```
BBBBBBBBBBBB        AAAAAAAAA       SSSSSSSSSSS  RRRRRRRRRRR     TTTTTTTTTTTTTTT  LLL
BBBBBBBBBBBB        AAAAAAAAA       SSSSSSSSSSS  RRRRRRRRRRR     TTTTTTTTTTTTTTT  LLL
BBBBBBBBBBBB        AAAAAAAAA       SSSSSSSSSSS  RRRRRRRRRRR     TTTTTTTTTTTTTTT  LLL
BBB          BBB   AAA         AAA  SSS          RRR         RRR       TTT        LLL
BBB          BBB   AAA         AAA  SSS          RRR         RRR       TTT        LLL
BBB          BBB   AAA         AAA  SSS          RRR         RRR       TTT        LLL
BBB          BBB   AAA         AAA  SSS          RRR         RRR       TTT        LLL
BBB          BBB   AAA         AAA  SSS          RRR         RRR       TTT        LLL
BBB          BBB   AAA         AAA  SSS          RRR         RRR       TTT        LLL
BBBBBBBBBBBB       AAA         AAA     SSSSSSSSS    RRRRRRRRRRR       TTT        LLL
BBBBBBBBBBBB       AAA         AAA     SSSSSSSSS    RRRRRRRRRRR       TTT        LLL
BBBBBBBBBBBB       AAA         AAA     SSSSSSSSS    RRRRRRRRRRR       TTT        LLL
BBB          BBB   AAAAAAAAAAAAAAA           SSS  RRR   RRR         TTT        LLL
BBB          BBB   AAAAAAAAAAAAAAA           SSS  RRR   RRR         TTT        LLL
BBB          BBB   AAAAAAAAAAAAAAA           SSS  RRR   RRR         TTT        LLL
BBB          BBB   AAA         AAA           SSS  RRR      RRR      TTT        LLL
BBB          BBB   AAA         AAA           SSS  RRR      RRR      TTT        LLL
BBB          BBB   AAA         AAA           SSS  RRR      RRR      TTT        LLL
BBBBBBBBBBBB       AAA         AAA  SSSSSSSSSSS  RRR         RRR    TTT        LLLLLLLLLLLLLLL
BBBBBBBBBBBB       AAA         AAA  SSSSSSSSSSS  RRR         RRR    TTT        LLLLLLLLLLLLLLL
BBBBBBBBBBBB       AAA         AAA  SSSSSSSSSSS  RRR         RRR    TTT        LLLLLLLLLLLLLLL
```

FILEID**BASRIGHT

```
BBBBBBBB      AAAAAA      SSSSSSSS  RRRRRRRR      IIIIII      GGGGGGGG  HH      HH  TTTTTTTTTT
BBBBBBBB      AAAAAA      SSSSSSSS  RRRRRRRR      IIIIII      GGGGGGGG  HH      HH  TTTTTTTTTT
BB      BB   AA      AA  SS        RR      RR      II      GG          HH      HH      TT
BB      BB   AA      AA  SS        RR      RR      II      GG          HH      HH      TT
BB      BB   AA      AA  SS        RR      RR      II      GG          HH      HH      TT
BB      BB   AA      AA  SS        RR      RR      II      GG          HH      HH      TT
BBBBBBBB     AA      AA    SSSSSS  RRRRRRRR        II      GG          HHHHHHHHHH      TT
BBBBBBBB     AA      AA    SSSSSS  RRRRRRRR        II      GG          HHHHHHHHHH      TT
BB      BB   AAAAAAAAAA          SS  RR   RR       II      GG  GGGGGG  HH      HH      TT
BB      BB   AAAAAAAAAA          SS  RR   RR       II      GG  GGGGGG  HH      HH      TT
BB      BB   AA      AA          SS  RR    RR      II      GG      GG  HH      HH      TT      ....
BB      BB   AA      AA          SS  RR    RR      II      GG      GG  HH      HH      TT      ....
BBBBBBBB     AA      AA  SSSSSSSS  RR      RR    IIIIII      GGGGGG    HH      HH      TT      ....
BBBBBBBB     AA      AA  SSSSSSSS  RR      RR    IIIIII      GGGGGG    HH      HH      TT      ....
```

```
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
```

```
;     1          0001  0 MODULE BAS$RIGHT (                    ! Extract the substring of the BASIC RIGHT
;     2          0002  0                 IDENT = '1-006'       ! File: BASRIGHT.B32
;     3          0003  0                 ) =
;     4          0004  1 BEGIN
;     5          0005  1 !
;     6          0006  1 !****************************************************************************
;     7          0007  1 !*                                                                          *
;     8          0008  1 !*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                                 *
;     9          0009  1 !*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                   *
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;    24          0024  1 !*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                  *
;    25          0025  1 !*                                                                          *
;    26          0026  1 !*                                                                          *
;    27          0027  1 !****************************************************************************
;    28          0028  1 !
;    29          0029  1
;    30          0030  1 !++
;    31          0031  1 ! FACILITY: String support library
;    32          0032  1 !
;    33          0033  1 ! ABSTRACT:
;    34          0034  1 !
;    35          0035  1 !       This module extracts a substring according to the
;    36          0036  1 !       BASIC-PLUS-2 syntax.  It finds the substring of a main string
;    37          0037  1 !       starting at the character position specified by the input parameter
;    38          0038  1 !       and continues through the last character of the string.  This
;    39          0039  1 !       substring is copied to the destination string.
;    40          0040  1 !
;    41          0041  1 ! ENVIRONMENT: User mode, AST level or not or mixed
;    42          0042  1 !
;    43          0043  1 ! AUTHOR: R. Will, CREATION DATE: 19-Feb-79
;    44          0044  1 !
;    45          0045  1 ! MODIFIED BY:
;    46          0046  1 !
;    47          0047  1 !  R. Will, 19-Feb-79: VERSION 01
;    48          0048  1 ! 01    - original
;    49          0049  1 ! 02    - change linkage and call to COPY routine. 15-mar-79
;    50          0050  1 ! 1-003 - Change string linkages to start with STR$.  JBS 04-JUN-1979
;    51          0051  1 ! 1-004 - Change call to STR$$COPY.  JBS 16-JUL-1979
;    52          0052  1 ! 1-005 - Define an aux variable to improve the code generated.
;    53          0053  1 !         JBS 11-OCT-1979
;    54          0054  1 ! 1-006 - CALL STRRIGHT, DELETE THIS MODULE WHEN COMPILER CALLS STR.  RW  1-Nov-79
;    55          0055  1 !--
;    56          0056  1
;    57          0057  1 !<BLF/PAGE>
```

```
;    59          0058  1 !
;    60          0059  1 ! SWITCHES:
;    61          0060  1 !
;    62          0061  1
;    63          0062  1 SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
;    64          0063  1
;    65          0064  1 !
;    66          0065  1 ! LINKAGES:
;    67          0066  1 !
;    68          0067  1
;    69          0068  1 !
;    70          0069  1 ! TABLE OF CONTENTS:
;    71          0070  1 !
;    72          0071  1
;    73          0072  1 FORWARD ROUTINE
;    74          0073  1     BAS$RIGHT : NOVALUE;                    ! Find the RIGHT of a string
;    75          0074  1
;    76          0075  1 !
;    77          0076  1 ! INCLUDE FILES:
;    78          0077  1 !
;    79          0078  1
;    80          0079  1 REQUIRE 'RTLIN:RTLPSECT';                   ! Declare PSECTs code
;    81          0174  1
;    82          0175  1 !
;    83          0176  1 ! MACROS:
;    84          0177  1 !
;    85          0178  1 !
;    86          0179  1 ! EQUATED SYMBOLS:
;    87          0180  1 !
;    88          0181  1 !
;    89          0182  1 ! PSECT DECLARATIONS
;    90          0183  1 !
;    91          0184  1 DECLARE_PSECTS (BAS);
;    92          0185  1 !
;    93          0186  1 ! OWN STORAGE:
;    94          0187  1 !
;    95          0188  1 !
;    96          0189  1 ! EXTERNAL REFERENCES:
;    97          0190  1 !
;    98          0191  1
;    99          0192  1 EXTERNAL ROUTINE
;   100          0193  1     STR$RIGHT;              ! Routine to do the copy
;   101          0194  1
```

```
;  103          0195  1 GLOBAL ROUTINE BAS$RIGHT (                            !
;  104          0196  1         DEST_DESC,                                    ! Pointer to destination descriptor
;  105          0197  1         SRC_DESC,                                     ! Pointer to source descriptor
;  106          0198  1         CHAR_POS                                      ! First character to be included
;  107          0199  1     ) : NOVALUE =
;  108          0200  1
;  109          0201  1 !++
;  110          0202  1 ! FUNCTIONAL DESCRIPTION:
;  111          0203  1 !
;  112          0204  1 !       This routine extracts the characters starting at the
;  113          0205  1 !       character position in the source string specified by the input
;  114          0206  1 !       parameter and continuing through the last character of the source
;  115          0207  1 !       string and copies that substring
;  116          0208  1 !       to the destination string (by JSB to STR$$COPY_R_R8) according
;  117          0209  1 !       to the syntax of the class of the destination string.
;  118          0210  1 !       If the input character position is < 2 then the entire source
;  119          0211  1 !       string is copied.  If the input character position is > the length
;  120          0212  1 !       of the source string, then the destination string becomes a null
;  121          0213  1 !       string.
;  122          0214  1 !
;  123          0215  1 ! FORMAL PARAMETERS:
;  124          0216  1 !
;  125          0217  1 !       DEST_DESC.wt.dx         pointer to destination string descriptor
;  126          0218  1 !       SRC_DESC.rt.dx          pointer to source string descriptor
;  127          0219  1 !       CHAR_POS.rw.v           character position in src to start substring
;  128          0220  1 !
;  129          0221  1 ! IMPLICIT INPUTS:
;  130          0222  1 !
;  131          0223  1 !       NONE
;  132          0224  1 !
;  133          0225  1 ! IMPLICIT OUTPUTS:
;  134          0226  1 !
;  135          0227  1 !       NONE
;  136          0228  1 !
;  137          0229  1 ! ROUTINE VALUE:
;  138          0230  1 ! COMPLETION CODES:
;  139          0231  1 !
;  140          0232  1 !       NONE
;  141          0233  1 !
;  142          0234  1 ! SIDE EFFECTS:
;  143          0235  1 !
;  144          0236  1 !       NONE
;  145          0237  1 !
;  146          0238  1 !--
;  147          0239  1
;  148          0240  2     BEGIN
;  149          0241  2
;  150          0242  2     MAP
;  151          0243  2         DEST_DESC : REF BLOCK [8,BYTE];
;  152          0244  2
;  153          0245  2     MAP
;  154          0246  2         SRC_DESC : REF BLOCK [8,BYTE];
;  155          0247  2
;  156          0248  2     STR$RIGHT (DEST_DESC [0,0,0,0], SRC_DESC [0,0,0,0], CHAR_POS);
;  157          0249  2     RETURN;
;  158          0250  1     END;                                              !End of BAS$RIGHT
```

```
                                                        .TITLE  BAS$RIGHT
                                                        .IDENT  \1-006\

                                                        .EXTRN  STR$RIGHT

                                                        .PSECT  _BAS$CODE,NOWRT,  SHR,  PIC,2

                                                0000 00000      .ENTRY  BAS$RIGHT, Save nothing                 ; 0195
                                            0C  AC  9F 00002    PUSHAB  CHAR_POS                                ; 0248
                                        7E  04  AC  7D 00005    MOVQ    DEST_DESC, -(SP)                        ;
                              00000000G  00     03  FB 00009    CALLS   #3, STR$RIGHT                           ;
                                                04  00010    RET                                             ; 0250

; Routine Size:  17 bytes,    Routine Base:  _BAS$CODE + 0000

;  159          0251  1
;  160          0252  1 END                                        !End of module
;  161          0253  1
;  162          0254  0 ELUDOM



;                                PSECT SUMMARY
;
;       Name                    Bytes                           Attributes
;
;  _BAS$CODE                         17  NOVEC,NOWRT,  RD ,  EXE,  SHR,  LCL,  REL,  CON,  PIC,ALIGN(2)




;                                     COMMAND QUALIFIERS

;       BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LIS$:BASRIGHT/OBJ=OBJ$:BASRIGHT MSRC$:BASRIGHT/UPDATE=(ENH$:BASRIGHT)

; Size:         17 code + 0 data bytes
; Run Time:         00:01.8
; Elapsed Time:     00:05.5
; Lines/CPU Min:     8659
; Lexemes/CPU-Min: 22500
; Memory Used:  18 pages
; Compilation Complete
```

BASRSTSUB
LIS

BASRAD50
LIS

BASRSET
LIS

BASPUT
LIS

BASRECPRO
LIS

BASRESTAR
LIS

BASRANDOM
LIS

BASREMAP
LIS

BASRESTOR
LIS

BASRIGHT
LIS