## Answers to Even-numbered Exercises

2. Write a gawk program that displays the number of characters in the first field followed by the first field and sends its output to standard output.

```
$ gawk '{print length($1), $1}' filename
```

4. Use gawk to determine how many lines in /etc/services contain the string Mail. Verify your answer using grep.

```
$ cat mailcount
BEGIN {count=0}
/Mail/ {count++}
END {print "There are", count, "lines with the string Mail."}
$ awk -f mailcount /etc/services
There are 51 lines with the string Mail.
$ grep -c Mail /etc/services
51
```

You do not need to initialize count.

6. Write a gawk (not awk or mawk) program named **net\_list** that reads from the **rfc-retrieval.txt** file on **www.rfc-editor.org** (see "Getting Input from a Network" on page 650) and displays a the last word on each line in all uppercase letters.

```
$ cat net_list
BEGIN {
    server = "/inet/tcp/0/www.rfc-editor.org/80"
    print "GET /rfc/rfc-retrieval.txt" |& server
    while (server |& getline)
        print toupper ($NF)
```

8. How can you cause gawk (not awk or mawk) to neatly format—that is, "pretty print"—a gawk program file? (*Hint:* See the gawk man page.)

Use gawk's **--profile** option. Unless you specify differently, the neatly formatted output appears in a file named **awkprof.out**.