

Ch.2 Understanding Class Definitions

Chapter 2 Summary & Exercises

Topics Covered

- class definitions
 - fields
 - constructors
 - methods
- methods
 - accessors
 - mutators
- comments
- parameters & local variables
 - assignment statements
 - scope
- conditional (if) statements
 - boolean expressions

The += Assignment Operator

This operator combines two operations into one: addition and assignment.

```
total = total + 1;
```

is the same as

```
total += 1;
```

Both forms are valid. The first is more clear, the second is more condensed.

Substrings in Java

A String is a collection of characters. A substring is part of that collection.

For example, given:

```
String name = "Benjamin";
```

then first three letters, "Ben" could be obtained from

```
String shortName = name.substring(0,3);
```

Substrings in Java

```
String name = "Benjamin";  
String shortName = name.substring(0,3);
```

The substring definition is actually quite confusing to new programmers, so for this example, we only need to understand the following:

```
substring(0, numCharacters)
```

The '0' indicates the start of the string, and then we specify the number of characters to include.

String method - length

All strings in Java belong to the String class. To determine the length of any string object (variable), use the length method, which *returns* the number of characters in the string as an *integer* value.

```
if (name.length() > 10)
{
    System.out.println("That is a long name");
}
```

Note the **parentheses** at the end of the method.

Assigned Work

Read the last two sections of Chapter 2
Section 2.17 (Reviewing a familiar example)
to 2.18 (Summary)

Record your answers in a text document or
OpenOffice document

Complete exercises for Section 2.17 (today)
Complete exercises for Section 2.18 (tomorrow)