# Appendix B The Utility Class: BL

## Methods

The class 'BL' provides specialized output of strings which is otherwise rather messy.

```
public static void drawStringLeft(Graphics g, String s, int right, int baseline)
```

*drawStringLeft* draws the string *s* to the left from the horizontal coordinate *right*.

```
public static void drawStringCenter(Graphics g, String s,
                                    int left, int width, int baseline)
```

*drawStringCenter* draws the string *s* centered horizontally between the coordinates *left* and *left+width*.

```
public static String fixedString(double x, int places)
```

*fixedString* returns a string representation of *x* with *places* digits to the right of the decimal point.

## Source

```
public class BL
    {
    public static void drawStringLeft(java.awt.Graphics g, String s, int right, int y)
        {
        int length = g.getFontMetrics(g.getFont()).stringWidth(s);
        g.drawString(s, right - length, y);
        }

    public static void drawStringCenter(java.awt.Graphics g, String s,
                                        int left, int width, int y)
        {
        int length = g.getFontMetrics(g.getFont()).stringWidth(s);
        g.drawString(s, left + (width - length) / 2, y);
        }

    public static String fixedString(double x, int places)
        {
        String formatString = "0";
        if (places > 0)
            {
            formatString += ".";
            for (int p=0; p<places; p++)
                formatString += "0";
            }
        return (new java.text.DecimalFormat(formatString)).format(x);
        }
    }
```