

Strings, Characters and Regular Expressions: Solutions

16

*The chief defect of Henry King
Was chewing little bits of string.*

—Hilaire Belloc

*Vigorous writing is concise. A
sentence should contain no
unnecessary words, a paragraph
no unnecessary sentences.*

—William Strunk, Jr.

*I have made this letter longer
than usual, because I lack the
time to make it short.*

—Blaise Pascal

Objectives

In this chapter you'll learn:

- To create and manipulate immutable character-string objects of class `String`.
- To create and manipulate mutable character-string objects of class `StringBuilder`.
- To create and manipulate objects of class `Character`.
- To break a `String` object into tokens using `String` method `split`.
- To use regular expressions to validate `String` data entered into an application.

Self-Review Exercises

- 16.1** State whether each of the following is *true* or *false*. If *false*, explain why.
- a) When `String` objects are compared using `==`, the result is `true` if the `Strings` contain the same values.
ANS: `False`. `String` objects are compared using operator `==` to determine whether they are the same object in memory.
 - b) A `String` can be modified after it's created.
ANS: `False`. `String` objects are immutable and cannot be modified after they are created. `StringBuilder` objects can be modified after they are created.
- 16.2** For each of the following, write a single statement that performs the indicated task:
- a) Compare the string in `s1` to the string in `s2` for equality of contents.
ANS: `s1.equals(s2)`
 - b) Append the string `s2` to the string `s1`, using `+=`.
ANS: `s1 += s2;`
 - c) Determine the length of the string in `s1`.
ANS: `s1.length()`

Exercises

NOTE: Solutions to the programming exercises are located in the `ch16solutions` folder. Each exercise has its own folder named `ex16_##` where `##` is a two-digit number representing the exercise number. For example, exercise 16.17's solution is located in the folder `ex16_17`.