

```

1 // fo1/5/shapes/HLine.java
2 //
3 //
4 // Copyright 2003 Bill Campbell and Ethan Bolker
5
6 /**
7  * An HLine is a horizontal line.
8  */
9
10 public class HLine extends Line
11 {
12     /**
13      * Construct an HLine having a paintChar and a length.
14      *
15      * @param length length in (character) pixels.
16      * @param paintChar character used for painting this line.
17      */
18     public HLine( int length, char paintChar )
19     {
20         super( length, paintChar );
21     }
22
23     /**
24      * Paint this Line on Screen s at position (x,y).
25      *
26      * @param screen the Screen on which this Line is to be painted.
27      * @param x       the x position for the line.
28      * @param y       the y position for the line.
29      */
30     public void paintOn( Screen screen, int x, int y )
31     {
32         for ( int i = 0; i < length; i++ )
33             screen.paintAt( paintChar, x+i, y );
34     }
35
36     /**
37      * Unit test for class HLine.
38      */
39
40     public static void main( String[] args )
41     {
42         Terminal terminal = new Terminal();
43
44         terminal.println( "Self documenting unit test of HLine." );
45         terminal.println( "The two Screens that follow should match." );
46         terminal.println();
47         terminal.println( "Hard coded picture:" );
48         terminal.println( "+++++++" );
49         terminal.println( "+++++++" );
50         terminal.println( "+++++++" );
51         terminal.println( "+++++++" );
52         terminal.println( "+++++++" );
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54         terminal.println( "+++++++" );
55         terminal.println( "+++++++" );
56         terminal.println( "+++++++" );

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57         terminal.println( "+" );
58         terminal.println( "+++++++" );
59         terminal.println();
60
61         terminal.println( "Picture drawn using HLine methods:" );
62         Screen screen = new Screen( 20, 6 );
63
64         Line hline = new HLine( 10, 'x' );
65         hline.paintOn( screen );
66
67         hline.setLength( 5 );
68         hline.paintOn( screen, 0, 1 );
69
70         hline.setPaintChar( '*' );
71         hline.paintOn( screen, 3, 3 );
72
73         hline.setLength( 1 );
74         hline.setPaintChar( '1' );
75         hline.paintOn( screen, 4, 4 );
76
77         screen.draw( terminal );
78
79     }
80 }

```