

- **12.12** (*Reformat Java source code*) Write a program that converts the Java source code from the next-line brace style to the end-of-line brace style. For example, the following Java source in (a) uses the next-line brace style. Your program converts it to the end-of-line brace style in (b).

```
public class Test
{
    public static void main(String[] args)
    {
        // Some statements
    }
}
```

(a) Next-line brace style

```
public class Test {
    public static void main(String[] args) {
        // Some statements
    }
}
```

(b) End-of-line brace style

Your program can be invoked from the command line with the Java source-code file as the argument. It converts the Java source code to a new format. For example, the following command converts the Java source-code file **Test.java** to the end-of-line brace style.

```
java Exercisel2_12 Test.java
```

- **12.18** (*Add package statement*) Suppose you have Java source files under the directories **chapter1**, **chapter2**, . . . , **chapter34**. Write a program to insert the statement **package chapteri**; as the first line for each Java source file under the directory **chapteri**. Suppose **chapter1**, **chapter2**, . . . , **chapter34** are under the root directory **srcRootDirectory**. The root directory and **chapteri** directory may contain other folders and files. Use the following command to run the program:

```
java Exercisel2_18 srcRootDirectory
```

- *12.19** (*Count words*) Write a program that counts the number of words in President Abraham Lincoln's Gettysburg address from <http://cs.armstrong.edu/liang/data/Lincoln.txt>.
- **12.23** (*Process scores in a text file on the Web*) Suppose that the text file on the Web <http://cs.armstrong.edu/liang/data/Scores.txt> contains an unspecified number of scores. Write a program that reads the scores from the file and displays their total and average. Scores are separated by blanks.
- *12.24** (*Create large dataset*) Create a data file with 1,000 lines. Each line in the file consists of a faculty member's first name, last name, rank, and salary. The faculty member's first name and last name for the *i*th line are *FirstName_i* and *LastName_i*. The rank is randomly generated as assistant, associate, and full. The salary is randomly generated as a number with two digits after the decimal point. The salary for an assistant professor should be in the range from 50,000 to 80,000, for associate professor from 60,000 to 110,000, and for full professor from 75,000 to 130,000. Save the file in **Salary.txt**. Here are some sample data:
- ```
FirstName1 LastName1 assistant 60055.95
FirstName2 LastName2 associate 81112.45
...
FirstName1000 LastName1000 full 92255.21
```