

File created: 17-Mar-87 16:39:13 {DSK}<LISPPFILES2>H.BETA>HENV.;7

changes to: (FNS H.NullW H.PrintInfo H.BUTTONFN HMenuFunction)
(VARS HENVCOMS HMIDDLEMENU HMENUITEMS)

previous date: 25-Feb-87 15:27:15 {DSK}<LISPPFILES2>H.BETA>HENV.;5

Read Table: OLD-INTERLISP-FILE

Package: INTERLISP

Format: XCCS

(RPAQQ HENVCOMS

```
( (VARS *temp-vars* HMENUITEMS HMIDDLEMENU HMenuItems)
  (FNS H H.BUTTONFN H.NullW H.PrintInfo H.delete H.editAxiom H.editSA H.erase H.load H.save HMenuFunction
    HReadProvePrint LoadHKB SaveHKB \DummyFoo \SEE.AT)
  (ADDVARS (BackgroundMenuCommands (H [QUOTE (ADD.PROCESS (QUOTE (H)
    "Open window on logic programming environment"))))
  (VARS (BackgroundMenu NIL))
  (ADVISE LOAD)
  (DECLARE: DONTEVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILERVARS (ADDVARS (NLAMA)
    (NLAML \SEE.AT)
    (LAMA]))
```

(RPAQQ *temp-vars* NIL)

(RPAQQ HMENUITEMS ((Dribble (QUOTE Dribble)
 "Dribble on file")))

(RPAQQ HMIDDLEMENU NIL)

(RPAQQ HMenuItems

```
(("Show Profile" (QUOTE SHOWPROFILE)
  "Show the profile of environment")
("Show(Axiom)" (QUOTE SHOWAXIOM)
  "Pretty-print axioms"
  (SUBITEMS ("Show SA" (QUOTE SHOWSA)
    "Pretty-print semantic attachment")
    ("Show Axiom" (QUOTE SHOWAXIOM)
    "Pretty-print axiom"))))
("Delete(Axiom)" (QUOTE DELETEAXIOM)
  "Erases axiom from database"
  (SUBITEMS ("Delete SA" (QUOTE DELETESA)
    "Erases semantic attachments from database")
    ("DeleteAxiom" (QUOTE DELETEAXIOM)
    "Erases axiom from database"))))
("Edit(Axiom)" (QUOTE EDITAXIOM)
  "Edit axioms"
  (SUBITEMS ("Edit SA" (QUOTE EDITSA)
    "Edit semantic attachment")
    ("EditAxiom" (QUOTE EDITAXIOM)
    "Edit axioms"))))
(SetLimit (QUOTE SETLIMIT)
  "Set limit of depth-search tree")
(Mode (QUOTE MODE)
  "Set mode of demonstration"
  (SUBITEMS (All (QUOTE ALL)
    "Search for all goals")
    (First (QUOTE FIRST)
    "Stop at first goal reached")
    (Interactive (QUOTE INTERACTIVE)
    "Ask user to go on"))))
[Shortform (QUOTE SHORTFORM)
  "Perform the control of occurrence"
  (SUBITEMS (Yes (QUOTE YES)
    (No (QUOTE NO)
  [Trace (QUOTE TRACE)
    "Trace demonstration"
    (SUBITEMS (Trace (QUOTE TRACE)
    (NoTrace (QUOTE NOTRACE)
["Trace PM" (QUOTE TRACEPM)
  "Trace pattern matching"
  (SUBITEMS (Trace (QUOTE TRACEPM)
    (NoTrace (QUOTE NOTRACEPM)
(LoadHKB (QUOTE LOAD)
  "Load H knowledge base")
(SaveHKB (QUOTE SAVE)
  "Save H knowledge base")
("EraseEnv" (QUOTE ERASE)
  "Erase entire environment")
(Exit (QUOTE Exit)
  "Exit from logic environment")))
```

(DEFINEQ

(H
[LAMBDA NIL

(* edited: " 9-Feb-87 14:52")

```
(LET* ((HWINDOW (CREATEW NIL (CONCAT "H " H.RELEASE.NUMBER " -- Horn Clauses Programming Environment "
6 T))
(HMenu (MENUWINDOW (create MENU
MENUCOLUMNS _ 1
TITLE _ "H control window"
ITEMS _ HMenuItems
WHENSELECTEDFN _ (FUNCTION HMenuFunction)
CENTERFLG _ T)))
(HKBMenu (MENUWINDOW (create MENU
MENUCOLUMNS _ 1
TITLE _ "KB loaded:"
ITEMS _ NIL
CENTERFLG _ T)))
(LISPXUSERFN T)
(H.FROM.WINDOW T))
(ATTACHWINDOW HMenu HWINDOW (QUOTE RIGHT)
(QUOTE TOP))
(ATTACHWINDOW HKBMenu HWINDOW (QUOTE LEFT)
(QUOTE TOP))
(PUTWINDOWPROP HWINDOW (QUOTE *functions*)
NIL)
(PUTWINDOWPROP HWINDOW (QUOTE *int-mode*)
(QUOTE first))
(PUTWINDOWPROP HWINDOW (QUOTE *l-trace*)
NIL)
(PUTWINDOWPROP HWINDOW (QUOTE *limit*)
200)
(PUTWINDOWPROP HWINDOW (QUOTE *match-trace*)
NIL)
(PUTWINDOWPROP HWINDOW (QUOTE *predicates*)
NIL)
(PUTWINDOWPROP HWINDOW (QUOTE *shortform*)
T)
(PUTWINDOWPROP HWINDOW (QUOTE *variables*)
NIL)
(OPENW HWINDOW)
(TTYDISPLAYSTREAM HWINDOW)
(USEREXEC (QUOTE ?--))
NIL
(FUNCTION HReadProvePrint))
(CLOSEW HWINDOW])
```

(H.BUTTONFN

(* edited: "17-Mar-87 16:28")

```
[LAMBDA (W)
(COND
((LASTMOUSESTATE LEFT)
T)
((LASTMOUSESTATE MIDDLE)
(SELECTQ [SETQ COM (MENU (OR HMIDDLEMENU (SETQ HMIDDLEMENU (create MENU
ITEMS _ HMENUITEMS]
(Dribble [LET ((PW (GETPROMPTWINDOW W))
(FILE NIL)
(FILENAME NIL))
(CLEARW PW)
(SETQ FILENAME (MKATOM (PROMPTFORWARD "Typescript to file (cr to close): " NIL NIL PW
)))
(FOO)
(CLEARW PW)
(COND
((NULL FILENAME)
(CLOSEF (GETWINDOWPROP W (QUOTE TYPESCRIPTFILE)))
(CLEARW PW)
(PRINTOUT PW (CONCAT (FULLNAME (GETWINDOWPROP W (QUOTE TYPESCRIPTFILE)))
" closed"))
(PUTWINDOWPROP W (QUOTE TYPESCRIPTFILE)
NIL))
(T (SETQ FILE (OPENSTREAM FILENAME (QUOTE OUTPUT)
(QUOTE NEW)))
(if (NULL FILE)
then [PROGN NIL (CLEARW PW)
(PRINTOUT PW (CONCAT "Could not open" (FULLNAME FILENAME]
else (PROGN NIL (CLEARW PW)
(PRINTOUT PW (CONCAT (FULLNAME FILENAME)
" opened"))
(PUTWINDOWPROP W (QUOTE TYPESCRIPTFILE)
FILE])
T])
```

(H.NullW

(* edited: "17-Mar-87 16:33")

```
[LAMBDA (type)
(COND
[(EQ type (QUOTE PM))
(if (NULL *PMwindow*
then (SETQ *PMwindow* (CREATEW NIL "Pattern matching window"))
(DSPSCROLL (QUOTE ON))
```

```

      *PMWindow*)
      (PUTWINDOWPROP *PMWindow* (QUOTE BUTTONEVENTFN)
        (FUNCTION H.BUTTONFN])
    [(EQ type (QUOTE TR))
     (if (NULL *TraceWindow*)
         then (SETQ *TraceWindow* (CREATEW NIL "Tracing window"))
              (DSPSCROLL (QUOTE ON)
                *TraceWindow*)
              (PUTWINDOWPROP *TraceWindow* (QUOTE BUTTONEVENTFN)
                (FUNCTION H.BUTTONFN])
         ((EQ type (QUOTE SH))
          (if (NULL *ShowWindow*)
              then (PROGN NIL (SETQ *ShowWindow* (CREATEW NIL "Show window"))
                             (DSPSCROLL (QUOTE ON)
                               *ShowWindow*)
                             (PUTWINDOWPROP *ShowWindow* (QUOTE BUTTONEVENTFN)
                               (FUNCTION H.BUTTONFN]))
              (H.NullW win-type)
              (LET [(W (COND
                    ((EQ win-type (QUOTE PM))
                     *PMWindow*)
                    ((EQ win-type (QUOTE TR))
                     *TraceWindow*)
                    ((EQ win-type (QUOTE SH))
                     *ShowWindow*)
                    (SHOWPRINT args W)
                    (TERPRI W)
                    (LET [(FILE (GETWINDOWPROP W (QUOTE TYPESCRIPTFILE)
                    (if FILE
                        then (SHOWPRINT args FILE]))
                    (H.delete delendo ax-list)
                    (COND
                    ((NULL ax-list)
                     NIL)
                    ((EQUAL delendo (CAAR ax-list))
                     (CDR ax-list))
                    (T (CONS (CAR ax-list)
                            (H.delete delendo (CDR ax-list))
                    (H.editAxiom
                    [LAMBDA (W)
                    (CLEARW PROMPTWINDOW)
                    (TTYDISPLAYSTREAM PROMPTWINDOW)
                    (LET* [(preds (GETWINDOWPROP W (QUOTE *predicates*)))
                          (name (MENU (create MENU
                                      MENU COLUMNS _ (IPLUS 1 (IQUOTIENT (LENGTH preds)
                                      10))
                                      TITLE _ (QUOTE Predicates)
                                      ITEMS _ (CONS (QUOTE --New--
                                      preds)
                                      MENUBORDERSIZE _ 1
                                      CENTERFLG _ T)))
                          (*dummy-axiom* (LIST (LIST (LIST (QUOTE predicate]
                    [COND
                    ((NULL name)
                     NIL)
                    [(MEMBER name preds)
                     (SETQ *dummy-axiom* (GETPROP name (QUOTE axiom)))
                     (DV *dummy-axiom*)
                     (PUTPROP name (QUOTE axiom)
                               *dummy-axiom*)
                     (MkVars *dummy-axiom* W)
                     (SETQ *dummy-axiom* (LIST (LIST (LIST (QUOTE predicate]
                    (T (SETQ name (MKATOM (PROMPTFORWARD "Name of new axiom: "))))
                     (DV *dummy-axiom*)
                     (PUTPROP name (QUOTE axiom)
                               *dummy-axiom*)
                     (MkVars *dummy-axiom* W)
                     (PUTWINDOWPROP W (QUOTE *predicates*)
                       (CONS name preds]
                     (SETQ *dummy-axiom* (LIST (LIST (LIST (QUOTE predicate])
                    (H.editSA
                    [LAMBDA (W)

```

(H.PrintInfo

[LAMBDA (win-type args) (* edited: "17-Mar-87 16:32")

(* Names for windows are: *PMWindow*, for tracing pattern matching, *TraceWindow*, for tracing window, and *ShowWindow*, for showing window)

```

(H.NullW win-type)
(LET [(W (COND
      ((EQ win-type (QUOTE PM))
       *PMWindow*)
      ((EQ win-type (QUOTE TR))
       *TraceWindow*)
      ((EQ win-type (QUOTE SH))
       *ShowWindow*)
      (SHOWPRINT args W)
      (TERPRI W)
      (LET [(FILE (GETWINDOWPROP W (QUOTE TYPESCRIPTFILE)
      (if FILE
          then (SHOWPRINT args FILE]))

```

(H.delete

[LAMBDA (delendo ax-list) (* edited: "17-Oct-86 15:07")

```

(COND
  ((NULL ax-list)
   NIL)
  ((EQUAL delendo (CAAR ax-list))
   (CDR ax-list))
  (T (CONS (CAR ax-list)
            (H.delete delendo (CDR ax-list))

```

(H.editAxiom

[LAMBDA (W) (* edited: " 6-Feb-87 10:15")

```

(CLEARW PROMPTWINDOW)
(TTYDISPLAYSTREAM PROMPTWINDOW)
(LET* [(preds (GETWINDOWPROP W (QUOTE *predicates*)))
      (name (MENU (create MENU
                      MENU COLUMNS _ (IPLUS 1 (IQUOTIENT (LENGTH preds)
                      10))
                      TITLE _ (QUOTE Predicates)
                      ITEMS _ (CONS (QUOTE --New--
                      preds)
                      MENUBORDERSIZE _ 1
                      CENTERFLG _ T)))
      (*dummy-axiom* (LIST (LIST (LIST (QUOTE predicate]
    [COND
    ((NULL name)
     NIL)
    [(MEMBER name preds)
     (SETQ *dummy-axiom* (GETPROP name (QUOTE axiom)))
     (DV *dummy-axiom*)
     (PUTPROP name (QUOTE axiom)
               *dummy-axiom*)
     (MkVars *dummy-axiom* W)
     (SETQ *dummy-axiom* (LIST (LIST (LIST (QUOTE predicate]
    (T (SETQ name (MKATOM (PROMPTFORWARD "Name of new axiom: "))))
     (DV *dummy-axiom*)
     (PUTPROP name (QUOTE axiom)
               *dummy-axiom*)
     (MkVars *dummy-axiom* W)
     (PUTWINDOWPROP W (QUOTE *predicates*)
       (CONS name preds]
     (SETQ *dummy-axiom* (LIST (LIST (LIST (QUOTE predicate])

```

(H.editSA

[LAMBDA (W) (* edited: " 6-Feb-87 10:15")

```
(CLEARW PROMPTWINDOW)
(LET* [(SAs (GETWINDOWPROP W (QUOTE *functions*)))
      (name (MENU (create MENU
                     MENUCOLUMNS _ (IPLUS 1 (IQUOTIENT (LENGTH SAs)
                                                           10))
                     TITLE _ (QUOTE Functions)
                     ITEMS _ (CONS (QUOTE --New--
                                   SAs)
                                   MENUBORDERSIZE _ 1
                                   CENTERFLG _ T)))
      (*dummy-SA* (LIST (QUOTE LAMBDA)
                       (LIST (QUOTE ARGS)
                             (QUOTE ...))
                       (QUOTE BODY])
      (COND
        ((NULL name)
         NIL)
        [(MEMBER name SAs)
         (SETQ *dummy-SA* (GETPROP name (QUOTE funct)))
         (DV *dummy-SA*)
         (PUTPROP name (QUOTE funct)
                  *dummy-SA*)
         (SETQ *dummy-SA* (LIST (QUOTE LAMBDA)
                               (LIST (QUOTE ARGS)
                                     (QUOTE ...))
                               (QUOTE BODY])
         (T (SETQ name (MKATOM (PROMPTFORWARD "Name of new SA: ")))
            (DV *dummy-SA*)
            (PUTPROP name (QUOTE funct)
                     *dummy-SA*)
            (PUTWINDOWPROP W (QUOTE *functions*)
                          (CONS name SAs))
            (SETQ *dummy-SA* (LIST (QUOTE LAMBDA)
                                  (LIST (QUOTE ARGS)
                                        (QUOTE ...))
                                  (QUOTE BODY]))
```

(H.erase

```
[LAMBDA NIL (* edited: " 5-Feb-87 15:46")
 (PSETQ *functions1* NIL *functions* NIL *predicates1* NIL *predicates* NIL *variables1* NIL *variables* NIL]
)
```

(H.load

```
[LAMBDA (kb) (* edited: " 5-Feb-87 16:10")
 (LET ((numFoo NIL)
      (numPred NIL))
  [LOAD (PACK (APPEND (UNPACK kb)
                    (QUOTE (%. H K B)
                    (SETQ numPred (LENGTH *predicates1*))
                    (SETQ numFoo (LENGTH *functions1*))
                    (for I in *temp-foo* as Q in *functions1* as H from 1 to numFoo do (PUTPROP Q (QUOTE funct)
                                                                                               I))
                    (for I in *temp-pred* as Q in *predicates1* as H from 1 to numPred do (PUTPROP Q (QUOTE axiom)
                                                                                               I))
                    (for Q in *variables1* do (PUTPROP Q (QUOTE variable)
                                                                                               T))
                    (SETQ *predicates* (APPEND *predicates* *predicates1*))
                    (SETQ *functions* (APPEND *functions* *functions1*))
                    (SETQ *variables* (APPEND *variables* *variables1*))
                    T])
```

(H.save

```
[LAMBDA (kb) (* edited: " 5-Feb-87 15:43")
 (LET [[var (PACK (CONS (UNPACK kb)
                      (QUOTE (C O M S)
                      (file (PACK (APPEND (UNPACK kb)
                                        (QUOTE (%. H K B)
                                        [SETQ *temp-foo* (for I in *functions* collect (GETPROP I (QUOTE funct)
                                        [SETQ *temp-pred* (for I in *predicates* collect (GETPROP I (QUOTE axiom)
                                        (PSETQ *functions1* *functions* *predicates1* *predicates* *variables1* *variables*)
                                        [SETQ var (LIST (LIST (QUOTE *functions1*)
                                                                (QUOTE *predicates1*)
                                                                (QUOTE *variables1*)
                                                                (QUOTE *temp-foo*)
                                                                (QUOTE *temp-pred*))
                                        (PUTDEF file (QUOTE FILES)
                                                var)
                                        (MAKEFILE file])
```

(HMenuFunction

```
[LAMBDA (item menu button) (* edited: "17-Mar-87 14:09")
 (LET* [(newitem (CADADR item))
      (mainw (MAINWINDOW (WFROMMENU menu))]
```

```

(KBMenu (CADR (ATTACHEDWINDOWS mainw]
(COND
  ((EQ newitem (QUOTE Exit))
    (PROG NIL
      (GIVE.TTY.PROCESS mainw)
      (BKSYSEBUF (QUOTE (OK)))
      (CLOSEW mainw)))
    ((MEMBER newitem (QUOTE (ALL MODE)))
      (PUTWINDOWPROP mainw (QUOTE *int-mode*)
        (QUOTE all)))
    ((EQ newitem (QUOTE FIRST))
      (PUTWINDOWPROP mainw (QUOTE *int-mode*)
        (QUOTE first)))
    [(EQ newitem (QUOTE SHOWAXIOM))
      (PROG (ans (mm (create MENU
        MENUOLUMNS _ (IPLUS 1 (IQUOTIENT (LENGTH (GETWINDOWPROP mainw (QUOTE
          *predicates*
            )))
              10))
          TITLE _ (QUOTE Predicates)
          ITEMS _ (GETWINDOWPROP mainw (QUOTE *predicates*))
          MENUBORDERSIZE _ 1
          CENTERFLG _ T)))
        (OR (GETWINDOWPROP mainw (QUOTE *predicates*))
          (RETURN T))
      flag
      (SETQ ans (MENU mm))
      (if ans
        then (PROG NIL
          (H.PrintInfo (QUOTE SH)
            (GETPROP ans (QUOTE axiom)))
          (GO flag)
        [(EQ newitem (QUOTE SHOWSA))
          (PROG (ans (mm (create MENU
            MENUOLUMNS _ (IPLUS 1 (IQUOTIENT (LENGTH (GETWINDOWPROP mainw (QUOTE
              *functions*
                )))
                  10))
              TITLE _ (QUOTE Functions)
              ITEMS _ (GETWINDOWPROP mainw (QUOTE *functions*))
              MENUBORDERSIZE _ 1
              CENTERFLG _ T)))
            (OR (GETWINDOWPROP mainw (QUOTE *functions*))
              (RETURN T))
          flag
          (SETQ ans (MENU mm))
          (if ans
            then (PROG NIL
              (H.PrintInfo (QUOTE SH)
                (GETPROP ans (QUOTE funct)))
              (GO flag)
            [(EQ newitem (QUOTE DELETEAXIOM))
              (PROG (ans)
                flag
                (SETQ ans (MENU (create MENU
                  MENUOLUMNS _ (IPLUS 1 (IQUOTIENT (LENGTH (GETWINDOWPROP mainw
                    (QUOTE *predicates*)
                      )))
                        10))
                    TITLE _ (QUOTE Predicates)
                    ITEMS _ (GETWINDOWPROP mainw (QUOTE *predicates*))
                    MENUBORDERSIZE _ 1
                    CENTERFLG _ T)))
                  (if ans
                    then (PROG NIL
                      [PUTWINDOWPROP mainw (QUOTE *predicates*)
                        (DREMOVE ans (GETWINDOWPROP mainw (QUOTE *predicates*)
                          (PUTPROP ans (QUOTE axiom)
                            NIL)
                          (GO flag)
                        [(EQ newitem (QUOTE DELETESA))
                          (PROG (ans)
                            flag
                            (SETQ ans (MENU (create MENU
                              MENUOLUMNS _ (IPLUS 1 (IQUOTIENT (LENGTH (GETWINDOWPROP mainw
                                (QUOTE *functions*)
                                  )))
                                    10))
                                  TITLE _ (QUOTE Functions)
                                  ITEMS _ (GETWINDOWPROP mainw (QUOTE *functions*))
                                  MENUBORDERSIZE _ 1
                                  CENTERFLG _ T)))
                                (if ans
                                  then (PROG NIL
                                    [PUTWINDOWPROP mainw (QUOTE *functions*)
                                      (DREMOVE ans (GETWINDOWPROP mainw (QUOTE *functions*)
                                        (PUTPROP ans (QUOTE funct)
                                          NIL)
                                        (GO flag)

```

```

                                NIL)
                                (GO flag]
(EQ newitem (QUOTE INTERACTIVE))
(PUTWINDOWPROP mainw (QUOTE *int-mode*
T))
(EQ newitem (QUOTE EDITAXIOM))
(H.editAxiom mainw))
(EQ newitem (QUOTE EDITSA))
(H.editSA mainw))
(MEMBER newitem (QUOTE (SHORTFORM YES)))
(PUTWINDOWPROP mainw (QUOTE *shortform*
T))
(EQ newitem (QUOTE NO))
(PUTWINDOWPROP mainw (QUOTE *shortform*
NIL))
(EQ newitem (QUOTE TRACE))
(PUTWINDOWPROP mainw (QUOTE *l-trace*
T))
(EQ newitem (QUOTE NOTRACE))
(PUTWINDOWPROP mainw (QUOTE *l-trace*
NIL))
(EQ newitem (QUOTE SETLIMIT))
(PUTWINDOWPROP mainw (QUOTE *limit*
(RNUMBER "Set new limit:")))
(EQ newitem (QUOTE ERASE))
(for I in (GETWINDOWPROP mainw (QUOTE *predicates*)) do (PUTPROP I (QUOTE axiom
NIL))
(for I in (GETWINDOWPROP mainw (QUOTE *functions*)) do (PUTPROP I (QUOTE funct
NIL))

(PUTWINDOWPROP mainw (QUOTE *functions*
NIL)
(PUTWINDOWPROP mainw (QUOTE *predicates*
NIL)
(PUTWINDOWPROP mainw (QUOTE *variables*
NIL)
(PSETQ *temp-foo* NIL *temp-pred* NIL)
(PSETQ *functions1* NIL *predicates1* NIL *variables1* NIL *PMTraceWindow* NIL *ShowWindow* NIL
*TraceWindow* NIL)
(DETACHWINDOW KBMenu)
(CLOSEW KBMenu)
(ATTACHMENU (create MENU
MENUCOLUMNS _ 1
TITLE _ "KB loaded:"
ITEMS _ NIL
CENTERFLG _ T)

mainw
(QUOTE LEFT)
(QUOTE TOP))
(EQ newitem (QUOTE TRACEPM))
(PUTWINDOWPROP mainw (QUOTE *match-trace*
T))
(EQ newitem (QUOTE NOTRACEPM))
(PUTWINDOWPROP mainw (QUOTE *match-trace*
NIL))
(EQ newitem (QUOTE LOAD))
(LoadHKB mainw))
(EQ newitem (QUOTE SAVE))
(SaveHKB mainw))
(EQ newitem (QUOTE SHOWPROFILE))
(CLEARW PROMPTWINDOW)
(PRINTOUT PROMPTWINDOW (QUOTE Mode:)
.SP 1 (GETWINDOWPROP mainw (QUOTE *int-mode*))
.SP 3 (QUOTE Limit:)
(GETWINDOWPROP mainw (QUOTE *limit*)))
T
(QUOTE Tracing:)
.SP 1 (GETWINDOWPROP mainw (QUOTE *l-trace*))
.SP 3 (QUOTE PMTracing:)
.SP 1 (GETWINDOWPROP mainw (QUOTE *match-trace*))
T])

```

(HReadProvePrint

```

[LAMBDA (x line)
(PROG ((SYSPRETTYFLG T)
(H.?! (LIST x))
(RETURN T])

```

(* edited: "20-Oct-86 14:11")

(LoadHKB

```

[LAMBDA (W)
(CLEARW PROMPTWINDOW)
(TTYDISPLAYSTREAM PROMPTWINDOW)
(LET [(ans (MKATOM (PROMPTFORWARD "Name of KB:")))
(numFoo NIL)
(numPred NIL)
(att-w (CADR (ATTACHEDWINDOWS W]

```

(* edited: " 4-Feb-87 10:14")

```

[LOAD (PACK (APPEND (UNPACK ans)
                    (QUOTE (%. H K B)
(DETACHWINDOW att-w)
(CLOSEW att-w)
(ATTACHMENU (create MENU
                  MENU COLUMNS _ 1
                  TITLE _ "KB loaded:"
                  ITEMS _ (replace ITEMS of (CAR (GETWINDOWPROP att-w (QUOTE MENU)))
                                with (APPEND [fetch ITEMS of (CAR (GETWINDOWPROP att-w (QUOTE MENU)
                                                                (LIST ans)))
                                CENTERFLG _ T)
W
(QUOTE LEFT)
(QUOTE TOP))
(SETQ numPred (LENGTH *predicates1*))
(SETQ numFoo (LENGTH *functions1*))
(for I in *temp-foo* as Q in *functions1* as H from 1 to numFoo do (PUTPROP Q (QUOTE funct)
                                                                    I))
(for I in *temp-pred* as Q in *predicates1* as H from 1 to numPred do (PUTPROP Q (QUOTE axiom)
                                                                    I))
(for Q in *variables1* do (PUTPROP Q (QUOTE variable)
                                    T))
(if (GETWINDOWPROP W (QUOTE *predicates*))
    then (PUTWINDOWPROP W (QUOTE *predicates*)
                        (APPEND (GETWINDOWPROP W (QUOTE *predicates*))
                                *predicates1*))
    else (PUTWINDOWPROP W (QUOTE *predicates*)
                        *predicates1*))
(if (GETWINDOWPROP W (QUOTE *functions*))
    then (PUTWINDOWPROP W (QUOTE *functions*)
                        (APPEND (GETWINDOWPROP W (QUOTE *functions*))
                                *functions1*))
    else (PUTWINDOWPROP W (QUOTE *functions*)
                        *functions1*))
(if (GETWINDOWPROP W (QUOTE *variables*))
    then (PUTWINDOWPROP W (QUOTE *variables*)
                        (APPEND (GETWINDOWPROP W (QUOTE *variables*))
                                *variables1*))
    else (PUTWINDOWPROP W (QUOTE *variables*)
                        *variables1*])

```

(SaveHKB

(* edited: "3-Feb-87 18:15")

```

[LAMBDA (W)
(CLEARW PROMPTWINDOW)
(TTYDISPLAYSTREAM PROMPTWINDOW)
(LET* [(ans (MKATOM (PROMPTFORWARD "Name of KB:"))
      [var (PACK (CONS (UNPACK ans)
                      (QUOTE (C O M S)
(file (PACK (APPEND (UNPACK ans)
                    (QUOTE (%. H K B)
[SETQ *temp-foo* (for I in (GETWINDOWPROP W (QUOTE *functions*)) collect (GETPROP I (QUOTE funct)
[SETQ *temp-pred* (for I in (GETWINDOWPROP W (QUOTE *predicates*)) collect (GETPROP I (QUOTE axiom)
(PSETQ *functions1* (GETWINDOWPROP W (QUOTE *functions*))
      *predicates1*
      (GETWINDOWPROP W (QUOTE *predicates*))
      *variables1*
      (GETWINDOWPROP W (QUOTE *variables*)))
[SETQ var (LIST (LIST (QUOTE *functions1*)
                     (QUOTE *predicates1*)
                     (QUOTE *variables1*)
                     (QUOTE *temp-foo*)
                     (QUOTE *temp-pred*])
(PUTDEF file (QUOTE FILES)
            var)
(MAKEFILE file])

```

(\DummyFoo

(* edited: "25-Feb-87 11:30")

```

[LAMBDA NIL
(PROG NIL
 LOOP
 (BLOCK 600000)
 (GO LOOP])

```

(\SEE.AT

(* edited: "3-Feb-87 17:42")

```

[NLAMBDA (ARG)
(if H.FROM.WINDOW
 then (GETWINDOWPROP HWINDOW ARG)
 else (EVAL ARG])
)

```

```

(ADDTOVAR BackgroundMenuCommands (H [QUOTE (ADD.PROCESS (QUOTE (H)
"Open window on logic programming environment")])

```

```
{MEDLEY}<lispusers>h>H-ENV.;1
(RPAQQ BackgroundMenu NIL)
(PUTPROPS LOAD READVICE [NIL (AROUND NIL (PROG1 (PROG ((UpdateClassBrowsers? NIL))
              (RETURN *)))
              (UpdateClassBrowsers)])
(DECLARE: DONTEVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILERVERS
(ADDTOVAR NLAMA )
(ADDTOVAR NLAML \SEE.AT)
(ADDTOVAR LAMA )
)
```

FUNCTION INDEX

H	1	H.editSA	3	H.PrintInfo	3	LoadHKB	6
H.BUTTONFN	2	H.erase	4	H.save	4	SaveHKB	7
H.delete	3	H.load	4	HMenuFunction	4	\DummyFoo	7
H.editAxiom	3	H.NullW	2	HReadProvePrint	6	\SEE.AT	7

VARIABLE INDEX

temp-vars	1	BackgroundMenuCommands ..	7	HMENUITEMS	1	HMIDDLEMENU	1
BackgroundMenu	8	HENVCOMS	1	HMenuItems	1		

ADVICE INDEX

LOAD	8
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