#include <GL/gl.h>

#include <GL/glut.h>

#define drawOneLine(x1,y1,x2,y2) glBegin(GL\_LINES); \

glVertex2f ((x1),(y1)); glVertex2f ((x2),(y2)); glEnd();

void init(void)

{

glClearColor (0.0, 0.0, 0.0, 0.0);

glShadeModel (GL\_FLAT);

}

void display(void)

{

int i;

glClear (GL\_COLOR\_BUFFER\_BIT);

/\* select white for all lines \*/

glColor3f (1.0, 1.0, 1.0);

/\* in 1st row, 3 lines, each with a different stipple \*/

glEnable (GL\_LINE\_STIPPLE);

glLineStipple (1, 0x0101); /\* dotted \*/

drawOneLine (50.0, 125.0, 150.0, 125.0);

glLineStipple (1, 0x00FF); /\* dashed \*/

drawOneLine (150.0, 125.0, 250.0, 125.0);

glLineStipple (1, 0x1C47); /\* dash/dot/dash \*/

drawOneLine (250.0, 125.0, 350.0, 125.0);

/\* in 2nd row, 3 wide lines, each with different stipple \*/

glLineWidth (5.0);

glLineStipple (1, 0x0101); /\* dotted \*/

drawOneLine (50.0, 100.0, 150.0, 100.0);

glLineStipple (1, 0x00FF); /\* dashed \*/

drawOneLine (150.0, 100.0, 250.0, 100.0);

glLineStipple (1, 0x1C47); /\* dash/dot/dash \*/

drawOneLine (250.0, 100.0, 350.0, 100.0);

glLineWidth (1.0);

/\* in 3rd row, 6 lines, with dash/dot/dash stipple \*/

/\* as part of a single connected line strip \*/

glLineStipple (1, 0x1C47); /\* dash/dot/dash \*/

glBegin (GL\_LINE\_STRIP);

for (i = 0; i < 7; i++)

glVertex2f (50.0 + ((GLfloat) i \* 50.0), 75.0);

glEnd ();

/\* in 4th row, 6 independent lines with same stipple \*/

for (i = 0; i < 6; i++) {

drawOneLine (50.0 + ((GLfloat) i \* 50.0), 50.0,

50.0 + ((GLfloat)(i+1) \* 50.0), 50.0);

}

/\* in 5th row, 1 line, with dash/dot/dash stipple \*/

/\* and a stipple repeat factor of 5 \*/

glLineStipple (5, 0x1C47); /\* dash/dot/dash \*/

drawOneLine (50.0, 25.0, 350.0, 25.0);

glDisable (GL\_LINE\_STIPPLE);

glFlush ();

}

void reshape (int w, int h)

{

glViewport (0, 0, (GLsizei) w, (GLsizei) h);

glMatrixMode (GL\_PROJECTION);

glLoadIdentity ();

gluOrtho2D (0.0, (GLdouble) w, 0.0, (GLdouble) h);

}

int main(int argc, char\*\* argv)

{

glutInit(&argc, argv);

glutInitDisplayMode (GLUT\_SINGLE | GLUT\_RGB);

glutInitWindowSize (400, 150);

glutInitWindowPosition (100, 100);

glutCreateWindow (argv[0]);

init ();

glutDisplayFunc(display);

glutReshapeFunc(reshape);

glutMainLoop();

return 0;

}

