Java's **print()** and **println()** methods provide no formatting capabilities—WYSIWYG. Advanced formatting methods are available to achieve precise control of output (e.g., currency, dates, time, Strings, etc.), but they require several extra steps. Recognizing the need for a simpler way to format output, developers introduced the **printf()** method with Java 5.0. You can substitute **printf()** for **print()** and **println()**to display output to the screen or stream output to a file.

The key feature of **printf()** is the inclusion of a formatting code as part of the method's argument. This disrupts the appearance of the print statement in the source code, but actually controls the appearance of the output. It will take some getting used to as the following examples illustrate.

System.out.printf( "City: **%-15s%n**", cityName);  
System.out.printf("Zip Code: **%10d%n**", zipCode);  
System.out.printf("pi = **%10.4f%n**",pi);

These three examples indicate the typical syntax of a **printf()** statement:

* a String literal to be printed (e,g., "City: " , "Zip Code: ", and "pi: ")
* a format specifier (%-15s%n , %10d%n, %10.4f%n)
* a variable to be printed (e.g., cityName, zipCode, pi)

With a little practice, using **printf()** will become automatic!