copy, 23 warn, 24 size, 25 substr, 26 go, 27 gobk, 28 del, 29 dnl, 32 quote, 33 serial, 34 list, 35 trace. Serial number 0 specifies no built-in action.

**SEE ALSO**

A. D. Hall, M6 Reference Manual. Computer Science Technical Report #2, Bell Laboratories, 1969.

**DIAGNOSTICS**

Various table overflows and ''impossible'' conditions result in comment and dump. There are no diagnostics for poorly formed input.

**AUTHOR**

M. D. McIlroy

**BUGS**

Provision should be made to extend tables as needed, instead of wasting a big fixed core allocation. You get what the PDP11 gives you for arithmetic.