- 16. Modify the fcopy.c program of Section 22.4 so that it uses fread and fwrite to copy the file in blocks of 512 bytes. (The last block may contain fewer than 512 bytes, of course.)
- 17. Write a program that reads a series of phone numbers from a file and displays them in a standard format. Each line of the file will contain a single phone number, but the numbers may be in a variety of formats. You may assume that each line contains 10 digits, possibly mixed with other characters (which should be ignored). For example, suppose that the file contains the following lines:

```
404.817.6900
(215) 686-1776
312-746-6000
877 275 5273
6173434200
```

The output of the program should have the following appearance:

```
(404) 817-6900
(215) 686-1776
(312) 746-6000
(877) 275-5273
(617) 343-4200
```

Have the program obtain the file name from the command line.

- 18. Write a program that reads integers from a text file whose name is given as a command-line argument. Each line of the file may contain any number of integers (including none) separated by one or more spaces. Have the program display the largest number in the file, the smallest number, and the median (the number closest to the middle if the integers were sorted). If the file contains an even number of integers, there will be two numbers in the middle; the program should display their average (rounded down). You may assume that the file contains no more than 10,000 integers. *Hint:* Store the integers in an array and then sort the array.
- 19. (a) Write a program that converts a Windows text file to a UNIX text file. (See Section 22.1 for a discussion of the differences between Windows and UNIX text files.)
 - (b) Write a program that converts a UNIX text file to a Windows text file.

In each case, have the program obtain the names of both files from the command line. Hint: Open the input file in "rb" mode and the output file in "wb" mode.