```
12-Jul-88 14:35:59 {MCS:MCS:STANFORD}<LANE>HASHDATUM.;4
 File created:
  changes to:
              (VARS HASHDATUMCOMS)
              (FNS GETHASHTEDIT)
previous date:
              15-Sep-87 11:25:28 {MCS:MCS:STANFORD} < LANE > HASHDATUM.; 3
 Read Table:
              INTERLISP
   Package:
              INTERLISP
      Format:
               XCCS
;; Copyright (c) 1985, 1986, 1987, 1988 by Stanford University. All rights reserved.
(RPAGO HASHDATUMCOMS
       ((FNS GETHASHDATUM PUTHASHDATUM)
        (MACROS GETHASHBITMAP PUTHASHBITMAP GETHASHBINARYBITMAP PUTHASHBINARYBITMAP GETHASHGRAPH PUTHASHGRAPH
               GETHASHUGLY PUTHASHUGLY PUTHASHTEDIT)
        (FNS GETHASHTEDIT \WRITEBM) (DECLARE%: DONTCOPY DOEVAL@COMPILE (FILES (LOADCOMP)
                                                   HASH))
        (FILES HASH)))
(DEFINEO
(GETHASHDATUM
                                                                   (* cdl "28-Jun-85 10:07")
  [LAMBDA (KEY HASHFILE READFN)
    (PROG
          ((HASHTEXTPTR (GETHASHFILE KEY HASHFILE)))
          (if (type? HashTextPtr HASHTEXTPTR)
              then (with HashFile HASHFILE (with HashTextPtr HASHTEXTPTR (SETFILEPTR Stream Start))
                         (RETURN (APPLY* READFN Stream])
(PUTHASHDATUM
  [LAMBDA (KEY DATA HASHFILE PRINTFN)
                                                                   (* cdl "28-Jun-85 10:17")
    (with HashFile (SETQ HASHFILE (GTHASHFILE HASHFILE T))
          (SETFILEPTR Stream -1)
          (PROG [ (HASHTEXTPTR (create HashTextPtr
                                     Start _ (GETEOFPTR Stream)
                (with HashTextPtr HASHTEXTPTR (APPLY* PRINTFN DATA Stream)
                     (SETQ End (GETEOFPTR Stream)))
                (RETURN (PUTHASHFILE KEY HASHTEXTPTR HASHFILE])
(DECLARE%: EVAL@COMPILE
(PUTPROPS GETHASHBITMAP MACRO ((KEY HASHFILE)
                                   (GETHASHDATUM KEY HASHFILE (FUNCTION READBITMAP))))
(PUTPROPS PUTHASHBITMAP MACRO ((KEY BITMAP HASHFILE)
                                   (PUTHASHDATUM KEY BITMAP HASHFILE (FUNCTION PRINTBITMAP))))
(PUTPROPS GETHASHBINARYBITMAP MACRO ((KEY HASHFILE)
                                          (GETHASHDATUM KEY HASHFILE (FUNCTION READBM))))
(PUTPROPS PUTHASHBINARYBITMAP MACRO ((KEY BITMAP HASHFILE)
                                          (PUTHASHDATUM KEY BITMAP HASHFILE (FUNCTION \WRITEBM))))
(PUTPROPS GETHASHGRAPH MACRO ((KEY HASHFILE)
                                   (GETHASHDATUM KEY HASHFILE (FUNCTION READGRAPH))))
(PUTPROPS PUTHASHGRAPH MACRO ((KEY GRAPH HASHFILE)
                                   (PUTHASHDATUM KEY GRAPH HASHFILE (FUNCTION DUMPGRAPH)))))
(PUTPROPS GETHASHUGLY MACRO ((KEY HASHFILE)
                                 (GETHASHDATUM KEY HASHFILE (FUNCTION HREAD))))
(PUTPROPS PUTHASHUGLY MACRO ((KEY UGLYVAR HASHFILE)
                                 (PUTHASHDATUM KEY UGLYVAR HASHFILE (FUNCTION HPRINT))))
(PUTPROPS PUTHASHTEDIT MACRO ((KEY TEXTOBJ HASHFILE)
                                 (PUTHASHDATUM KEY TEXTOBJ HASHFILE (FUNCTION TEDIT.PUT.PCTB))))
(DEFINEO
(GETHASHTEDIT
  [LAMBDA (KEY HASHFILE WINDOW PROPS)
                                                                   ; Edited 12-Jul-88 14:33 by cdl
    (with HashTextPtr (GETHASHFILE KEY HASHFILE)
          (OPENTEXTSTREAM (OPENSTREAM (with HashFile HASHFILE File)
                                 'INPUT)
                WINDOW Start End PROPSI)
```

```
(WRITEBM
[LAMBDA (BITMAP STREAM) (* cdl "24-Oct-85 10:51")

(WRITEBM STREAM BITMAP])

(DECLARE%: DONTCOPY DOEVAL@COMPILE
(FILESLOAD (LOADCOMP)
HASH)

(FILESLOAD HASH)

(PUTPROPS HASHDATUM COPYRIGHT ("Stanford University" 1985 1986 1987 1988))
```

{MEDLEY}spusers>HASHDATUM.;1 28-Jun-2024 18:34:03 -- Listed on 30-Jun-2024 13:14:17 --

FUNCTION INDEX			
GETHASHDATUM1 GETHASH	TEDIT1	PUTHASHDATUM	WRITEBM2
MACRO INDEX			
GETHASHBINARYBITMAP 1 GETHASHBITMAP 1 GETHASHGRAPH 1	PUTHASHBINARYBITM	AP1 PUTHAS	HGRAPH