ANSWERS TO EVEN-NUMBERED EXERCISES

2. How would you use kill to log Max off the system?

The -1 (one) in both of the following commands tells kill to send a TERM signal to all processes that are owned by Max:

```
# su max -c 'kill -TERM -1'
$ sudo -u max kill -TERM -1
```

4. Which problem does logrotate solve? Which is the primary configuration file for logrotate?

The logrotate utility solves the problem of log files growing too large. It manages system log (and other) files automatically by rotating, compressing, mailing, and removing each file as you specify. The logrotate utility is controlled by the <code>/etc/logrotate.conf</code> file, which sets default values and can optionally specify files to be rotated.

6. If the system is less responsive than normal, what is a good first step in figuring out where the problem is?

Run top to see if a process is using close to 100 percent of the CPU. If there is one, contact its owner or just kill the process. The user can restart the process with nice if necessary.

- 8. Working with **root** privileges, you are planning to delete some files but want to make sure that the wildcard expression you use is correct. Suggest two ways you could make sure you delete the correct files.
 - a. Give the rm command with the -i flag and confirm each deletion.

- b. Before giving the command, replace rm with echo on the command line. The shell expands the wildcards, and you can see which files will be deleted.
- c. Redirect the output of Is with the wildcard expression to put the names of the files you want to delete in a file (named, for example, deleteme). When you have verified the filenames listed in the file are correct, enter the following command:

rm \$(cat deleteme)

See page 450 for information on command substitution.