Chapter 1: Introduction

"Debugging is twice as hard as writing the code in the first place. Therefore, if you write the code as cleverly as possible, you are, by definition, not smart enough to debug it."

—Brian W. Kernighan, Canadian computer scientist and coauthor of the first book on the C programming language

Introduction

This lesson's a bit of a potpourri. We'll start with a look at one of BlueJ's tools, its *debugger*. The debugger lets us look at what's going on while the program is executing. We can see the values of our variables, and we can execute one statement at a time to check its effects. Most integrated development environments have debuggers, so if you're using one of the other IDEs that supports Java, it will have similar capabilities.

Then we'll look at one of Java's data type declarations: enum, or enumeration. It lets us declare a new data type and its values. I'll explain what that means in the lesson.

Last we'll look at Java's *switch statement*, sometimes called a case statement. It allows us to use a different structure based on a data value to replace a list of nested if statements.

I'm guessing that's all pretty confusing right now, so I'd better get busy explaining it!