

Chapter 5: Exercises

1. What is the meaning of the term busy waiting? What other kinds of waiting are there in an operating system? Can busy waiting be avoided altogether? Explain your answer.
2. Servers can be designed to limit the number of open connections. For example, a server may wish to have only N socket connections at any point in time. As soon as N connections are made, the server will not accept another incoming connection until an existing connection is released. Explain how semaphores can be used by a server to limit the number of concurrent connections.
3. Is it possible to have a deadlock involving only a single process? Explain your answer.