IDLEHAX

By: Larry Masinter (Masinter.pa@Xerox.com) with contributions by various others.

INTRODUCTION

This module contains a couple of random demonstration programs, useful as "Idle programs", callable from the background menu. The Idle display options includes Lines Warp-Out Radar Triangles RandAngles Polygons Bubbles and Kaleidoscope.

These are implemented by the following functions:

(POLYGONS *W NOBLOCK TIMER*)   [Function]

Calls (POLYGONS) or (POLYGONS window) to perpetually draw polygons in the given window (it (re)uses POLYGONSWINDOW if argument is NIL). To run in the background, you can ADD.PROCESS((POLYGONS (CREATEW]. Controlled somewhat by the global parameters POLYGONMINPTS (minimum number of vertices), POLYGONMAXPTS (maximum number of vertices), POLYGONSTEPS (number of steps between min and max), and delays POLYGONWAIT (time between different polygons) and POLYGONWAIT2 (delay between initial display of beginning and end and the movement phase.)

If NOBLOCK is T, it doesn't block at all (runs after but can't run in background.) If TIMER is given, then POLYGONS will stop after TIMER is expired. (Used by the demo system.)

(LINES *W N LCNT STEPS ODDSTEP*)   [Function]

Similar to POLYGONS in controls, but draws perpetually changing form using line draw. W defaults a "demo window", but is the window on which the display is drawn, N is the number of endpoints (e.g., 2 draws lines, 3 draws triangles, 7 draws 7-segment figures), LCNT is the "number of lines on the screen at any one time", STEPS is the number of lines to draw between start and end (the higher this number, the closer together the lines are), and ODDSTEP is a flag: if T, then the odd endpoints remain the same every other iteration (try (LINES NIL 3 1 40 T).) The background RandAngles means: (LINES W (RAND 3 7) (RAND 1 16) (RAND 25 100)), while Triangles is (LAMBDA (W) (LINES W 3 1 40)), etc.

(BUBBLES *WINDOW*)   [Function]

Perpetually draws circles. Controlled by BUBBLECNT, which is read at startup as the number of circles visible at any one time.

(KAL *W PERIOD PERSISTENCE*)   [Function]

Borrowed from the KAL LispUsers package: draws a random symmetric pattern of dots. Pretty. Period affects the style of display, while PERSISTENCE affects how many dots are on the screen at once.

(WARP *W*)   [Function]

Draws a sequence of circular patterns that resemble piles of sand. Or not; you decide.

POLYGONS, LINES and BUBBLES adjust themselves to the size of the window, so you can reshape the window in the middle of the demo.