

Operating System Structures



Practice Exercises

- 2.1 What is the purpose of system calls?
- 2.2 What are the five major activities of an operating system in regard to process management?
- 2.3 What are the three major activities of an operating system in regard to memory management?
- 2.4 What are the three major activities of an operating system in regard to secondary-storage management?
- 2.5 What is the purpose of the command interpreter? Why is it usually separate from the kernel?
- 2.6 What system calls have to be executed by a command interpreter or shell in order to start a new process?
- 2.7 What is the purpose of system programs?
- 2.8 What is the main advantage of the layered approach to system design? What are the disadvantages of using the layered approach?
- 2.9 List five services provided by an operating system. Explain how each provides convenience to the users. Explain also in which cases it would be impossible for user-level programs to provide these services.
- 2.10 What is the purpose of system calls?
- 2.11 What are the main advantages of the microkernel approach to system design?
- 2.12 Why do some systems store the operating system in firmware, and others on disk?
- 2.13 How could a system be designed to allow a choice of operating systems to boot from? What would the bootstrap program need to do?

