


```

MM      MM      TTTTTTTTTT  HH      HH      GGGGGGGG  SSSSSSSS  IIIIII  GGGGGGGG  NN      NN
MM      MM      TTTTTTTTTT  HH      HH      GGGGGGGG  SSSSSSSS  IIIIII  GGGGGGGG  NN      NN
MMMM    MMMM      TT          HH      HH      GG          SS          II       GG          NN      NN
MMMM    MMMM      TT          HH      HH      GG          SS          II       GG          NN      NN
MM      MM      TT          HH      HH      GG          SS          II       GG          NN      NN
MM      MM      TT          HH      HH      GG          SS          II       GG          NN      NN
MM      MM      TT          HH      HH      GG          SS          II       GG          NN      NN
MM      MM      TT          HHHHHHHHHH  GG          SSSSSS  II       GG          NN      NN
MM      MM      TT          HHHHHHHHHH  GG          SSSSSS  II       GG          NN      NN
MM      MM      TT          HH      HH      GG  GGGGGG  SS          II       GG  GGGGGG  NN      NN
MM      MM      TT          HH      HH      GG  GGGGGG  SS          II       GG  GGGGGG  NN      NN
MM      MM      TT          HH      HH      GG          GG          SS          II       GG          NN      NN
MM      MM      TT          HH      HH      GG          GG          SS          II       GG          NN      NN
MM      MM      TT          HH      HH      GG          GG          SS          II       GG          NN      NN
MM      MM      TT          HH      HH      GGGGGG  SSSSSSSS  IIIIII  GGGGGG  NN      NN
MM      MM      TT          HH      HH      GGGGGG  SSSSSSSS  IIIIII  GGGGGG  NN      NN

```

```

LL      IIIIII  SSSSSSSS
LL      IIIIII  SSSSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SSSSSS
LL      II      SSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLL  IIIIII  SSSSSSSS

```

(2) 50
(3) 62
(4) 93

HISTORY ; Detailed Current Edit History
DECLARATIONS
MTH\$GSIGN - G Transfer of Sign

```

0000 1      .TITLE  MTH$GSIGN      ; G Floating Transfer of Sign
0000 2      .IDENT  /1-003/        ; File: MTHGSIGN.MAR   EDIT:JCWH1003
0000 3
0000 4
0000 5 :*****
0000 6 :*
0000 7 :*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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0000 22 :*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
0000 23 :*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0000 24 :*
0000 25 :*
0000 26 :*****
0000 27
0000 28
0000 29 : FACILITY: MATH LIBRARY
0000 30 : ++
0000 31 : ABSTRACT:
0000 32 :   This module contains routine MTH$GSIGN:
0000 33 :   Return arg1 with sign of arg2.
0000 34 :
0000 35 :
0000 36 : --
0000 37 :
0000 38 : VERSION: 1
0000 39 :
0000 40 : HISTORY:
0000 41 :
0000 42 : AUTHOR:
0000 43 :   Steven B. Lionel, 26-Jan-79: Version 1
0000 44 :
0000 45 : MODIFIED BY:
0000 46 :
0000 47 :
0000 48 :

```

MTH\$GSIGN
1-003

```
0000 50      .SBTTL HISTORY          ; Detailed Current Edit History
0000 51
0000 52
0000 53      ; Edit History for Version 1 of MTH$GSIGN
0000 54      ;
0000 55      ; 1-001 - Adapted from MTH$DSIGN version 1-001. SBL 26-Jan-79
0000 56      ; 1-002 - Eliminated reserved operand exception by including a
0000 57      ;      logic branch for input arguments with a value of 0.
0000 58      ;      RNH 11-FEB-81
0000 59      ; 1-003 - Added register R2 to the entry mask. JCW 20-Jul-84
0000 60      ;
```

```
0000 62      .SBTTL  DECLARATIONS
0000 63
0000 64 :
0000 65 : INCLUDE FILES:
0000 66 :     NONE
0000 67 :
0000 68 :
0000 69 :
0000 70 : EXTERNAL SYMBOLS:
0000 71 :     NONE
0000 72 :
0000 73 :
0000 74 :
0000 75 : MACROS:
0000 76 :     NONE
0000 77 :
0000 78 :
0000 79 :
0000 80 : PSECT DECLARATIONS:
0000 81 :     .PSECT  _MTH$CODE          PIC, SHR, LONG, EXE, NOWRT
0000 82 :
0000 83 :
0000 84 : EQUATED SYMBOLS:
0000 85 :     NONE
0000 86 :
0000 87 :
0000 88 :
0000 89 : OWN STORAGE:
0000 90 :     NONE
0000 91 :
```

```

0000 93      .SBTTL  MTH$GSIGN - G Transfer of Sign
0000 94
0000 95      :++
0000 96      : FUNCTIONAL DESCRIPTION:
0000 97      :   Return the value of arg1 with the sign of arg2.
0000 98      :
0000 99      :
0000 100     : CALLING SEQUENCE:
0000 101     :
0000 102     :   Transfer_of_sign.wg.v = MTH$GSIGN (arg1.rg.r, arg2.rg.r)
0000 103     :
0000 104     :
0000 105     : INPUT PARAMETERS:
0000 106     :   The two input parameters are G floating-point
0000 107     :   values and are call-by-reference.
0000 108     :
0000 109     :
0000 110     : IMPLICIT INPUTS:
0000 111     :   NONE
0000 112     :
0000 113     : OUTPUT PARAMETERS:
0000 114     :   NONE
0000 115     :
0000 116     : IMPLICIT OUTPUTS:
0000 117     :   NONE
0000 118     :
0000 119     : COMPLETION CODES:
0000 120     :   NONE
0000 121     :
0000 122     : SIDE EFFECTS:
0000 123     :   NONE
0000 124     :
0000 125     :
0000 126     :--
0000 127
0000 128
0000 129
0004 0000 130     .ENTRY  MTH$GSIGN,      ^M<R2>
0002 131
52  50 08 BC 01 0F 52 04 0002 132     MOVG   @4(AP), R0           ; R0/R1 = arg1
0007 133     BEQL   RETURN          ; Arg = 0, do not transfer sign
0009 134     EXTZV  #15, #1, @8(AP), R2 ; Get sign
000F 135     INSV   R2, #15, #1, R0    ; Transfer
0014 136     RETURN: RET
0015 137
0015 138
0015 139     .END

```

MTH\$GSIGN
Symbol table

; G Floating Transfer of Sign

H 2

16-SEP-1984 01:30:20

VAX/VMS Macro V04-00

Page 5

6-SEP-1984 11:24:02

[MTHRTL.SRC]MTHGSIGN.MAR;1

(4)

MTH\$GSIGN 00000000 RG 01
RETURN 00000014 R 01

+-----+
! Psect synopsis !
+-----+

PSECT name	Allocation	PSECT No.	Attributes
ABS	00000000 (0.)	00 (0.)	NOPIC USR
MTH\$CODE	00000015 (21.)	01 (1.)	PIC USR

CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
CON REL LCL SHR EXE RD NOWRT NOVEC LONG

+-----+
! Performance indicators !
+-----+

Phase	Page faults	CPU Time	Elapsed Time
Initialization	33	00:00:00.09	00:00:00.92
Command processing	122	00:00:00.49	00:00:05.87
Pass 1	66	00:00:00.37	00:00:02.26
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	38	00:00:00.30	00:00:01.40
Symbol table output	1	00:00:00.01	00:00:00.01
Psect synopsis output	3	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	265	00:00:01.28	00:00:10.48

The working set limit was 750 pages.
1390 bytes (3 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 2 non-local and 0 local symbols.
139 source lines were read in Pass 1, producing 10 object records in Pass 2.
0 pages of virtual memory were used to define 0 macros.

+-----+
! Macro library statistics !
+-----+

Macro library name	Macros defined
_\$255\$DUA28:[SYSLIB]STARLET.MLB;2	0

0 GETS were required to define 0 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/DISABLE=(GLOBAL,TRACEBACK)/LIS=LIS\$:MTHGSIGN/OBJ=OBJ\$:MTHGSIGN MSRC\$:MTHGSIGN/UPDATE=(ENH\$:MTHGSIGN)

The image displays a grid of 100 terminal windows, each showing a different screen from the LIS (Library Information System) software. The screens are arranged in a 10x10 grid. Each window contains a unique interface with various data fields, tables, and headers. Some windows have titles like 'MTHGSTGN LIS', 'MTHHCOSH LIS', 'MTHHACOS LIS', 'MTHGPROD LIS', 'MTHGSINCO LIS', 'MTHHASIN LIS', 'MTHHATAN LIS', 'MTHGTAN LIS', 'MTHGTANH LIS', 'MTHGSORT LIS', 'MTHGSINH LIS', and 'MTHHEXP LIS'. The content within each window is dense and technical, typical of a mainframe terminal display.