



```

LL      IIIIII  BBBB8888  DDDDDDDD  AAAAAA  YY      YY  WW      WW  KK      KK
LL      IIIIII  88888888  DDDDDDDD  AAAAAA  YY      YY  WW      WW  KK      KK
LL      II      88      88  DD      DD  AA      AA  YY      YY  WW      WW  KK      KK
LL      II      88      88  DD      DD  AA      AA  YY      YY  WW      WW  KK      KK
LL      II      88      88  DD      DD  AA      AA  YY      YY  WW      WW  KK      KK
LL      II      88888888  DD      DD  AA      AA  YY      YY  WW      WW  KK      KK
LL      II      88888888  DD      DD  AA      AA  YY      YY  WW      WW  KK      KK
LL      II      88      88  DD      DD  AA      AA  YY      YY  WW      WW  KK      KK
LL      II      88      88  DD      DD  AA      AA  YY      YY  WW      WW  KK      KK
LL      II      88      88  DD      DD  AA      AA  YY      YY  WWW      WWW  KK      KK
LL      II      88888888  DD      DD  AA      AA  YY      YY  WWW      WWW  KK      KK
LL      IIIIII  88888888  DDDDDDDD  AA      AA  YY      YY  WW      WW  KK      KK
LL      IIIIII  88888888  DDDDDDDD  AA      AA  YY      YY  WW      WW  KK      KK

```

```

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      IIIIII  SSSSSSSS
LL      IIIIII  SSSSSSSS

```

LIB\$DAY\_OF\_WEEK  
Table of contents

; Find numeric day of week

K 11

16-SEP-1984 02:05:50 VAX/VMS Macro V04-00

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LIB  
V04

(2) 44  
(3) 50  
(4) 77

HISTORY ; Detailed Current Edit History  
DECLARATIONS  
LIB\$DAY\_OF\_WEEK -

```

0000 1 .TITLE LIB$DAY_OF_WEEK ; Find numeric day of week
0000 2 .IDENT 'V04-000'
0000 3
0000 4 :*****
0000 5 :*
0000 6 :* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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0000 21 :* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS *
0000 22 :* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL. *
0000 23 :*
0000 24 :*
0000 25 :*****
0000 26 :
0000 27 :
0000 28 : FACILITY: Language-independent support library
0000 29 : ++
0000 30 : ABSTRACT:
0000 31 :
0000 32 :
0000 33 : --
0000 34 :
0000 35 : VERSION: 1
0000 36 :
0000 37 : HISTORY:
0000 38 :
0000 39 : AUTHOR:
0000 40 :
0000 41 : Herb Jacobs November 1981
0000 42 :

```

LIB  
Sym  
LIB  
LIB  
SYS  
  
PSE  
---  
\_LI  
  
Pha  
---  
Ini  
Com  
Pas  
Sym  
Pas  
Sym  
Pse  
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The  
179  
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134  
2 p  
  
Mac  
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-S2  
-S2  
-S2  
TOT  
12  
The  
MAC

LIB\$DAY\_OF\_WEEK  
V04-000

M 11  
; Find numeric day of week  
HISTORY ; Detailed Current Edit History

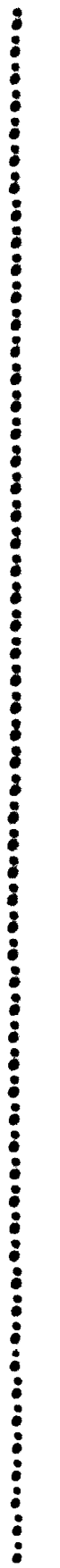
16-SEP-1984 02:05:50 VAX/VMS Macro V04-00  
5-SEP-1984 01:46:03 [LOGIN.SRC]LIBDAYWK.MAR;1

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(2)

\*\*F

0000 44 .SBTTL HISTORY ; Detailed Current Edit History  
0000 45  
0000 46 ; EDIT HISTORY:  
0000 47 ;  
0000 48 ; 1-001 -

```
0000 50 .SBTTL DECLARATIONS
0000 51
0000 52
0000 53 : INCLUDE FILES:
0000 54 :
0000 55
0000 56 :
0000 57 : EXTERNAL SYMBOLS:
0000 58 :
0000 59
0000 60 :
0000 61 : MACROS:
0000 62 :
0000 63
0000 64 :
0000 65 : PSECT DECLARATIONS:
0000 66 :
0000 67
00000000 68 .PSECT _LIB$CODE PIC, SHR, LONG, EXE, NOWRT
0000 69
0000 70 :
0000 71 : EQUATED SYMBOLS:
0000 72 :
0000 73
00000002 0000 74 offset = 7-5 ; make monday 1, tuesday 2, etc.
0000 75
```



```

0000 77 .SBTTL LIB$DAY_OF_WEEK -
0000 78
0000 79 :++
0000 80 : FUNCTIONAL DESCRIPTION:
0000 81 :
0000 82 : This routine returns the numeric day of the week for an input time
0000 83 : value. If the input value is omitted, the current day of the week
0000 84 : today is, is returned. Monday is considered day 1, and Sunday day
0000 85 : 7.
0000 86 :
0000 87 : CALLING SEQUENCE:
0000 88 :
0000 89 : ret = LIB$DAY_OF_WEEK ( time_64_bit_Q, output_day_L)
0000 90 :
0000 91 : INPUT PARAMETERS:
0000 92 :
0000 93 : time_64_bit_Q - Address of a quadword representing time or 0
0000 94 :
0000 95 : IMPLICIT INPUTS:
0000 96 :
0000 97 : If time_64_bit_Q is 0, then the current system time is used.
0000 98 :
0000 99 : OUTPUT PARAMETERS:
0000 100 :
0000 101 : output_day_L - Address of a longword to recieve the day
0000 102 :
0000 103 : IMPLICIT OUTPUTS:
0000 104 :
0000 105 : NONE
0000 106 :
0000 107 : COMPLETION CODES:
0000 108 :
0000 109 : SSS_NORMAL - success
0000 110 :
0000 111 : SIDE EFFECTS:
0000 112 :
0000 113 : NONE
0000 114 :
0000 115 : --
0000 116 : .entry -

```

```

0000 117 lib$day_of_week, ^M<>
50 00000000'8F 0000 118 movl #Lib$_invarg,r0 ; assume error
6C 02 91 0009 119 cmpb #2,(ap) ; are there at least 2 arguments
51 04 AC D0 000C 120 bgtru 100$ ; branch if not
OF 12 0012 121 movl 4(ap),r1 ; get address of quadword time
51 7E 7E 0014 122 bneq 20$ ; branch if specified
29 50 E9 0017 123 movaq -(sp),r1 ; area to recieve time in, r1 addr of area
50 61 7D 0020 124 $gettim_s(r1) ; get current time
51 50 50 23C34600 8F 7B 0023 125 blbc r0,100$ ; branch if error
51 50 50 000005A0 8F 7B 0026 126 20$: movq (r1),r0 ; get the time
51 50 50 08 BC 51 07 C1 002F 127 ediv #60*10*1000*1000,r0,r0,r1 ; get the time in minutes
51 50 50 08 BC 51 07 C1 0031 128 clrl r1 ; time in minutes from 1858 is only 32 bits
51 50 50 08 BC 51 07 C1 003A 129 ediv #24*60,r0,r0,r1 ; time in days into r0
51 50 50 08 BC 51 07 C1 003D 130 addl #offset,r0 ; account for Nov 17, 1858 being a Wednesday
51 50 50 08 BC 51 07 C1 003F 131 clrl r1 ; again only 32 bits
08 BC 51 07 C1 0044 132 ediv #7,r0,r0,r1 ; r0 number of weeks, r1 day of week
08 BC 51 07 C1 0044 133 addl3 #1,r1,@8(ap) ; store the day number

```

LIB\$DAY\_OF\_WEEK  
V04-000

: Find numeric day of week  
LIB\$DAY\_OF\_WEEK =

C 12

16-SEP-1984 02:05:50 VAX/VMS Macro V04-00  
5-SEP-1984 01:46:03 [LOGIN.SRC]LIBDAYWK.MAR;1

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(4)

LOG  
V04

```
50 01 D0 0049 134      movl  #1,r0
      04 004C 135 100$:  ret
      004D 136
      004D 137      .end
```

```
; set success
; exit, clean stack if needed
```

.....



LIB\$DAY OF WEEK  
Symbol table

; Find numeric day of week

D 12

16-SEP-1984 02:05:50  
5-SEP-1984 01:46:03

VAX/VMS Macro V04-00  
[LOGIN.SRC]LIBDAYWK.MAR;1

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(4)

LOG  
V04

LIB\$DAY OF WEEK 00000000 RG 01  
LIB\$ INVARG \*\*\*\*\* X 01  
OFFSET = 00000002  
SY\$GETTIM \*\*\*\*\* GX 01

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

PSECT name	Allocation	PSECT No.	Attributes
ABS	00000000 ( 0.)	00 ( 0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
LIB\$CODE	0000004D ( 77.)	01 ( 1.)	PIC USR CON REL LCL SHR EXE RD NOWRT NOVEC LONG

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.08	00:00:00.52
Command processing	107	00:00:00.41	00:00:02.75
Pass 1	114	00:00:00.43	00:00:02.84
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	40	00:00:00.20	00:00:01.22
Symbol table output	2	00:00:00.01	00:00:00.01
Psect synopsis output	1	00:00:00.01	00:00:00.01
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	295	00:00:01.14	00:00:07.35

The working set limit was 1050 pages.  
1876 bytes (4 pages) of virtual memory were used to buffer the intermediate code.  
There were 10 pages of symbol table space allocated to hold 4 non-local and 2 local symbols.  
137 source lines were read in Pass 1, producing 14 object records in Pass 2.  
2 pages of virtual memory were used to define 2 macros.

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

Macro library name	Macros defined
-\$255\$DUA28:[LOGIN.OBJ]LOGIN.MLB;1	0
-\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	0
-\$255\$DUA28:[SYSLIB]STARLET.MLB;2	2
TOTALS (all libraries)	2

12 GETS were required to define 2 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:LIBDAYWK/OBJ=OBJ\$:LIBDAYWK MSRC\$:LIBDAYWK/UPDATE=(ENH\$:LIBDAYWK)+EXECMLS/LIB+LIB\$:LOGIN/LIB

A grid of 100 terminal windows, arranged in 10 rows and 10 columns. Each window displays a different screen from the VAX/VMS operating system. The screens vary in content, including system status reports, user prompts, and error messages. Several windows are clearly legible and contain the following text:

- LIBHOUR LIS
- LIBDAYWK LIS
- INITUSER LIS
- LOGIN LIS
- INTERACT LIS

The remaining windows show various system screens, some with headers like 'SYSTEM STATUS' or 'USER PROMPT', and others displaying lists of data or error codes. The overall appearance is that of a multi-user terminal farm or a collection of system diagnostic screens.