

```
1  /* This class extends teh JPanel class and is
2  * used primarily to contain the Graphical dot-plot
3  */
4
5  import java.awt.*;
6  import javax.swing.*;
7  import java.util.*;
8  import java.io.*;
9
10 class GraphPane extends JPanel
11 {
12     /* These are the attributes required for this class.
13     * Their primary purpose is to fit the graph to the
14     * panel.
15     */
16     int scaleWidth = 600;
17     int scaleHeight = 600;
18     final int PAD = 20;
19     Image scaledImage;
20     DotPlot dp;
21     String sequence_1 = "";
22     String sequence_2 = "";
23     int window;
24     int threshold;
25
26     /* This is the sole constructor for GraphPane. The
27     * class is populated from these initial parameters.
28     *
29     */
30     public GraphPane(String sequence_1, String sequence_2, int window, int threshold)
31     {
32         this.window = window;
33         this.threshold = threshold;
34         this.sequence_1 = sequence_1;
35         this.sequence_2 = sequence_2;
36     }
37
38     // Paints the graph to a panel
39     public void paint(Graphics g)
40     {
41         DotPlot dp = new DotPlot();
42         dp = new DotPlot();
43         dp.readInGenome(this.sequence_1, this.sequence_2, this.window, this.threshold);
44         dp.setDimensions();
45         Panel panel = new Panel();
46         panel.setBackground(new Color(235, 235, 235));
47         add(panel);
48         g.setColor(Color.red);
49         dp.draw(panel);
50         scaledImage = dp.img.getScaledInstance(scaleWidth, scaleHeight, 0);
51         g.drawImage(scaledImage, 0, 0, panel);
52     }
53 }
```