

Processes



Review Questions

Section 3.1

- 3.1 What are the four components of a process?
- 3.2 Provide at least three possible states a process may be in.
- 3.3 What is a Process Control Block (PCB) ?
- 3.4 What is another term for process?
- 3.5 True or False? Most operating systems allow a process to have multiple threads.

Section 3.2

- 3.6 What is the role of the process scheduler?
- 3.7 What is the degree of multiprogramming?
- 3.8 What is the term that describes saving the state of one process, and restoring the state of another?
- 3.9 What is the term that describes saving the state of one process, and restoring the state of another?

Section 3.3

- 3.10 What is a process identifier (PID)?
- 3.11 What system call creates a process on UNIX systems?
- 3.12 What system call creates a process on Windows systems?
- 3.13 What system call terminates a process on UNIX systems?
- 3.14 What is the name of the process that UNIX and Linux systems assign as the new parent of orphan processes?

Section 3.4

- 3.15 What are the two fundamental models of interprocess communication?
- 3.16 What are the two system calls used with message-passing systems?
- 3.17 True or False? Message passing is typically faster than shared memory.
- 3.18 How must shared memory behave for a rendezvous to occur?

Section 3.7

- 3.19 What system call is used to create a POSIX shared memory object?
- 3.20 What system call is used to configure the size of a POSIX shared memory object?
- 3.21 What term does Mach use to describe mailboxes?
- 3.22 What system call does Mach use to create a new mailbox?
- 3.23 What term does Windows use to name its message passing facility?

Section 3.8

- 3.24 Provide at least two types of communication mechanisms in client-server systems.
- 3.25 TCP sockets are (a) connection-oriented or (b) connection-less?
- 3.26 UDP sockets are (a) connection-oriented or (b) connection-less?
- 3.27 _____ abstract procedure calls for use between systems with network connections.
- 3.28 What is parameter marshaling?
- 3.29 What are the two types of pipes?