

File created: 3-Feb-89 15:12:20 {ERIS}<LISPCORE>INTERNAL>LIBRARY>PACMANCORE>PACMAN.;6

changes to: (FNS INCOLORQ HASCOLORDISPLAY PACMANINITNEW MOVEPACMAN ASSIGNDIR BLINKENERGIZERS PLAYERBOARDVAL BOARDVAL CHECKAT COLLISIONCHECK DECIDE DOTCHECK DRAWBOARD DRAWBOARDNEW ENERGIZERCHECK ERASEOBJ FRUITCHECK FRUITINIT GETHISCORES GETMONEY GETMOVE VOICEINPUT XLOCTOSCREEN XSCREENTOLOC YLOCTOSCREEN YSCREENTOLOC HISCORE INPUTMODEQ INTERMISSION1 ISIGN JOYSTICK LOSE MOVEDOWN MOVEGHOST MOVELEFT MOVEOBJ MOVERIGHT MOVEUP NEWHISCORES PACINTRO PACMAN PACMANINIT PACMANNEWGAME PACMANREINIT PAINTOBJ PAINTDOT PUTDOTS PUTDOTSAGAIN PUTENERGIZERS REDODOT REPLACEOBJ SCAN SETBITMAPS SETBOARDVAL SETCHARPROPS SETGCANS SETGLOCS SETPLAYERBOARDVAL SHOW SHOWCAP SHOWHISCORES SPEEDQ)
(VARS PACMANCOMS 1600BITMAP 200BITMAP 400BITMAP 800BITMAP APPLEBITMAP ATTRACTMODE BELLBITMAP BIGPMANC BIGPMANR BIRDBITMAP BLUETIME BOARD BOARDLIST CHERRY CHERRYBITMAP COLORPMANDOWN COLORPMANLEFT COLORPMANRIGHT COLORPMANUP DOT ENERGIZER ENERGIZEROBJ EYESBITMAP FRUIT# FRUITTIME G1BITMAP G2BITMAP G3BITMAP G4BITMAP GINVBITMAP KEYBITMAP MRIGHT ORANGEBITMAP PACMANC PACMANINCOLOR PINEAPPLEBITMAP PMAN PMANDOWN PMANLEFT PMANRIGHT PMANUP PMGAMEOVER)

previous date: 3-Feb-89 12:51:56 {ERIS}<LISPCORE>INTERNAL>LIBRARY>PACMANCORE>PACMAN.;3

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

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(RPAQQ PACMANCOMS

```
((FNS ASSIGNDIR BLINKENERGIZERS PLAYERBOARDVAL BOARDVAL CHECKAT COLLISIONCHECK DECIDE DOTCHECK DRAWBOARD DRAWBOARDNEW ENERGIZERCHECK ERASEOBJ FRUITCHECK FRUITINIT GETHISCORES GETMONEY GETMOVE VOICEINPUT XLOCTOSCREEN XSCREENTOLOC YLOCTOSCREEN YSCREENTOLOC HISCORE INCOLORQ INPUTMODEQ HASCOLORDISPLAY INTERMISSION1 ISIGN JOYSTICK LOSE MOVEDOWN MOVEGHOST MOVELEFT MOVEOBJ MOVEPACMAN MOVERIGHT MOVEUP NEWHISCORES PACINTRO PACMAN PACMANINIT PACMANINITNEW PACMANNEWGAME PACMANREINIT PAINTOBJ PAINTDOT PUTDOTS PUTDOTSAGAIN PUTENERGIZERS REDODOT REPLACEOBJ SCAN SETBITMAPS SETBOARDVAL SETCHARPROPS SETGCANS SETGLOCS SETPLAYERBOARDVAL SHOW SHOWCAP SHOWHISCORES SPEEDQ)  
(VARS 1600BITMAP 200BITMAP 400BITMAP 800BITMAP APPLEBITMAP ATTRACTMODE BELLBITMAP BIGPMANC BIGPMANR BIRDBITMAP BLUETIME BOARD BOARDLIST CHERRY CHERRYBITMAP COLORPMANDOWN COLORPMANLEFT COLORPMANRIGHT COLORPMANUP DOT ENERGIZER ENERGIZEROBJ EYESBITMAP FRUIT# FRUITTIME G1BITMAP G2BITMAP G3BITMAP G4BITMAP GINVBITMAP KEYBITMAP MRIGHT (NEXTMOVE 0)  
ORANGEBITMAP PACMANC PACMANINCOLOR PINEAPPLEBITMAP PMAN PMANDOWN PMANLEFT PMANRIGHT PMANUP PMGAMEOVER PSTREAM (PWINDOW)  
QUARTERBITMAP ROW SIGLOGO STRAWBERRYBITMAP (PACMANWAITTIME 100)  
(PMANINPUTMODE))  
(BITMAPS PMANUPMAP COLORPMANUP PMANRIGHTMAP COLORPMANRIGHT PMANDOWNMAP COLORPMANDOWN PMANLEFTMAP COLORPMANLEFT PACMANCMAP COLORPACMANC DOT COLORDOT ENERGIZER COLORENERGIZER BWG1BITMAP COLORG1BITMAP BWG2BITMAP COLORG2BITMAP BWG3BITMAP COLORG3BITMAP BWG4BITMAP COLORG4BITMAP BWGINVBITMAP COLORGINVBITMAP CHERRYBITMAP COLORCHERRYBITMAP STRAWBERRYBITMAP COLORSTRAWBERRYBITMAP ORANGEBITMAP COLORORANGEBITMAP APPLEBITMAP COLORAPPLEBITMAP PINEAPPLEBITMAP COLORPINEAPPLEBITMAP BIRDBITMAP COLORBIRDBITMAP BELLBITMAP COLORBELLBITMAP KEYBITMAP COLORKEYBITMAP 200BITMAP COLOR200BITMAP 400BITMAP COLOR400BITMAP 800BITMAP COLOR800BITMAP 1600BITMAP COLOR1600BITMAP SIGLOGO COLORSIGLOGO EYESBITMAP COLOREYESBITMAP BIGPMANC COLORBIGPMANC BIGPMANR COLORBIGPMANR QUARTERBITMAP COLORQUARTERBITMAP)  
(ARRAY BOARD VIRGINBOARD)  
(DECLARE%: DOEVAL@COMPILE  
(GLOBALVARS 1600BITMAP 200BITMAP 400BITMAP 800BITMAP APPLEBITMAP ATTRACTMODE BELLBITMAP BIGPMANC BIGPMANR BIRDBITMAP BLUETIME BOARD BOARDLIST BWG1BITMAP BWG2BITMAP BWG3BITMAP BWG4BITMAP BWGINVBITMAP CHERRYBITMAP COLOR1600BITMAP COLOR200BITMAP COLOR400BITMAP COLOR800BITMAP COLORAPPLEBITMAP COLORBELLBITMAP COLORBIGPMANC COLORBIGPMANR COLORBIRDBITMAP COLORCHERRYBITMAP COLORDOT COLORENERGIZER COLOREYESBITMAP COLORG1BITMAP COLORG2BITMAP COLORG3BITMAP COLORG4BITMAP COLORGINVBITMAP COLORKEYBITMAP COLORORANGEBITMAP COLORPACMANC COLORPINEAPPLEBITMAP COLORPMANDOWN COLORPMANLEFT COLORPMANRIGHT COLORPMANUP COLORQUARTERBITMAP COLORSIGLOGO COLORSTRAWBERRYBITMAP DOT ENERGIZER ENERGIZEROBJ EYESBITMAP FOLLOW FRUIT# FRUITLIST FRUITTIME FRUITVISIBLE G1 G1BITMAP G2 G2BITMAP G3 G3BITMAP G4 G4BITMAP GINVBITMAP GVALUE GVALUEBITMAPLIST GVALUEPOS HASDOT HILIST HINAMES HIVALUES KEYBITMAP LASTMOUSEBUTTONS LASTMOUSEX LASTMOUSEY NAME NETP NEXTMOVE NUMDOTS NUMMEN OLDG1 OLDG2 OLDG3 OLDG4 OLDPMAN ORANGEBITMAP PMANINPUTMODE PACMANC PACMANCMAP PACMANINCOLOR PACMANVERSION PINEAPPLEBITMAP PIT PMANDOWN PMANDOWNMAP PMANLEFT PMANLEFTMAP PMANRIGHT PMANRIGHTMAP PMANUP PMANUPMAP PMGAMEOVER PMOLDCOLORMAP PMWANTMORE PSTREAM PWINDOW QUARTERBITMAP SAVEGVALUE SCORE SIGLOGO STRAWBERRYBITMAP VIRGINBOARD))))
```

(DEFINEQ

(ASSIGNDIR

[LAMBDA (GNUM WANT)

(* MD "27-JAN-84 11:32" When a ghost has a choice of directions to move in, this makes sure they don't all choose the same way (avoids piggybacking) Returns the final assignment of direction for move)

(SELECTQ GNUM

```
(1 [for TRY in '(8 2 4 1) as ANS in '(2 1 3 4) do (COND  
((NEQ (LOGAND WANT TRY)  
0)  
(RETURN ANS]))  
(2 [for TRY in '(2 8 1 4) as ANS in '(1 2 4 3) do (COND  
((NEQ (LOGAND WANT TRY)  
0)
```

```

                                (RETURN ANS])
(3 [for TRY in '(4 8 2 1) as ANS in '(3 2 1 4) do (COND
                                ((NEQ (LOGAND WANT TRY)
                                           0)
                                (RETURN ANS])
(4 [for TRY in '(1 8 4 2) as ANS in '(4 2 3 1) do (COND
                                ((NEQ (LOGAND WANT TRY)
                                           0)
                                (RETURN ANS])
T])

```

(BLINKENERGIZERS

(* MD "11-AUG-83 13:04")

```

[LAMBDA NIL
(COND
  ((CHECKAT 1 3 32)
   (PAINTOBJ ENERGIZEROBJ (ITIMES 1 11)
                    (ITIMES 11 (IDIFFERENCE 30 3))
                    8 8 PSTREAM)))
(COND
  ((CHECKAT 26 3 32)
   (PAINTOBJ ENERGIZEROBJ (ITIMES 26 11)
                    (ITIMES 11 (IDIFFERENCE 30 3))
                    8 8 PSTREAM)))
(COND
  ((CHECKAT 1 23 32)
   (PAINTOBJ ENERGIZEROBJ (ITIMES 1 11)
                    (ITIMES 11 (IDIFFERENCE 30 23))
                    8 8 PSTREAM)))
(COND
  ((CHECKAT 26 23 32)
   (PAINTOBJ ENERGIZEROBJ (ITIMES 26 11)
                    (ITIMES 11 (IDIFFERENCE 30 23))
                    8 8 PSTREAM]))

```

(PLAYERBOARDVAL

(* rrb "3-Feb-84 10:55")
(* returns the representation of the board square that PLAYER is currently located at.)

```

[LAMBDA (PLAYER)

  (BOARDVAL (GETPROP PLAYER 'XLOC)
            (GETPROP PLAYER 'YLOC))

```

(BOARDVAL

(* MD "28-NOV-83 16:44")

```

[LAMBDA (X Y)
  (CAR (FNTH (ELT BOARD Y)
            X))]

```

(CHECKAT

(* rrb "31-Jan-84 14:02")

```

[LAMBDA (X Y BIT)
  (NEQ (LOGAND (BOARDVAL X Y)
              BIT)
        0)]

```

(COLLISIONCHECK

(* MD "4-JAN-84 14:01")

```

[LAMBDA (PMAN)
  (PROG (X Y GHOST OLDGHOST)
    (SETQ X (GETPROP PMAN 'XLOC))
    (SETQ Y (GETPROP PMAN 'YLOC))
    (COND
      ((CHECKAT X Y 3840)
       (SETQ GNUM (LOGAND (BOARDVAL X Y)
                          3840))
       (COND
         ((IGEQ GNUM 2048)
          (SETQ GHOST G4)
          (SETQ OLDGHOST OLDG4))
         ((IGEQ GNUM 1024)
          (SETQ GHOST G3)
          (SETQ OLDGHOST OLDG3))
         ((IGEQ GNUM 512)
          (SETQ GHOST G2)
          (SETQ OLDGHOST OLDG2))
         ((IGEQ GNUM 256)
          (SETQ GHOST G1)
          (SETQ OLDGHOST OLDG1)))
       (COND
         ((EQ FOLLOW 1)
          (LOSE))
         (T
          (SHOW (add SCORE GVALUE))
          (SETQ SAVEGVALUE GVALUE)
          (PUTPROP (CAR (NTH GVALUEBITMAPLIST (IQUOTIENT GVALUE 20)))
                   'OPERATION

```

(* Was there a collision?)

(* A ghost got him)

(* He got a ghost)

```

    ' INVERT)
(COND
  ((IGREATERP (CAR GVALUEPOS)
    0)
    new one.)
    (* Erase the previously displayed point value before painting the
    new one.)
    (ERASEOBJ (CAR (NTH GVALUEBITMAPLIST (IQUOTIENT (IQUOTIENT GVALUE 2)
      20)))
      (CAR GVALUEPOS)
      (CDR GVALUEPOS)
      16 16 PSTREAM)))
(PAINTOBJ (CAR (NTH GVALUEBITMAPLIST (IQUOTIENT GVALUE 20)))
  (change (CAR GVALUEPOS)
    (IDIFFERENCE (ITIMES (GETPROP GHOST 'XLOC)
      11)
      6))
    (change (CDR GVALUEPOS)
      (IDIFFERENCE (ITIMES (IDIFFERENCE 30 (GETPROP GHOST 'YLOC))
        11)
        6))
      16 16 PSTREAM)
    (SETQ GVALUE (ITIMES GVALUE 2))
    (PUTPROP GHOST 'EATEN 1)))
(DISSMISS 1500)
(ERASEOBJ GHOST (IDIFFERENCE (ITIMES (GETPROP GHOST 'XLOC)
  11)
  6)
  (IDIFFERENCE (ITIMES (IDIFFERENCE 30 (GETPROP GHOST 'YLOC))
    11)
    6)
  16 16 PSTREAM)
(COND
  [(EQ (GETPROP GHOST 'EATEN)
    1)
    (PUTPROP GHOST 'BITMAP (COND
      (PACMANINCOLOR COLOREYESBITMAP)
      (T EYESBITMAP)))
    (PUTPROP OLDGHOST 'BITMAP (GETPROP GHOST 'BITMAP))
    (SETBOARDVAL X Y (IDIFFERENCE (BOARDVAL X Y)
      (GETPROP GHOST 'BIT)
      (T [for G in '(G1 G2 G3 G4) do [SETBOARDVAL (GETPROP (EVAL G)
        'XLOC)
          (GETPROP (EVAL G)
            'YLOC)
          (IDIFFERENCE (BOARDVAL (GETPROP (EVAL G)
            'XLOC)
              (GETPROP (EVAL G)
                'YLOC))
            (GETPROP (EVAL G)
              'BIT)
          (PUTPROP (EVAL G)
            'XLOC
            (GETPROP (EVAL G)
              'INITX))
          (PUTPROP (EVAL G)
            'YLOC
            (GETPROP (EVAL G)
              'INITY))
          (SETBOARDVAL (GETPROP (EVAL G)
            'XLOC)
            (GETPROP (EVAL G)
              'YLOC)
            (IPLUS (BOARDVAL (GETPROP (EVAL G)
              'XLOC)
                (GETPROP (EVAL G)
                  'YLOC))
              (GETPROP (EVAL G)
                'YLOC))
            (GETPROP (EVAL G)
              'BIT)
          ]
        ]
      ]
    (SETGCANS])

```

DECIDE

```

[LAMBDA (GHOST)

```

(* rrb "3-Feb-84 10:55")
 (* MD "27-JAN-84 11:28" Choose a direction for this ghost to
 move in)

```

(PROG (GXINC GYINC WANT CURLOC)

```

```

[COND
  [(EQ (GETPROP GHOST 'EATEN)
    0)
    (SETQ GXINC (ISIGN 1 (ITIMES (IDIFFERENCE (GETPROP PMAN 'XLOC)
      (GETPROP GHOST 'XLOC))
      FOLLOW)))
    (SETQ GYINC (ISIGN 1 (ITIMES (IDIFFERENCE (GETPROP PMAN 'YLOC)
      (GETPROP GHOST 'YLOC))
      FOLLOW))
    (T [SETQ GXINC (ISIGN 1 (IDIFFERENCE 13 (GETPROP GHOST 'XLOC)
      (SETQ GYINC (ISIGN 1 (IDIFFERENCE 12 (GETPROP GHOST 'YLOC)

```

(* GXINC & GYINC point towards the desired goal
 (either the Pacman or home))


```

(IPLUS (ITIMES 11 (IDIFFERENCE 30 Y1))
 2)
(ITIMES 11 X2)
(ITIMES 11 (IDIFFERENCE 30 Y2))
4
'PAINT PSTREAM 1))
(T (DRAWLINE (ITIMES X1 11)
  (ITIMES 11 (IDIFFERENCE 30 Y1))
  (ITIMES 11 X2)
  (ITIMES 11 (IDIFFERENCE 30 Y2))
  4
  'PAINT PSTREAM 1))

```

(ENERGIZERCHECK

(* MD "22-JUL-83 10:56")

```

[LAMBDA (PMAN)
  (PROG (X Y)
    (SETQ X (GETPROP PMAN 'XLOC))
    (SETQ Y (GETPROP PMAN 'YLOC))
    (COND
      ((CHECKAT X Y 32)
       (SETBOARDVAL X Y (IDIFFERENCE (BOARDVAL X Y)
        32))
        (MOVETO 130 350 PSTREAM)
        (PRIN1 (SETQ SCORE (IPLUS SCORE 5))
          PSTREAM)
        (PRIN1 0 PSTREAM)
        (SETQ GVALUE 20)
        (SETQ FOLLOW -1)
        (SETQ BLUETIME 0])

```

(ERASEOBJ

(* KW "18-MAY-83 14:52")

```

[LAMBDA (OBJ X Y W H STREAM)
  (BITBLT (GETPROP OBJ 'BITMAP)
    NIL NIL STREAM X Y W H NIL 'ERASE NIL NIL))

```

(FRUITCHECK

(* MD "30-AUG-83 14:23")

```

[LAMBDA NIL
  (SETQ FRUITTIME (ADD1 FRUITTIME))
  (COND
    ((EQ FRUITTIME 60)
     (PUTPROP (CAR (NTH FRUITLIST FRUIT#))
       'OPERATION
       'PAINT)
     (PAINTOBJ (CAR (NTH FRUITLIST FRUIT#))
       (IDIFFERENCE (ITIMES 13 11)
        6)
       (IDIFFERENCE (ITIMES (IDIFFERENCE 30 17)
        11)
        6)
       16 16 PSTREAM))
     ((IGREATERP FRUITTIME 120)
      (ERASEOBJ (CAR (NTH FRUITLIST FRUIT#))
        (IDIFFERENCE (ITIMES 13 11)
         6)
        (IDIFFERENCE (ITIMES (IDIFFERENCE 30 17)
         11)
         6)
        16 16 PSTREAM))
      ((IGREATERP FRUITTIME 60)
       (COND
         ((CHECKAT (GETPROP PMAN 'XLOC)
           (GETPROP PMAN 'YLOC)
           16384)
          [SETQ SCORE (IPLUS SCORE (GETPROP (CAR (NTH FRUITLIST FRUIT#))
            'VALUE])
            (SHOW SCORE)
            (SETQ FRUITVISIBLE NIL)
            (ERASEOBJ (CAR (NTH FRUITLIST FRUIT#))
              (IDIFFERENCE (ITIMES 13 11)
               6)
              (IDIFFERENCE (ITIMES (IDIFFERENCE 30 17)
               11)
               6)
              16 16 PSTREAM)
            (PAINTOBJ (CAR (NTH FRUITLIST FRUIT#))
              (IPLUS 160 (ITIMES FRUIT# 20))
              350 16 16 PSTREAM])

```

(FRUITINIT

(* MD "10-NOV-83 13:18")

```

[LAMBDA NIL
  (SETQ FRUIT# 0)
  (SETQ FRUITLIST '(CHERRY STRAWBERRY ORANGE ORANGE APPLE APPLE PINEAPPLE PINEAPPLE BIRD BIRD BELL BELL KEY))
  (PUTPROP 'CHERRY 'BITMAP (COND

```

```

(PACMANINCOLOR COLORCHERRYBITMAP)
(T CHERRYBITMAP)))
(PUTPROP 'CHERRY 'VALUE 10)
(PUTPROP 'STRAWBERRY 'BITMAP (COND
(PACMANINCOLOR COLORSTRAWBERRYBITMAP)
(T STRAWBERRYBITMAP)))
(PUTPROP 'STRAWBERRY 'VALUE 30)
(PUTPROP 'ORANGE 'BITMAP (COND
(PACMANINCOLOR COLORORANGEBITMAP)
(T ORANGEBITMAP)))
(PUTPROP 'ORANGE 'VALUE 50)
(PUTPROP 'APPLE 'BITMAP (COND
(PACMANINCOLOR COLORAPPLEBITMAP)
(T APPLEBITMAP)))
(PUTPROP 'APPLE 'VALUE 70)
(PUTPROP 'PINEAPPLE 'BITMAP (COND
(PACMANINCOLOR COLORPINEAPPLEBITMAP)
(T PINEAPPLEBITMAP)))
(PUTPROP 'PINEAPPLE 'VALUE 100)
(PUTPROP 'BIRD 'BITMAP (COND
(PACMANINCOLOR COLORBIRDBITMAP)
(T BIRDBITMAP)))
(PUTPROP 'BIRD 'VALUE 200)
(PUTPROP 'BELL 'BITMAP (COND
(PACMANINCOLOR COLORBELLBITMAP)
(T BELLBITMAP)))
(PUTPROP 'BELL 'VALUE 300)
(PUTPROP 'KEY 'BITMAP (COND
(PACMANINCOLOR COLORKEYBITMAP)
(T KEYBITMAP)))
(PUTPROP 'KEY 'VALUE 500])

```

(GETHISCORES

```

[LAMBDA NIL
(CLEARW PWINDOW)
(SHOWCAP "Read high scores?" 70 200)
(CURSORPOSITION (create POSITION
XCOORD _ (IPLUS (DSPXPOSITION NIL PWINDOW)
20)
YCOORD _ (IDIFFERENCE (DSPYPOSITION NIL PWINDOW)
50))
PWINDOW)
(COND
((EQ [MENU (create MENU
ITEMS _ '( (Yes 'Y)
(No 'N]
'Y)
(SETQ NETP T)
(INFILE '{ICE}<SYSIFS>PSYSICE 'READ)
(SETQ HILIST (READ))
(SHOWHISCORES)
(CLOSEF '{ICE}<SYSIFS>PSYSICE)
(SHOWCAP "Click LEFT or FIRE (joystick) when ready." 6 20)
(until (OR (UNTILMOUSESTATE (OR LEFT MIDDLE)
10)
(KEYDOWNP 'PAD1))
do))
(T (SETQ NETP NIL])
(* rrb " 3-Feb-84 14:36")
(* move cursor to near question.)

```

(GETMONEY

```

[LAMBDA NIL
(PROG (PMHADENOUGH)
(SHOWCAP "INSERT QUARTER TO START GAME" 50 20)
(SHOWCAP "(Click anywhere else to quit)" 50 6)
(PUTPROP INTROOBJ 'BITMAP (COND
(PACMANINCOLOR COLORQUARTERBITMAP)
(T QUARTERBITMAP)))
(PAINTOBJ INTROOBJ 150 40 64 32 PSTREAM)
(GETMOUSESTATE)
(until [OR (SETQ PMWANTMORE (KEYDOWNP 'PAD1))
(SETQ PMWANTMORE (COND
((AND (EQ PMANINPUTMODE 'VOICE)
(EQ (VOICEINPUT)
0))
T)
(T NIL)))
[SETQ PMWANTMORE (AND (MOUSESTATE (OR LEFT MIDDLE))
(INSIDEP '(150 40 32 32)
(LASTMOUSEX PSTREAM)
(LASTMOUSEY PSTREAM)
(SETQ PMHADENOUGH (AND (MOUSESTATE (OR LEFT MIDDLE))
(NOT (INSIDEP '(150 40 32 32)
(LASTMOUSEX PSTREAM)
(LASTMOUSEY PSTREAM)
do (GETMOUSESTATE))
(* MD "15-Mar-85 16:05")

```

```
(COND
  (PMHADENOUGH (SETQ PMWANTMORE NIL]))
```

(GETMOVE

(* MJD "11-Dec-85 14:05")

```
[LAMBDA (MOVE)
  (PROG (CHAR OLDX OLDY (XINC 0)
        (YINC 0))
    (CONTROL T)
    (SETQ CHAR (OR (AND (EQ PMANINPUTMODE 'VOICE)
                       (VOICEINPUT))
                  (JOYSTICK))))
```

```
[COND
  ((AND (NOT CHAR)
        (NOT (READP T)))
   (SETQ OLDX LASTMOUSEX)
   (SETQ OLDY LASTMOUSEY)
   (GETMOUSESTATE)
   (if (EQ (MACHINETYPE)
           'DORADO)
       then (DISMISS 3))
   (SETQ XINC (IDIFFERENCE LASTMOUSEX OLDX))
   (SETQ YINC (IDIFFERENCE LASTMOUSEY OLDY))
   (COND
     ((ILESSP OLDX 32)
      (ADJUSTCURSORPOSITION 64 0)))
   (COND
     ((ILESSP OLDY 32)
      (ADJUSTCURSORPOSITION 0 64)))
   (COND
     ((IGREATERP OLDX (COND
                    (PACMANINCOLOR 620)
                    (T 1000)))
      (ADJUSTCURSORPOSITION -64 0)))
   (COND
     ((IGREATERP OLDY (COND
                    (PACMANINCOLOR 460)
                    (T 780)))
      (ADJUSTCURSORPOSITION 0 -64]
```

(* This is needed to give LMX & LMY time to change values.)

(* Keep cursor from bumping into edge of screen.)

```
[COND
  ((AND (NOT CHAR)
        (NOT (READP T))
        (NOT ATTRACTMODE)
        (ILESSP (ABS XINC)
                6)
        (ILESSP (ABS YINC)
                6))
   (COND
     ((AND (NEQ NEXTMOVE 0)
           (CHECKAT (GETPROP PMAN 'XLOC)
                    (GETPROP PMAN 'YLOC)
                    NEXTMOVE))
      (RETURN NEXTMOVE))
     ((CHECKAT (GETPROP PMAN 'XLOC)
                (GETPROP PMAN 'YLOC)
                MOVE)
      (RETURN MOVE))
     (T (RETURN 0)]
  [SETQ DIR (COND
    (CHAR CHAR)
    [(READP T)
     (RESETFORM (ECHOMODE NIL)
                (SETQ CHAR (READC))
                (COND
                  ((EQ CHAR 'L)
                   4)
                  ((EQ CHAR 'J)
                   8)
                  ((EQ CHAR 'I)
                   2)
                  ((EQ CHAR '% )
                   1)
                  (T MOVE)]
     [ATTRACTMODE (CAR (NTH '(1 2 4 8)
                           (RAND 1 4)]
     (T (COND
        ((AND (IGREATERP XINC 0)
              (IGREATERP (ABS XINC)
                          (ABS YINC))))
         4)
        ((AND (ILESSP XINC 0)
              (IGREATERP (ABS XINC)
                          (ABS YINC))))
         8)
        ((AND (IGREATERP YINC 0)
              (IGEQL (ABS YINC)
                    (ABS XINC))))
```

```

2)
((AND (ILESSP YINC 0)
      (IGEQ (ABS YINC)
            (ABS XINC))))
1]
(COND
 ((CHECKAT (GETPROP PMAN 'XLOC)
           (GETPROP PMAN 'YLOC)
           DIR)
  (SETQ NEXTMOVE DIR)
  (RETURN DIR))
 (T (SETQ NEXTMOVE DIR)
    (COND
     ((CHECKAT (GETPROP PMAN 'XLOC)
               (GETPROP PMAN 'YLOC)
               MOVE)
      (RETURN MOVE))
     (T (RETURN 0))
    )
  )

```

(VOICEINPUT

```

[LAMBDA NIL
 (NUMBERP (CHARACTER (OR (RS232READBYTE)
                          0))

```

(* MD "15-Mar-85 13:15")

(XLOCTOSCREEN

```

[LAMBDA (XLOC)
 (IDIFFERENCE (ITIMES XLOC 11)
 6)]

```

(* rrb " 3-Feb-84 12:20")
(* converts from a pacman board square to a screen coordinate.)

(XSCREENTOLOC

```

[LAMBDA (XLOC)
 (IQUOTIENT (IPLUS XLOC 6)
 11)]

```

(* rrb " 3-Feb-84 12:29")
(* converts from a screen coordinate to a pacman board square)

(YLOCTOSCREEN

```

[LAMBDA (YLOC)
 (IPLUS (IQUOTIENT (IPLUS 6 YLOC)
 11)
 30)]

```

(* rrb " 3-Feb-84 12:31")
(* converts from a y location to window coordinates.)

(YSCREENTOLOC

```

[LAMBDA (YLOC)
 (IDIFFERENCE 30 (IQUOTIENT (IPLUS YLOC 6)
 11)]

```

(* rrb " 3-Feb-84 12:41")
(* converts from a screen coordinate to a pacman board square)

(HISCORE

```

[LAMBDA NIL
 (PROG (Y)
  (CLEARW PWINDOW)
  (SHOWCAP "Read high scores?" 70 200)
  (COND
   ((EQ (READ)
        'Y)
    (SHOWCAP "Y" 200 200)
    (SETPASSWORD '{ICE} 'PSYS "PRTZKRRK" 'SYSIFS)
    (INFILE '{ICE}<SYSIFS>PSYSICE 'READ)
    (SETQ HINAMES (READ))
    (SETQ HIVALUES (READ))
    (CLEARW PWINDOW)
    (SHOWCAP "High scores" 100 330)
    (SETQ Y 300)
    (for I in HINAMES as J in HIVALUES do (SHOWCAP I 50 Y)
        (SHOWCAP J 200 Y)
        (SETQ Y (IDIFFERENCE Y 16)))
    )
   )
  (CLOSEF '{ICE}<SYSIFS>PSYSICE))

```

(* MD "29-AUG-83 17:11")

(INCOLORQ

```

[LAMBDA NIL
 (SELECTQ (MACHINETYPE)
  ((DOLPHIN DORADO MAIKO)
   (COND
    [(HASCOLORDISPLAYP)
     (printout T "In color?" T)
     (MENU (create MENU
             ITEMS _ '( (Yes T "Will play Pacman in color. - Only if you have a color display."
                           (No 'NIL "Plays Pacman on the standard display."))

```

; Edited 3-Feb-89 15:07 by FS


```

TITLE _ 'Color?]
(T NIL))
((DANDELION DOVE)
NIL)
(LET NIL (PRINTOUT T "Unknown machine type.")
NIL])

```

(INPUTMODEQ

```

[LAMBDA NIL
(* MJD "11-Dec-85 14:08")
(* returns the mode of input after querying the user.)
(printout T T "You can input your moves using the " "MOUSE (by having " "PMAN move " "in the same direction
" "as the cursor moved), " "KEYBOARD (I is up, " "J is left, " "L is right, " "space is down) " "or "
"JOYSTICK (if you have one on your machine), " "or voice control (if you have the voice board).")
(PRINTOUT T "You can change modes any time even during a game." T)
(OR (MENU (create MENU
ITEMS _ '(Cursor 'SAMEDIRASCURSOR "PMAN will move in the same direction as the cursor just
moved.")
(Keyboard 'KEYS "PMAN is controlled by I, J, L and spacebar.")
(Joystick 'JOYSTICK "PMAN is controlled by the Joystick.")
(Voice 'VOICE "Pacman is controlled by voice control ('up', 'down', 'left',
'right'"))
CENTERFLG _ T
TITLE _ "Choose mode"))
'SAMEDIRASCURSOR])

```

(HASCOLORDISPLAYP

```

[LAMBDA NIL
(SELECTQ (MACHINETYPE)
(DOLPHIN (EQ (LRSH (\DEVICE.INPUT 80)
8)
175))
(DORADO 'MAYBE)
(MAIKO 'MAYBE)
NIL])
; Edited 3-Feb-89 15:05 by FS
(* does this machine have a color display.
Returns MAYBE if is can't tell.)

```

(INTERMISSION1

```

[LAMBDA NIL
(* MD "29-NOV-83 15:58")
(PROG (BIGOBJ OLDBIGOBJ)
(PUTPROP G1 'BITMAP G1BITMAP)
(CLEARW PWINDOW)
[for X from 350 to -45 by -1 do (COND
((EQ (IREMAINDER (IQUOTIENT X 10)
2)
0)
(PUTPROP PMAN 'BITMAP PMANLEFT))
(T (PUTPROP PMAN 'BITMAP PACMANC)))
(MOVEOBJ PMAN OLDPMAN X 200 (SUB1 X)
200 16 16 PSTREAM)
(MOVEOBJ G1 G1 (IPLUS X 30)
200
(IPLUS X 29)
200 16 16 PSTREAM)
(PUTPROP OLDPMAN 'BITMAP (GETPROP PMAN 'BITMAP])
(SETQ BIGOBJ 'BIGP)
(SETQ OLDBIGOBJ 'OLDBIGP)
[for X from -45 to 350 by 2 do [COND
[(EQ (IREMAINDER (IQUOTIENT X 10)
2)
0)
(PUTPROP BIGOBJ 'BITMAP (COND
(PACMANINCOLOR COLORBIGPMANR)
(T BIGPMANR])
(T (PUTPROP BIGOBJ 'BITMAP (COND
(PACMANINCOLOR COLORBIGPMANC)
(T BIGPMANC])
(MOVEOBJ BIGOBJ OLDBIGOBJ X 200 (IPLUS X 2)
200 64 64 PSTREAM)
(MOVEOBJ G1 G1 (IPLUS X 75)
200
(IPLUS X 77)
200 16 16 PSTREAM)
(PUTPROP OLDBIGOBJ 'BITMAP (GETPROP BIGOBJ 'BITMAP])
(DISMISS 2000])

```

(ISIGN

```

[LAMBDA (VALUE SIGN)
(COND
((IGREATERP SIGN 0)
VALUE)
((ILESSP SIGN 0)
(ITIMES (IABS VALUE)
(* MD "4-JAN-84 16:55")

```

```

      -1))
(T
  (ITIMES (IABS VALUE)
    (CAR (NTH ' (-1 1)
      (RAND 1 2]))
    (* If sign is 0 then make + or -
    randomly)

```

(JOYSTICK

[LAMBDA NIL (* MD "28-NOV-83 12:13")

(* Pinouts%: (Atari D0) (Fire PAD1) (E PAD2) (W PAD3) (S PAD4)
(N PAD5) Atari connector%: Top row (view from outside) 0 E W S N;
bottom row%: 0 GND 0 Fire ; D0 connector%: middle row%: 0 0 Fire E W S N;
bottom row GND 0 0 0 0 0)

```

(COND
  ((KEYDOWNP 'PAD2)
    4)
  ((KEYDOWNP 'PAD3)
    8)
  ((KEYDOWNP 'PAD4)
    1)
  ((KEYDOWNP 'PAD5)
    2))

```

(LOSE

[LAMBDA NIL (* MD " 8-DEC-83 12:50")

```

  (SETQ NUMMEN (SUB1 NUMMEN))
  (PUTPROP PMAN 'BITMAP PACMANC)
  (ERASEOBJ PMAN (IDIFFERENCE (ITIMES (GETPROP PMAN 'XLOC)
    11)
    6)
  (IDIFFERENCE (ITIMES (IDIFFERENCE 30 (GETPROP PMAN 'YLOC))
    11)
    6)
  16 16 PSTREAM)

```

```

(COND
  ((EQ NUMMEN 2)
    (ERASEOBJ PMAN 40 345 16 16 PSTREAM))
  ((EQ NUMMEN 1)
    (ERASEOBJ PMAN 20 345 16 16 PSTREAM))
  ((EQ NUMMEN 0)
    (SHOWCAP "GAME OVER" (ITIMES 11 11)
      (ITIMES (IDIFFERENCE 30 17)
        11))
  (COND
    ([AND NETP (IGREATERP (ITIMES SCORE 10)
      (CAAR (LAST HILIST)
        (DISMISS 2000)
        (NEWHISCORES)))
      (CLEARBUF T T)
      (CONTROL NIL)
      (SETQ PMGAMEOVER T)))
    (PUTPROP PMAN 'XLOC 13)
    (PUTPROP PMAN 'YLOC 23)
    (SETQ MOVE 8])

```

(MOVEDOWN

[LAMBDA (OBJ OLDOBJ) (* MD " 6-JAN-83 16:22")

```

  (MOVEOBJ OBJ OLDOBJ (IDIFFERENCE (ITIMES (GETPROP OLDOBJ 'XLOC)
    11)
    6)
  (IDIFFERENCE (ITIMES (IDIFFERENCE 30 (GETPROP OLDOBJ 'YLOC))
    11)
    6)
  (IDIFFERENCE (ITIMES (GETPROP OBJ 'XLOC)
    11)
    6)
  (IDIFFERENCE (ITIMES [IDIFFERENCE 30 (PUTPROP OBJ 'YLOC (ADD1 (GETPROP OBJ 'YLOC)
    11)
    6)
  16 16 PSTREAM])

```

(MOVEGHOST

[LAMBDA (GHOST OLDGHOST) (* rrb " 3-Feb-84 11:03")

```

(COND
  ((AND (EQ CYCLE 2)
    (CHECKAT (GETPROP GHOST 'XLOC)
      (GETPROP GHOST 'YLOC)
      4096))
    (* Slow spot)
  T)
  [(IGREATERP (GETPROP GHOST 'GIT)
    0)
    (* In tunnel)

```

```

(add (GETPROP GHOST 'GIT)
 1)
(COND
 ((IGREATERP (GETPROP GHOST 'GIT)
 4)
 (PUTPROP GHOST 'GIT 0)
 (T [COND
 ((EQ (GETPROP GHOST 'EATEN)
 0)
 (SETPLAYERBOARDVAL GHOST (IDIFFERENCE (PLAYERBOARDVAL GHOST)
 (GETPROP GHOST 'BIT]
 [COND
 ((EQ (GETPROP GHOST 'EATEN)
 0)
 (COND
 [(IGREATERP BLUETIME 30)
 (COND
 ((EQ CYCLE 1)
 (PUTPROP GHOST 'BITMAP GINVBITMAP))
 (T (PUTPROP GHOST 'BITMAP (EVAL (CAR (NTH '(G1BITMAP G2BITMAP G3BITMAP G4BITMAP)
 (GETPROP GHOST 'NUMBER]
 ((IGREATERP BLUETIME 0)
 (PUTPROP GHOST 'BITMAP GINVBITMAP]
 (SELECTQ (DECIDE GHOST)
 (1 (MOVEUP GHOST OLDGHOST)
 (PUTPROP GHOST 'CAN 14))
 (2 (COND
 ((CHECKAT (GETPROP GHOST 'XLOC)
 (GETPROP GHOST 'YLOC)
 64)
 (ERASEOBJ OLDGHOST (IDIFFERENCE (ITIMES (GETPROP OLDGHOST 'XLOC)
 11)
 6)
 (IDIFFERENCE (ITIMES (IDIFFERENCE 30 (GETPROP OLDGHOST 'YLOC))
 11)
 6)
 16 16 PSTREAM)
 (PUTPROP GHOST 'XLOC 26)
 (PUTPROP GHOST 'GIT 1))
 (T (MOVELEFT GHOST OLDGHOST)))
 (PUTPROP GHOST 'CAN 11))
 (3 (COND
 ((CHECKAT (GETPROP GHOST 'XLOC)
 (GETPROP GHOST 'YLOC)
 128)
 (ERASEOBJ OLDGHOST (IDIFFERENCE (ITIMES (GETPROP OLDGHOST 'XLOC)
 11)
 6)
 (IDIFFERENCE (ITIMES (IDIFFERENCE 30 (GETPROP OLDGHOST 'YLOC))
 11)
 6)
 16 16 PSTREAM)
 (PUTPROP GHOST 'XLOC 1)
 (PUTPROP GHOST 'GIT 1))
 (T (MOVERIGHT GHOST OLDGHOST)))
 (PUTPROP GHOST 'CAN 7))
 (4 (MOVEDOWN GHOST OLDGHOST)
 (PUTPROP GHOST 'CAN 13))
 T)
 (REDODOT (GETPROP OLDGHOST 'XLOC)
 (GETPROP OLDGHOST 'YLOC))
 (PUTPROP OLDGHOST 'XLOC (GETPROP GHOST 'XLOC))
 (PUTPROP OLDGHOST 'YLOC (GETPROP GHOST 'YLOC))
 (COND
 [(IGREATERP BLUETIME 30)
 (PUTPROP OLDGHOST 'BITMAP (GETPROP GHOST 'BITMAP]
 ((AND (EQ (GETPROP GHOST 'EATEN)
 0)
 (IGREATERP BLUETIME 0))
 (PUTPROP OLDGHOST 'BITMAP GINVBITMAP)))
 [COND
 ((AND (EQ (GETPROP GHOST 'EATEN)
 1)
 (EQ (GETPROP GHOST 'YLOC)
 12)
 (EQ (GETPROP GHOST 'XLOC)
 13))
 (PUTPROP GHOST 'EATEN 0)
 [PUTPROP GHOST 'BITMAP (EVAL (CAR (NTH '(G1BITMAP G2BITMAP G3BITMAP G4BITMAP)
 (GETPROP GHOST 'NUMBER]
 (PUTPROP OLDGHOST 'BITMAP (GETPROP GHOST 'BITMAP]
 (COND
 ((EQ (GETPROP GHOST 'EATEN)
 0)
 (SETBOARDVAL (GETPROP GHOST 'XLOC)
 (GETPROP GHOST 'YLOC)
 (IPLUS (BOARDVAL (GETPROP GHOST 'XLOC)

```

(GETPROP GHOST 'YLOC))
(GETPROP GHOST 'BIT])

(MOVELEFT

[LAMBDA (OBJ OLDOBJ) (* rrb "31-Jan-84 10:15")
(MOVEOBJ OBJ OLDOBJ (IDIFFERENCE (ITIMES (GETPROP OLDOBJ 'XLOC)
11)
6)
(IDIFFERENCE (ITIMES (IDIFFERENCE 30 (GETPROP OLDOBJ 'YLOC))
11)
6)
(IDIFFERENCE (ITIMES [PUTPROP OBJ 'XLOC (SUB1 (GETPROP OBJ 'XLOC)
11)
6)
(IDIFFERENCE (ITIMES (IDIFFERENCE 30 (GETPROP OBJ 'YLOC))
11)
6)
16 16 PSTREAM])

(MOVEOBJ

[LAMBDA (OBJ OLDOBJ X1 Y1 X2 Y2 W H STREAM) (* MD "3-JAN-83 14:51")
(ERASEOBJ OLDOBJ X1 Y1 W H STREAM)
(PAINTOBJ OBJ X2 Y2 W H STREAM])

(MOVEPACMAN

[LAMBDA (PMAN DIR) ; Edited 3-Feb-89 13:09 by FS
(SELECTQ DIR
(1 (PUTPROP PMAN 'BITMAP (COND
((EQ CYCLE 1)
PMANDOWN)
(T PACMANC)))
(MOVEDOWN PMAN OLDPMAN))
(2 (PUTPROP PMAN 'BITMAP (COND
((EQ CYCLE 1)
PMANUP)
(T PACMANC)))
(MOVEUP PMAN OLDPMAN))
(4 (PUTPROP PMAN 'BITMAP (COND
((EQ CYCLE 1)
PMANRIGHT)
(T PACMANC)))
(COND
((CHECKAT (GETPROP PMAN 'XLOC)
(GETPROP PMAN 'YLOC)
128)
(ERASEOBJ OLDPMAN (IDIFFERENCE (ITIMES (GETPROP OLDPMAN 'XLOC)
11)
6)
(IDIFFERENCE (ITIMES (IDIFFERENCE 30 (GETPROP OLDPMAN 'YLOC))
11)
6)
16 16 PSTREAM)
(PUTPROP PMAN 'XLOC 1)
(SETQ PIT 1))
(T (MOVERIGHT PMAN OLDPMAN))))
(8 (PUTPROP PMAN 'BITMAP (COND
((EQ CYCLE 1)
PMANLEFT)
(T PACMANC)))
(COND
((CHECKAT (GETPROP PMAN 'XLOC)
(GETPROP PMAN 'YLOC)
64)
(ERASEOBJ OLDPMAN (IDIFFERENCE (ITIMES (GETPROP OLDPMAN 'XLOC)
11)
6)
(IDIFFERENCE (ITIMES (IDIFFERENCE 30 (GETPROP OLDPMAN 'YLOC))
11)
6)
16 16 PSTREAM)
(PUTPROP PMAN 'XLOC 26)
(SETQ PIT 1))
(T (MOVELEFT PMAN OLDPMAN))))
NIL)
(PUTPROP OLDPMAN 'BITMAP (GETPROP PMAN 'BITMAP))
(PUTPROP OLDPMAN 'XLOC (GETPROP PMAN 'XLOC))
(PUTPROP OLDPMAN 'YLOC (GETPROP PMAN 'YLOC])

(MOVERIGHT

[LAMBDA (OBJ OLDOBJ) (* MD "6-JAN-83 16:21")
(MOVEOBJ OBJ OLDOBJ (IDIFFERENCE (ITIMES (GETPROP OLDOBJ 'XLOC)
11)
6)

```

(IDIFFERENCE (ITIMES (IDIFFERENCE 30 (GETPROP OLD OBJ 'YLOC))
                    11)
              6)
(IDIFFERENCE (ITIMES [PUTPROP OBJ 'XLOC (ADD1 (GETPROP OBJ 'XLOC))
                    11)
              6)
(IDIFFERENCE (ITIMES (IDIFFERENCE 30 (GETPROP OBJ 'YLOC))
                    11)
              6)
16 16 PSTREAM])

```

(MOVEUP

```

[LAMBDA (OBJ OLD OBJ) (* MD "6-JAN-83 16:21")
  (MOVEOBJ OBJ OLD OBJ (IDIFFERENCE (ITIMES (GETPROP OLD OBJ 'XLOC)
                                             11)
                                     6)
           (IDIFFERENCE (ITIMES (IDIFFERENCE 30 (GETPROP OLD OBJ 'YLOC))
                                 11)
                         6)
           (IDIFFERENCE (ITIMES (GETPROP OBJ 'XLOC)
                                 11)
                         6)
           (IDIFFERENCE (ITIMES [IDIFFERENCE 30 (PUTPROP OBJ 'YLOC (SUB1 (GETPROP OBJ 'YLOC))
                                 11)
                         6)
           16 16 PSTREAM])

```

(NEWHISCORES

```

[LAMBDA NIL (* MD "30-AUG-83 14:09")
  (CLEARW PWINDOW)
  (SHOWCAP "What is your name?" 70 200)
  (SETSYNTAX '% 'OTHER)
  (SETQ NAME (RSTRING))
  (SETSYNTAX '% 'SEPRCHAR)
  (SETPASSWORD '{ICE} 'PSYS "PRTZKRK" 'SYSIFS)
  (INFILE '{ICE}<SYSIFS>PSYSICE)
  (SETQ HILIST (REVERSE (CDR (SORT (APPEND (READ)
                                       (LIST (LIST (ITIMES SCORE 10)
                                                  NAME))))
                          T])
  (SHOWHISCORES)
  (CLOSEF '{ICE}<SYSIFS>PSYSICE)
  (OUTFILE '{ICE}<SYSIFS>PSYSICE.;2)
  (PRINT HILIST)
  (CLOSEF '{ICE}<SYSIFS>PSYSICE.;2])

```

(PACINTRO

```

[LAMBDA NIL (* rrb "31-Jan-84 11:00")
  (PROG (CHAR CHARNAME X Y)
    (CLEARW PWINDOW)
    (PUTPROP INTROOBJ 'BITMAP (COND
      (PACMANINCOLOR COLORSIGLOGO)
      (T SIGLOGO)))
    (PUTPROP INTROOBJ 'OPERATION 'PAINT)
    (PAINTOBJ INTROOBJ 110 330 64 32 PSTREAM)
    (DISMISS 400)
    (SHOWCAP "by Michel Denber" 150 300)
    (DISMISS 400)
    (SHOWCAP "CHARACTER / NICKNAME" 80 250)
    (SETQ Y 200)
    (for CHAR in [COND
      (PACMANINCOLOR '(COLORG1BITMAP COLORG2BITMAP COLORG3BITMAP COLORG4BITMAP))
      (T '(G1BITMAP G2BITMAP G3BITMAP G4BITMAP))
    ]
      as CHARNAME in ('SHADOW 'BLINKY' 'SPEEDY 'PINKY' 'BASHFUL 'INKY' 'POKEY 'CLYDE')
      do (PUTPROP INTROOBJ 'BITMAP (EVAL CHAR))
        [for X from 360 to 50 by -1 do (MOVEOBJ INTROOBJ INTROOBJ X Y (SUB1 X)
                                             Y 16 16 PSTREAM)
          (GETMOUSESTATE)
          (COND
            ((MOUSESTATE LEFT)
             (RETURN NIL))
          (COND
            ((MOUSESTATE LEFT)
             (RETURN NIL)))
          (SHOWCAP CHARNAME 90 (IPLUS Y 5))
          (DISMISS 100)
          (SETQ Y (IDIFFERENCE Y 30)))
        (COND
          ((MOUSESTATE LEFT)
           (RETURN NIL)))
        (GETMONEY])

```

(PACMAN

[LAMBDA NIL (* MJD "11-Dec-85 13:20")

(DECLARE (GLOBALVARS PACMANWAITTIME))
(PROG ((PMAN 'X)
(INTROOBJ 'TEMP)
(MOVE 8))

(* Bit assignments%: (15 32768 Unused) (14 16384 fruit-loc) (13 8192 starts-w/dot)
(12 4096 slow-area) (11 2048 G4) (10 1024 G3) (9 512 G2) (8 256 G1)
(7 128 R-tunnel-exit) (6 64 L-tunnel-exit) (5 32 has-energizer) (4 16 still-has-dot)
(3 8 W) (2 4 E) (1 2 N) (0 1 S))

(SETQ OLDPMAN 'Y)
(SETQ G1 'A)
(SETQ G2 'B)
(SETQ G3 'C)
(SETQ G4 'D)
(SETQ OLDG1 'E)
(SETQ OLDG2 'F)
(SETQ OLDG3 'G)
(SETQ OLDG4 'H)
(SETQ PMWANTMORE T)
(SETQ PMGAMEOVER NIL)
(PACMANINITNEW PMAN)
(PACINTRO)

(while PMWANTMORE
do (PACMANNEWGAME)
(until PMGAMEOVER do (for CYCLE from 1 to 3
do (DISMISS PACMANWAITTIME)
[COND
[(IGREATERP PIT 0)
(add PIT 1)
(COND
((IGREATERP PIT 4)
(SETQ PIT 0)
(T (MOVEPACMAN PMAN (SETQ MOVE (GETMOVE MOVE)]
(BLINKENERGIZERS)
(DOTCHECK PMAN)
(FRUITCHECK)
(COND
((EQ FOLLOW -1)
(add BLUETIME 1)))
[COND
((IGREATERP BLUETIME 60)
(SETQ FOLLOW 1)
(SETQ BLUETIME 0)
[COND
((NEQ (CAR GVALUEPOS)
0) (* Erase any remaining point value)
(* Caution -
a kludge%:)
(ERASEOBJ (CAR (NTH GVALUEBITMAPLIST (IQUOTIENT SAVEGVALUE 20
)))
(CAR GVALUEPOS)
(CDR GVALUEPOS)
16 16 PSTREAM)
(SETQ GVALUEPOS ' (280 . 291]
(for GHOST in ' (G1 G2 G3 G4) as GBITMAP
in ' (G1BITMAP G2BITMAP G3BITMAP G4BITMAP)
when (EQ (GETPROP (EVAL GHOST)
'EATEN)
0)
do (PUTPROP (EVAL GHOST)
'BITMAP
(EVAL GBITMAP)))
(for OLDGHOST in ' (OLDG1 OLDG2 OLDG3 OLDG4) as GHOST
in ' (G1 G2 G3 G4) do (PUTPROP (EVAL OLDGHOST)
'BITMAP
(GETPROP (EVAL GHOST)
'BITMAP]
(ENERGIZERCHECK PMAN)
(COLLISIONCHECK PMAN)
(COND
((EQ (MACHINETYPE)
'DORADO)
(DISSMISS 3)))
[COND
[(EQ CYCLE 3)
[COND
((EQ FOLLOW 1)
(for GHOST in ' (G1 G2 G3 G4) as OLDGHOST
in ' (OLDG1 OLDG2 OLDG3 OLDG4)
do (MOVEGHOST (EVAL GHOST)
(EVAL OLDGHOST)
(T (for GHOST in ' (G1 G2 G3 G4) as OLDGHOST
in ' (OLDG1 OLDG2 OLDG3 OLDG4) do (MOVEGHOST (EVAL GHOST)
(EVAL OLDGHOST]
(COLLISIONCHECK PMAN)))

```

      (SETQ PMGAMEOVER NIL)
      (DISMISS 2000)
      (CLEARW PWINDOW)
      (GETMONEY))
(COND
  (PACMANINCOLOR (CHANGECURSORSSCREEN (SCREENBITMAP))
    (SCREENCOLORMAP PMOLDCOLORMAP)
    (SETDISPLAYHEIGHT T])

```

(PACMANINIT

(* MD "18-AUG-83 16:03")

```

[LAMBDA (PMAN)
  [CLEARW (OR PWINDOW (PROG1 (SETQ PWINDOW
    (CREATEW (create REGION
              LEFT _ 32
              BOTTOM _ 32
              WIDTH _ 307
              HEIGHT _ 390)
              "PACMAN" NIL])
    (SETQ PSTREAM (DECODE/WINDOW/OR/DISPLAYSTREAM PWINDOW NIL "PACMAN" NIL))
    (CLOSEP? '{DSK}PACMAN.DAT)
    (INFILE '{DSK}PACMAN.DAT 'READ)
    (SETQ NUMMEN 3)
    (SETQ SCORE 0)
    (SETQ NUMDOTS 0)
    (DRAWBOARD)
    (PUTDOTS)
    (PAINTOBJ PMAN 20 345 16 16 PSTREAM)
    (PAINTOBJ PMAN 40 345 16 16 PSTREAM)
    (SETBOARDVAL 13 17 (IPLUS (BOARDVAL 13 17)
                              16384)) (* Fruit location)
    (SETBOARDVAL 26 14 (IPLUS (BOARDVAL 26 14)
                              128 4)) (* Tunnel exits)
    (SETBOARDVAL 1 14 (IPLUS (BOARDVAL 1 14)
                              64 8))
    (for I from 1 to 5 do (SETBOARDVAL I 14 (IPLUS (BOARDVAL I 14)
                                                    4096)))
    (for I from 22 to 26 do (SETBOARDVAL I 14 (IPLUS (BOARDVAL I 14)
                                                       4096))) (* Slow spots)
    [for X from 13 to 15 do (for Y from 13 to 15 do (SETBOARDVAL X Y (IPLUS (BOARDVAL X Y)
                                                                              2]
    (SETBOARDVAL 12 13 (IPLUS (BOARDVAL 12 13)
                              4 2))
    (SETBOARDVAL 15 13 (IPLUS (BOARDVAL 15 13)
                              8))
    (SETQ ENERGIZEROBJ 'I)
    (SETBOARDVAL 1 3 (IPLUS (BOARDVAL 1 3)
                           32))
    (SETBOARDVAL 26 3 (IPLUS (BOARDVAL 26 3)
                             32))
    (SETBOARDVAL 1 23 (IPLUS (BOARDVAL 1 23)
                             32))
    (SETBOARDVAL 26 23 (IPLUS (BOARDVAL 26 23)
                              32)) (* Energizers)
    [SETBOARDVAL 13 11 (IPLUS (BOARDVAL 13 11)
                             (GETPROP G1 'BIT)) (* Ghosts)
    [SETBOARDVAL 13 12 (IPLUS (BOARDVAL 13 12)
                             (GETPROP G2 'BIT))
    [SETBOARDVAL 12 13 (IPLUS (BOARDVAL 12 13)
                             (GETPROP G3 'BIT))
    (SETBOARDVAL 15 13 (IPLUS (BOARDVAL 15 13)
                             (GETPROP G4 'BIT))

```

(PACMANINITNEW

; Edited 3-Feb-89 15:10 by FS

```

[LAMBDA (PMAN)
  (printout T (SETQ PACMANVERSION "PACMAN Version 1.5")
    T)
  (CURSORPOSITION (create POSITION
    XCOORD _ (IPLUS (DSPXPOSITION NIL T)
                   20)
    YCOORD _ (IDIFFERENCE (DSPYPOSITION NIL T)
                          75))
    T)
  (SETQ PMANINPUTMODE (INPUTMODEQ))
  (if (EQ PMANINPUTMODE 'VOICE)
    then (LOAD? (PACKFILENAME 'NAME 'RS232.LCOM 'DIRECTORY (CAR DIRECTORIES)))
    (RS232INIT (MENU (create MENU
      ITEMS _ '(75 150 300 600 1200 2400 4800 9600)
      TITLE _ "Baud rate for voice input:"))
      8 NIL 1))
  (SETQ PACMANWAITTIME (SPEEDQ))
  (SETQ PACMANINCOLOR (INCOLORQ))
  [CLEARW (OR PWINDOW
    (SETQ PWINDOW
      (COND
        (PACMANINCOLOR (COLORCREATEW (create REGION

```

```

LEFT _ 0
BOTTOM _ 0
WIDTH _ 307
HEIGHT _ 390)
PACMANVERSION 1 1))
(T (CREATEW (create REGION
LEFT _ 32
BOTTOM _ 32
WIDTH _ 307
HEIGHT _ 390)
PACMANVERSION NIL]
[SETQ PSTREAM (COND
(PACMANINCOLOR (DSPCREATE (COLORSCREENBITMAP)))
(T (GETSTREAM PWINDOW]
(COND
(PACMANINCOLOR (COLORDISPLAY T)
(COLORBACKGROUND)
(SETQ PMOLDCOLORMAP (SCREENCOLORMAP (COLORMAPCREATE)))
(CHANGECURSORSSCREEN (COLORSCREENBITMAP))
(SETDISPLAYHEIGHT 0)))
(SETQ ENERGIZEROBJ 'I)
(SETBITMAPS)
(SETCHARPPROPS)
(GETHISCORES])

```

(PACMANNEWGAME

(* MD " 7-DEC-83 14:50")

```

[LAMBDA NIL
(SETQ NUMMEN 3)
(SETQ SCORE 0)
(SETQ NUMDOTS 0)
(DRAWBOARDNEW)
(FRUITINIT)
(SETQ GVALUEBITMAPLIST '(GHOST1 GHOST2 T GHOST3 T T T GHOST4))
(PAINTOBJ PMAN 20 345 16 16 PSTREAM)
(PAINTOBJ PMAN 40 345 16 16 PSTREAM)
(PACMANREINIT])

```

(PACMANREINIT

(* rrb " 3-Feb-84 14:04")

```

[LAMBDA NIL
[COND
((EQ FRUIT# 2)
(INTERMISSION1)
(DISSMISS 200)
(CLEARW PWINDOW)
(DRAWBOARDNEW)
(PUTPROP PMAN 'BITMAP PMANLEFT)
(COND
((IGREATERP NUMMEN 1)
(PAINTOBJ PMAN 20 345 16 16 PSTREAM)))
(COND
((IGREATERP NUMMEN 2)
(PAINTOBJ PMAN 40 345 16 16 PSTREAM]
(for I from 1 to FRUIT# do (PAINTOBJ (CAR (NTH FRUITLIST I))
(IPLUS 160 (ITIMES I 20))
350 16 16 PSTREAM))
(PUTPROP PMAN 'BITMAP PACMANC)
(ERASEOBJ PMAN (IDIFFERENCE (ITIMES (GETPROP PMAN 'XLOC)
11)
6)
(IDIFFERENCE (ITIMES (IDIFFERENCE 30 (GETPROP PMAN 'YLOC))
11)
6)
16 16 PSTREAM)
[for I from 1 to 29 do (SETA BOARD I (COPY (ELT VIRGINBOARD I)
(for GHOST in '(G1 G2 G3 G4) do (ERASEOBJ (EVAL GHOST)
(IDIFFERENCE (ITIMES (GETPROP (EVAL GHOST)
'XLOC)
11)
6)
(IDIFFERENCE (ITIMES (IDIFFERENCE 30 (GETPROP (EVAL GHOST)
'YLOC))
11)
6)
16 16 PSTREAM))
(SETCHARPPROPS)
(for GHOST in '(G1 G2 G3 G4) do (PAINTOBJ (EVAL GHOST)
(IDIFFERENCE (ITIMES (GETPROP (EVAL GHOST)
'XLOC)
11)
6)
(IDIFFERENCE (ITIMES (IDIFFERENCE 30 (GETPROP (EVAL GHOST)
'YLOC))
11)
6)
16 16 PSTREAM))

```



```
(SHOWCAP "READY!" (ITIMES 12 11)
  (ITIMES (IDIFFERENCE 30 17)
    11)
  PSTREAM)
(PUTPROP PMAN 'XLOC 13)
(PUTPROP PMAN 'YLOC 23)
(SETQ FOLLOW 1)
(SETQ BLUETIME 0)
(SETQ FRUITTIME 0)
(SETQ FRUITVISIBLE T) (* Used by REDODOT)
(SETQ FRUIT# (ADD1 FRUIT#))
(SETQ GVALUEPOS '(159 . 269)) (* Used by COLLISIONCHECK)
(SETQ MOVE 8)
(SETQ PIT 0) (* Pacman in tunnel)
(PUTDOTSAGAIN)
(PUTENERGIZERS)
(DISSMISS 2000)
(SHOWCAP " " (ITIMES 12 11)
  (ITIMES (IDIFFERENCE 30 17)
    11)
  PSTREAM))
```

```
(PAINTOBJ (* MD "3-JAN-83 14:22")
[LAMBDA (OBJ X Y W H STREAM)
  (BITBLT (GETPROP OBJ 'BITMAP)
    NIL NIL STREAM X Y W H NIL (GETPROP OBJ 'OPERATION)
    NIL NIL))
```

```
(PAINTDOT (* MD "19-NOV-82 10:30")
[LAMBDA (OBJ X Y W H)
  (BITBLT OBJ NIL NIL PSTREAM X Y W H NIL 'PAINT NIL NIL))
```

```
(PUTDOTS (* MD "8-NOV-83 16:20")
[LAMBDA NIL
  (PROG (ROW N E S W)
    (for Y from 1 to 29 do (SETQ ROW (LIST NIL))
      [for X from 1 to 26 do (SETQ ROW (APPEND ROW (LIST (READ)
        (SETA BOARD Y (DREMOVE NIL ROW)))
        (SETQ ROW (ELT BOARD Y))
        (for X from 1 to 26 when (NEQ (CAR (NTH ROW X))
          0)
          do (COND
            ((EQ (CAR (NTH ROW X))
              1)
              (PAINTDOT (IF PACMANINCOLOR
                THEN COLORDOT
                ELSE DOT)
                (ITIMES X 11)
                (ITIMES (IDIFFERENCE 30 Y)
                  11)
                4 4)
                (SETQ HASDOT 8208)
                (SETQ NUMDOTS (ADD1 NUMDOTS)))
                (T (SETQ HASDOT 0)))
              (SETQ N 0)
              (SETQ E 0)
              (SETQ S 0)
              (SETQ W 0)
              [COND
                ((IGREATERP X 1)
                 (SETQ W (IMIN (CAR (NTH ROW (SUB1 X)))
                   1)
                [COND
                  ((ILESSP X 26)
                   (SETQ E (IMIN (CAR (NTH ROW (ADD1 X)))
                     1)
                [COND
                  ((IGREATERP Y 1)
                   (SETQ N (IMIN (CAR (NTH (ELT BOARD (SUB1 Y))
                     X))
                     1)
                [COND
                  ((ILESSP Y 29)
                   (SETQ S (IMIN (CAR (NTH (ELT BOARD (ADD1 Y))
                     X))
                     1)
                (RPLACA (NTH ROW X)
                  (IPLUS HASDOT (ITIMES W 8)
                    (ITIMES E 4)
                    (ITIMES N 2)
                    S)))
                (SETA BOARD Y ROW)]
```

(PUTDOTSAGAIN

```
[LAMBDA NIL (* MD "8-NOV-83 16:23")
  (for Y from 1 to 29 do (for X from 1 to 26 do (COND
    ((CHECKAT X Y 8192)
     (PAINTDOT (COND
      (PACMANINCOLOR COLORDOT)
      (T DOT))
      (ITIMES X 11)
      (ITIMES (IDIFFERENCE 30 Y)
        11)
      4 4)
      (SETQ NUMDOTS (ADD1 NUMDOTS))
```

(PUTENERGIZERS

```
[LAMBDA NIL (* MD "7-JAN-83 15:57")
  (PAINTOBJ ENERGIZEROBJ (ITIMES 1 11)
    (ITIMES 11 (IDIFFERENCE 30 3))
    8 8 PSTREAM)
  (PAINTOBJ ENERGIZEROBJ (ITIMES 26 11)
    (ITIMES 11 (IDIFFERENCE 30 3))
    8 8 PSTREAM)
  (PAINTOBJ ENERGIZEROBJ (ITIMES 1 11)
    (ITIMES 11 (IDIFFERENCE 30 23))
    8 8 PSTREAM)
  (PAINTOBJ ENERGIZEROBJ (ITIMES 26 11)
    (ITIMES 11 (IDIFFERENCE 30 23))
    8 8 PSTREAM)]
```

(REDODOT

```
[LAMBDA (X Y) (* MD "10-NOV-83 12:46")
  (COND
    ((CHECKAT X Y 16)
     (PAINTDOT (COND
      (PACMANINCOLOR COLORDOT)
      (T DOT))
      (ITIMES X 11)
      (ITIMES (IDIFFERENCE 30 Y)
        11)
      4 4))
    ((AND (CHECKAT X Y 16384)
      (IGREATERP FRUITTIME 60)
      (ILESSP FRUITTIME 120)
      FRUITVISIBLE)
     (PAINTOBJ (CAR (NTH FRUITLIST FRUIT#))
      (IDIFFERENCE (ITIMES 13 11)
        6)
      (IDIFFERENCE (ITIMES (IDIFFERENCE 30 17)
        11)
        6)
      16 16 PSTREAM))
    (T NIL))
```

(REPLACEOBJ

```
[LAMBDA (OBJ X Y W H STREAM) (* MD "8-DEC-82 17:54")
  (BITBLT OBJ NIL NIL STREAM X Y W H NIL 'REPLACE NIL NIL)]
```

(SCAN

```
[LAMBDA NIL (* MD "17-AUG-83 11:40")
  (for X from 1 to 26 do (for Y from 1 to 29 do (COND
    ((CHECKAT X Y 3840)
     (printout T X %, Y %, (BOARDVAL X Y)
      T))
```

(SETBITMAPS

```
[LAMBDA NIL (* MD "10-NOV-83 16:19")
  (SETQ PMANLEFT (COND
    (PACMANINCOLOR COLORPMANLEFT)
    (T PMANLEFTMAP)))
  (SETQ PMANRIGHT (COND
    (PACMANINCOLOR COLORPMANRIGHT)
    (T PMANRIGHTMAP)))
  (SETQ PMANUP (COND
    (PACMANINCOLOR COLORPMANUP)
    (T PMANUPMAP)))
  (SETQ PMANDOWN (COND
    (PACMANINCOLOR COLORPMANDOWN)
    (T PMANDOWNMAP)))
  (SETQ PACMANC (COND
    (PACMANINCOLOR COLORPACMANC)
    (T PACMANCMAP)))
  (SETQ G1BITMAP (COND
    (PACMANINCOLOR COLORG1BITMAP)
```

```

      (T BWG1BITMAP)))
(SETQ G2BITMAP (COND
  (PACMANINCOLOR COLORG2BITMAP)
  (T BWG2BITMAP)))
(SETQ G3BITMAP (COND
  (PACMANINCOLOR COLORG3BITMAP)
  (T BWG3BITMAP)))
(SETQ G4BITMAP (COND
  (PACMANINCOLOR COLORG4BITMAP)
  (T BWG4BITMAP)))
(SETQ GINVBITMAP (COND
  (PACMANINCOLOR COLORGINVBITMAP)
  (T BWGINVBITMAP]))

```

(SETBOARDVAL

```

[LAMBDA (X Y VAL)
  (FRPLACA (FNTH (ELT BOARD Y)
    X)
    VAL)]

```

(* MD "28-NOV-83 16:48")

(SETCHARPROPS

```

[LAMBDA NIL
  (PUTPROP PMAN 'BITMAP PMANLEFT)
  (PUTPROP 'GHOST1 'BITMAP (COND
    (PACMANINCOLOR COLOR200BITMAP)
    (T 200BITMAP)))
  (PUTPROP 'GHOST2 'BITMAP (COND
    (PACMANINCOLOR COLOR400BITMAP)
    (T 400BITMAP)))
  (PUTPROP 'GHOST3 'BITMAP (COND
    (PACMANINCOLOR COLOR800BITMAP)
    (T 800BITMAP)))
  (PUTPROP 'GHOST4 'BITMAP (COND
    (PACMANINCOLOR COLOR1600BITMAP)
    (T 1600BITMAP)))
  (PUTPROP ENERGIZEROBJ 'BITMAP (COND
    (PACMANINCOLOR COLORENERGIZER)
    (T ENERGIZER)))
  (PUTPROP ENERGIZEROBJ 'OPERATION 'INVERT)
  (PUTPROP OLDPMAN 'BITMAP PACMANC)
  (PUTPROP OLDPMAN 'OPERATION 'PAINT)
  (PUTPROP PMAN 'OPERATION 'PAINT)
  (PUTPROP PMAN 'XLOC 13)
  (PUTPROP PMAN 'YLOC 23)
  (PUTPROP OLDPMAN 'XLOC 13)
  (PUTPROP OLDPMAN 'YLOC 23)

```

(* MD "10-NOV-83 16:53")

(* Energizers)

**(SETGLOCS)
(SETGCANS)**

```

(PUTPROP G1 'BITMAP G1BITMAP)
(PUTPROP OLDG1 'BITMAP (GETPROP G1 'BITMAP))
(PUTPROP G1 'NUMBER 1)
(PUTPROP G1 'BIT 256)
(PUTPROP G1 'OPERATION 'INVERT)
(PUTPROP G1 'EATEN 0)
(PUTPROP G1 'GIT 0)
(PUTPROP G2 'BITMAP G2BITMAP)
(PUTPROP OLDG2 'BITMAP (GETPROP G2 'BITMAP))
(PUTPROP G2 'BIT 512)
(PUTPROP G2 'NUMBER 2)
(PUTPROP G2 'OPERATION 'INVERT)
(PUTPROP G2 'EATEN 0)
(PUTPROP G2 'GIT 0)
(PUTPROP G3 'BITMAP G3BITMAP)
(PUTPROP OLDG3 'BITMAP (GETPROP G3 'BITMAP))
(PUTPROP G3 'BIT 1024)
(PUTPROP G3 'NUMBER 3)
(PUTPROP G3 'OPERATION 'INVERT)
(PUTPROP G3 'EATEN 0)
(PUTPROP G3 'GIT 0)
(PUTPROP G4 'BITMAP G4BITMAP)
(PUTPROP OLDG4 'BITMAP (GETPROP G4 'BITMAP))
(PUTPROP G4 'BIT 2048)
(PUTPROP G4 'NUMBER 4)
(PUTPROP G4 'OPERATION 'INVERT)
(PUTPROP G4 'EATEN 0)
(PUTPROP G4 'GIT 0)]

```

(* Ghost 1)

(* Ghost 2)

(* Ghost 3)

(* Ghost 4)

(SETGCANS

```

[LAMBDA NIL
  (PUTPROP G1 'CAN 12)
  (PUTPROP G2 'CAN 2)
  (PUTPROP G3 'CAN 4)
  (PUTPROP G4 'CAN 8)]

```

(* MD "19-AUG-83 17:25")

(SETGLOCS

```
[LAMBDA NIL
  (PUTPROP OLDG1 'INITX 13)
  (PUTPROP OLDG1 'INITY 11)
  (PUTPROP OLDG1 'XLOC 13)
  (PUTPROP OLDG1 'YLOC 11)
  (PUTPROP G1 'INITX 13)
  (PUTPROP G1 'INITY 11)
  (PUTPROP G1 'XLOC 13)
  (PUTPROP G1 'YLOC 11)
  (PUTPROP OLDG2 'INITX 13)
  (PUTPROP OLDG2 'INITY 12)
  (PUTPROP OLDG2 'XLOC 13)
  (PUTPROP OLDG2 'YLOC 12)
  (PUTPROP G2 'INITX 13)
  (PUTPROP G2 'INITY 12)
  (PUTPROP G2 'XLOC 13)
  (PUTPROP G2 'YLOC 12)
  (PUTPROP OLDG3 'INITX 12)
  (PUTPROP OLDG3 'INITY 13)
  (PUTPROP OLDG3 'XLOC 12)
  (PUTPROP OLDG3 'YLOC 13)
  (PUTPROP G3 'INITX 12)
  (PUTPROP G3 'INITY 13)
  (PUTPROP G3 'XLOC 12)
  (PUTPROP G3 'YLOC 13)
  (PUTPROP OLDG4 'INITX 15)
  (PUTPROP OLDG4 'INITY 13)
  (PUTPROP OLDG4 'XLOC 15)
  (PUTPROP OLDG4 'YLOC 13)
  (PUTPROP G4 'INITX 15)
  (PUTPROP G4 'INITY 13)
  (PUTPROP G4 'XLOC 15)
  (PUTPROP G4 'YLOC 13)]
```

(* MD "18-AUG-83 14:55")

(SETPLAYERBOARDVAL

```
[LAMBDA (PLAYER VAL)
  (SETBOARDVAL (GETPROP PLAYER 'XLOC)
    (GETPROP PLAYER 'YLOC)
    VAL)]
```

(* sets the board representation of the current location of player.)

(SHOW

```
[LAMBDA (VALUE)
  (MOVE TO 130 350 PSTREAM)
  (PRIN1 VALUE PSTREAM)
  (PRIN1 0 PSTREAM)]
```

(* MD "10-JAN-83 15:07")

(SHOWCAP

```
[LAMBDA (MESSAGE X Y)
  (MOVE TO X Y PSTREAM)
  (PRIN1 MESSAGE PSTREAM)]
```

(* MD "10-NOV-83 12:31")

(SHOWHISCORES

```
[LAMBDA NIL
  (PROG (Y)
    (CLEARW PWINDOW)
    (SHOWCAP "High scores" 100 330)
    (SETQ Y 300)
    (for I in HILIST do (SHOWCAP (CADR I)
      50 Y)
      (SHOWCAP (CAR I)
        200 Y)
      (SETQ Y (IDIFFERENCE Y 16]))
```

(* MD "30-AUG-83 11:39")

(SPEEDQ

```
[LAMBDA NIL
  (IMAX 0 (IDIFFERENCE (MENU (create MENU
    ITEMS _ '((Fast 50 "Expert players")
      (Medium 100 "Intermediate players")
      (Slow 200 "Beginning Players")
      (Snail 400 "First time players")))
    TITLE _ "How fast?"
    CENTERFLG _ T))
    (SELECTQ (MACHINETYPE)
      (DOLPHIN 75)
      (DANDELION 40)
      0)]
```

(* rrb "3-Feb-84 14:55")

(* queries about the speed of the game.)

)

(RPAQQ 1600BITMAP 1600)

(RPAQQ 200BITMAP 200)


(RPAQQ 400BITMAP 400)


(RPAQQ 800BITMAP 800)

(RPAQQ APPLEBITMAP )

(RPAQQ ATTRACTMODE NIL)

(RPAQQ BELLBITMAP )

(RPAQQ BIGPMANC )

(RPAQQ BIGPMANR )

(RPAQQ BIRDBITMAP )

(RPAQQ BLUETIME 0)

(RPAQ BOARD

```
(READARRAY-FROM-LIST 29 'DOUBLE POINTER 1
' ((8213 8220 8220 8220 8220 8221 8220 8220 8220 8220 8220 8217 0 0 8213 8220 8220 8220 8220 8220
8221 8220 8220 8220 8220 8220 8217)
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QUARTERBITMAP SAVEGVALUE SCORE SIGLOGO STRAWBERRYBITMAP VIRGINBOARD)
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(PUTPROPS PACMAN COPYRIGHT ("Xerox Corporation" 1984 1985 1987 1988 1989))

FUNCTION INDEX

ASSIGNDIR	1	GETHISCORES	6	MOVELEFT	12	PAINTOBJ	17	SETPLAYERBOARDVAL	20
BLINKENERGIZERS	2	GETMONEY	6	MOVEOBJ	12	PLAYERBOARDVAL	2	SHOW	20
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