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 3.5

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 3.6

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?