Practice Exercises

- **2.1** What is the purpose of system calls?
- **2.2** What is the purpose of the command interpreter? Why is it usually separate from the kernel?
- 2.3 What system calls have to be executed by a command interpreter or shell in order to start a new process on a UNIX system?
- **2.4** What is the purpose of system programs?
- **2.5** What is the main advantage of the layered approach to system design? What are the disadvantages of the layered approach?
- 2.6 List five services provided by an operating system, and explain how each creates convenience for users. In which cases would it be impossible for user-level programs to provide these services? Explain your answer.
- **2.7** Why do some systems store the operating system in firmware, while others store it on disk?
- 2.8 How could a system be designed to allow a choice of operating systems from which to boot? What would the bootstrap program need to do?