```
;;
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(RPAQQ TRAJECTORY-FOLLOWERCOMS
       ((FNS TRAJECTORY.FOLLOW TRAJECTORY.FOLLOWER.POINT TRAJECTORY.FOLLOWER.PUT TRAJECTORY.FOLLOWER.SETUP
             TRAJECTORY.FOLLOWER.TEST TRAJECTORY.FOLLOWER.WRAPUP)
        (VARS (TRAJECTORY.FOLLOWER.POINTS))
        (GLOBALVARS TRAJECTORY.FOLLOWER.COUNT TRAJECTORY.FOLLOWER.LAST.TIME TRAJECTORY.FOLLOWER.POINTER
             TRAJECTORY.FOLLOWER.POINTS TRAJECTORY.FOLLOWER.DELAY TRAJECTORY.FOLLOWER.DSP
             TRAJECTORY.FOLLOWER.BITMAP TRAJECTORY.FOLLOWER.HALF.WIDTH TRAJECTORY.FOLLOWER.HALF.HEIGHT
             TRAJECTORY.FOLLOWER.WIDTH TRAJECTORY.FOLLOWER.HEIGHT)
        (BITMAPS TRAJECTORY.FOLLOWER.DEFAULT.BITMAP TRAJECTORY.FOLLOWER.BALL TRAJECTORY.FOLLOWER.HORIZONTAL
             TRAJECTORY.FOLLOWER.VERTICAL)
        (FILES (SYSLOAD FROM VALUEOF LISPUSERSDIRECTORIES)
             READNUMBER)))

(DEFINEQ
```

(**TRAJECTORY.FOLLOW**
```
  [LAMBDA (KNOTS CLOSED N DELAY BITMAP WINDOW)              ; Edited  4-Apr-88 11:51 by Briggs
                                                           ; Edited 22-Apr-83 17:56 by DAHJr

    (PROG NIL
          (TRAJECTORY.FOLLOWER.SETUP (OR WINDOW (SCREENBITMAP))
                 N DELAY (OR BITMAP TRAJECTORY.FOLLOWER.BALL))
          (DRAWCURVE KNOTS CLOSED (FUNCTION TRAJECTORY.FOLLOWER.POINT)
                 NIL
                 (OR WINDOW PROMPTWINDOW))
          (TRAJECTORY.FOLLOWER.WRAPUP])
```

(**TRAJECTORY.FOLLOWER.POINT**
```
  [LAMBDA (X Y WINDOW)                                      ; Edited  4-Apr-88 11:52 by Briggs
                                                           ; Edited 19-APR-83 21:06 by DAHJr
    (if (IGREATERP (SETQ TRAJECTORY.FOLLOWER.POINTER (IPLUS TRAJECTORY.FOLLOWER.POINTER 2))
               TRAJECTORY.FOLLOWER.COUNT)
        then (SETQ TRAJECTORY.FOLLOWER.POINTER 1))
    (TRAJECTORY.FOLLOWER.PUT TRAJECTORY.FOLLOWER.POINTER)
    (if TRAJECTORY.FOLLOWER.DELAY
        then (DISMISS (IDIFFERENCE TRAJECTORY.FOLLOWER.DELAY (CLOCKDIFFERENCE TRAJECTORY.FOLLOWER.LAST.TIME)))
             (SETQ TRAJECTORY.FOLLOWER.LAST.TIME (CLOCK 0)))
    (if X
        then (SETA TRAJECTORY.FOLLOWER.POINTS TRAJECTORY.FOLLOWER.POINTER (FIXR X))
             (SETA TRAJECTORY.FOLLOWER.POINTS (ADD1 TRAJECTORY.FOLLOWER.POINTER)
                   (FIXR Y))
             (TRAJECTORY.FOLLOWER.PUT TRAJECTORY.FOLLOWER.POINTER)
      else (SETA TRAJECTORY.FOLLOWER.POINTS TRAJECTORY.FOLLOWER.POINTER MAX.FIXP])
```

(**TRAJECTORY.FOLLOWER.PUT**
```
  [LAMBDA (POINTER)                                         ; Edited  4-Apr-88 11:53 by Briggs
                                                           ; Edited 19-APR-83 20:57 by DAHJr
    (PROG (X Y)
          (if (NOT (IEQP (SETQ X (ELT TRAJECTORY.FOLLOWER.POINTS POINTER))
                     MAX.FIXP))
              then (SETQ Y (ELT TRAJECTORY.FOLLOWER.POINTS (ADD1 POINTER)))
                   (BITBLT TRAJECTORY.FOLLOWER.BITMAP 0 0 TRAJECTORY.FOLLOWER.DSP (IDIFFERENCE X
                                                                                        TRAJECTORY.FOLLOWER.HALF.WIDTH
                                                                                        )
                          (IDIFFERENCE Y TRAJECTORY.FOLLOWER.HALF.HEIGHT)
                          TRAJECTORY.FOLLOWER.WIDTH TRAJECTORY.FOLLOWER.HEIGHT 'INPUT 'INVERT])
```

(**TRAJECTORY.FOLLOWER.SETUP**
```
  [LAMBDA (DSP N DELAY BITMAP)                              ; Edited  4-Apr-88 11:54 by Briggs
                                                           ; Edited 19-APR-83 21:05 by DAHJr
    (PROG ((REAL.N (OR N 100))
           (REAL.BITMAP (OR BITMAP TRAJECTORY.FOLLOWER.DEFAULT.BITMAP)))
          (if (AND TRAJECTORY.FOLLOWER.POINTS (EQ (ITIMES REAL.N 2)
                                                  (ARRAYSIZE TRAJECTORY.FOLLOWER.POINTS)))
              else (SETQ TRAJECTORY.FOLLOWER.POINTS (ARRAY (ITIMES REAL.N 2)
                                                           'FIXP MAX.FIXP)))
          (SETQ TRAJECTORY.FOLLOWER.POINTER 1)
```

```
            (SETQ TRAJECTORY.FOLLOWER.COUNT REAL.N)
            (SETQ TRAJECTORY.FOLLOWER.DSP DSP)
            (SETQ TRAJECTORY.FOLLOWER.DELAY DELAY)
            (if DELAY
                then (SETQ TRAJECTORY.FOLLOWER.LAST.TIME (CLOCK 0)))
            (SETQ TRAJECTORY.FOLLOWER.BITMAP REAL.BITMAP)
            (SETQ TRAJECTORY.FOLLOWER.WIDTH (fetch (BITMAP BITMAPWIDTH) of REAL.BITMAP))
            (SETQ TRAJECTORY.FOLLOWER.HEIGHT (fetch (BITMAP BITMAPHEIGHT) of REAL.BITMAP))
            (SETQ TRAJECTORY.FOLLOWER.HALF.WIDTH (IQUOTIENT TRAJECTORY.FOLLOWER.WIDTH 2))
            (SETQ TRAJECTORY.FOLLOWER.HALF.HEIGHT (IQUOTIENT TRAJECTORY.FOLLOWER.HEIGHT 2])
```

(**TRAJECTORY.FOLLOWER.TEST**

```
  [LAMBDA NIL                                                    ; Edited  4-Apr-88 11:42 by Briggs
                                                                 ; Edited 22-APR-83 16:17 by DAHJr
    (PROG (KNOTS N DELAY CLOSED BITMAP)
          (printout PROMPTWINDOW "Indicate knots on a trajectory; hold down left shift key on last point")
          [SETQ KNOTS (CONS (GETPOSITION)
                            (collect (GETPOSITION) repeatuntil (KEYDOWNP 'LSHIFT]
          (SETQ N (RNUMBER "Indicate the number of points in the follower"))
          (SETQ DELAY (MAX 0 (RNUMBER "Indicate the delay per point (milliseconds)")))
          (if (ZEROP DELAY)
              then (SETQ DELAY NIL))
          [SETQ CLOSED (MENU (create MENU
                                     ITEMS _ '(OPEN CLOSED]
          [SETQ BITMAP (MENU (create MENU
                                     ITEMS _ '(("A single point" NIL)
                                               ("A horizontal line" TRAJECTORY.FOLLOWER.HORIZONTAL)
                                               ("A vertical line" TRAJECTORY.FOLLOWER.VERTICAL)
                                               ("A ball" TRAJECTORY.FOLLOWER.BALL]
          (TRAJECTORY.FOLLOWER.SETUP (SCREENBITMAP)
                 N DELAY BITMAP)
          (if (EQ CLOSED 'CLOSED)
              then (until (KEYDOWNP 'LSHIFT) do (DRAWCURVE KNOTS T (FUNCTION TRAJECTORY.FOLLOWER.POINT)
                                                            NIL PROMPTWINDOW))
            else (DRAWCURVE KNOTS NIL (FUNCTION TRAJECTORY.FOLLOWER.POINT)
                     NIL PROMPTWINDOW))
          (TRAJECTORY.FOLLOWER.WRAPUP])
```

(**TRAJECTORY.FOLLOWER.WRAPUP**

```
  [LAMBDA NIL                                                    ; Edited  4-Apr-88 11:42 by Briggs
                                                                 ; Edited 19-APR-83 17:29 by DAHJr
    (for I to TRAJECTORY.FOLLOWER.COUNT do (TRAJECTORY.FOLLOWER.POINT])
)

(RPAQQ TRAJECTORY.FOLLOWER.POINTS NIL)

(DECLARE%: DOEVAL@COMPILE DONTCOPY

(GLOBALVARS TRAJECTORY.FOLLOWER.COUNT TRAJECTORY.FOLLOWER.LAST.TIME TRAJECTORY.FOLLOWER.POINTER
       TRAJECTORY.FOLLOWER.POINTS TRAJECTORY.FOLLOWER.DELAY TRAJECTORY.FOLLOWER.DSP TRAJECTORY.FOLLOWER.BITMAP
       TRAJECTORY.FOLLOWER.HALF.WIDTH TRAJECTORY.FOLLOWER.HALF.HEIGHT TRAJECTORY.FOLLOWER.WIDTH
       TRAJECTORY.FOLLOWER.HEIGHT)
)

(RPAQQ TRAJECTORY.FOLLOWER.DEFAULT.BITMAP .)

(RPAQQ TRAJECTORY.FOLLOWER.BALL ● )

(RPAQQ TRAJECTORY.FOLLOWER.HORIZONTAL ▬ )

(RPAQQ TRAJECTORY.FOLLOWER.VERTICAL ▎ )

(FILESLOAD (SYSLOAD FROM VALUEOF LISPUSERSDIRECTORIES)
       READNUMBER)

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FUNCTION INDEX

VARIABLE INDEX