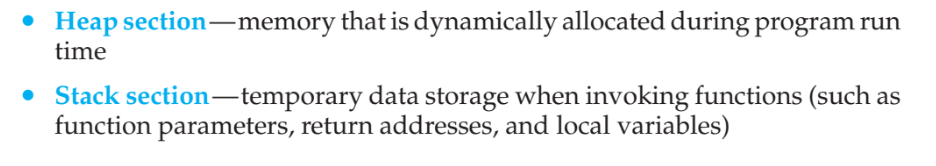
3. Process:

3.1 Process concept:

3.1.1 The process:

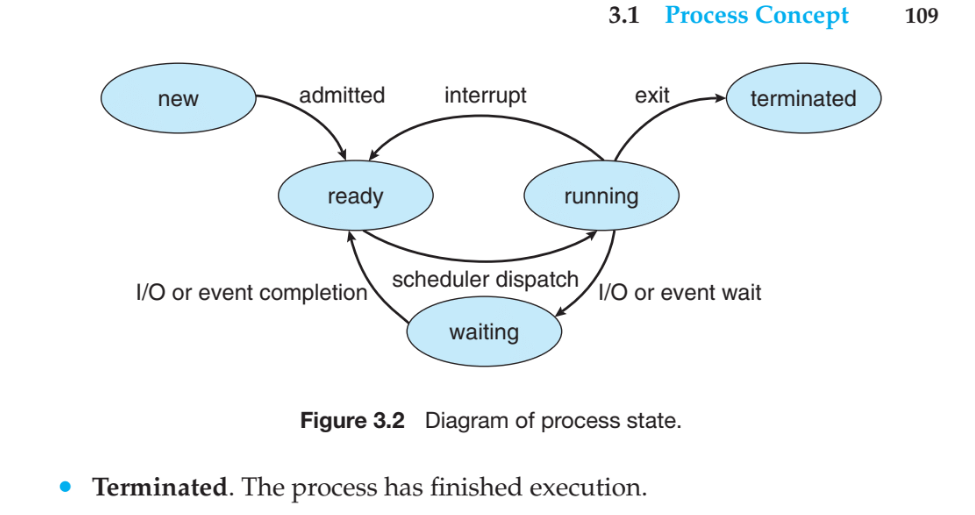
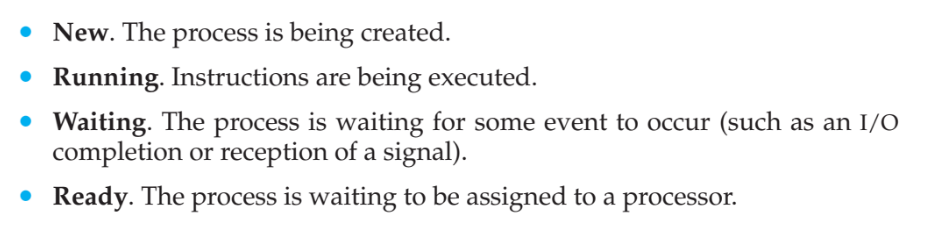




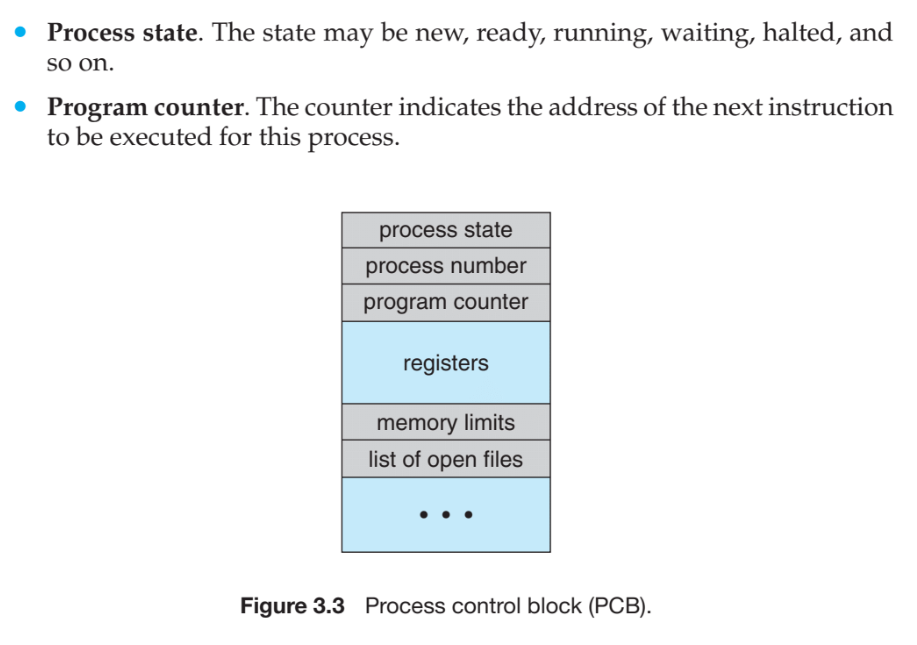
Each time a function is called an activation record containing function parameters, local variables, and the return address is push to stack.

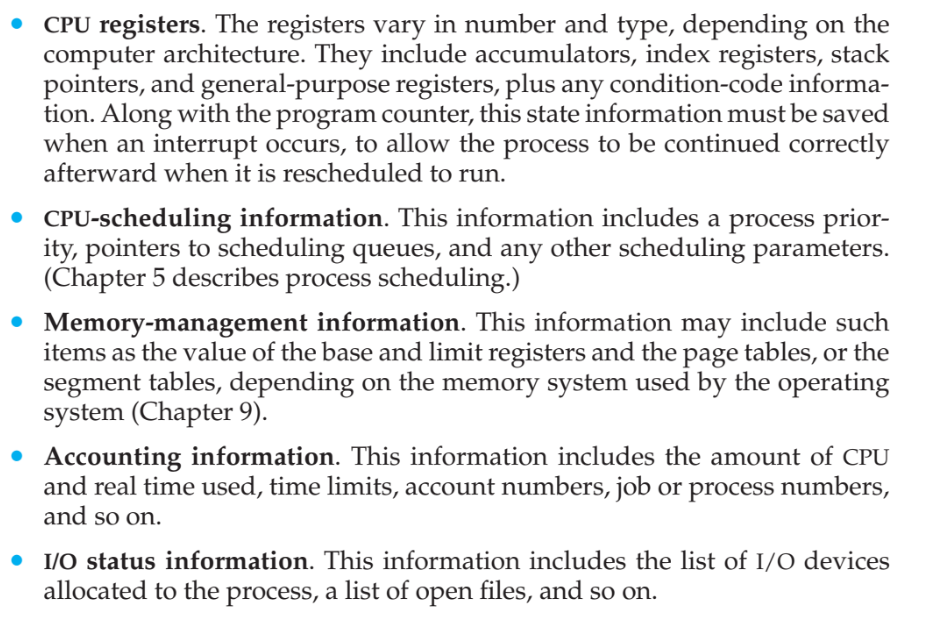
Emphasize that a program by itself not a process. A program is a passive entity, such as a file containing list of instructions stored on disk (executable fil)

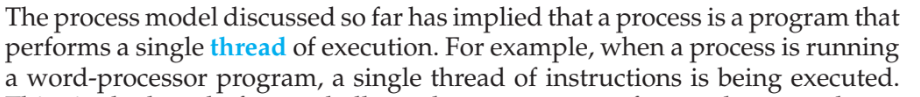
3.1.2 Process state



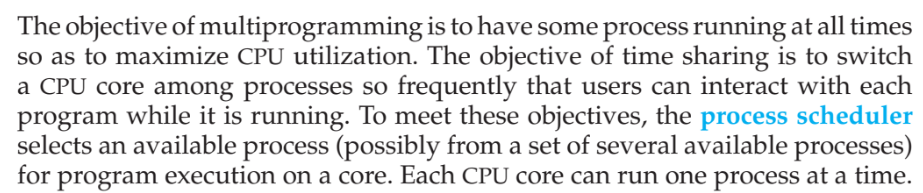
3.1.3 Process control block (PCB)

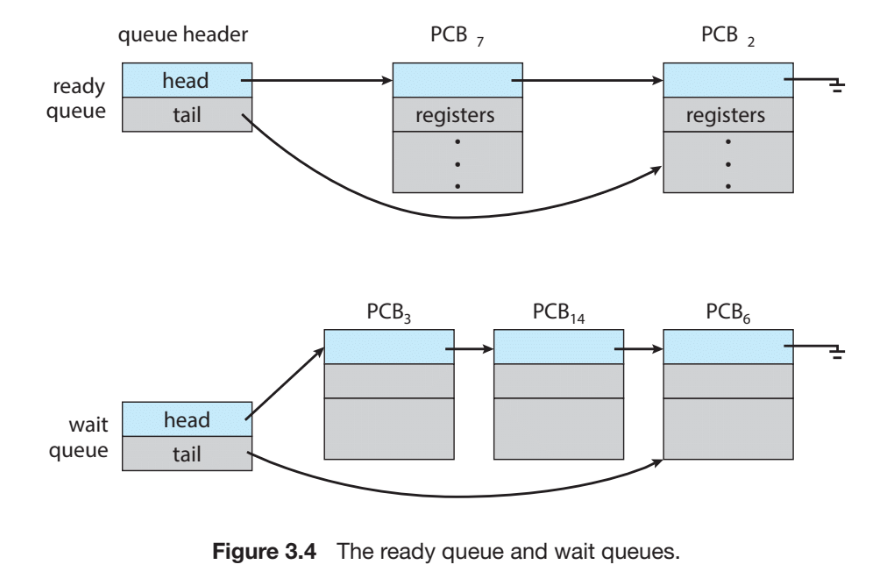
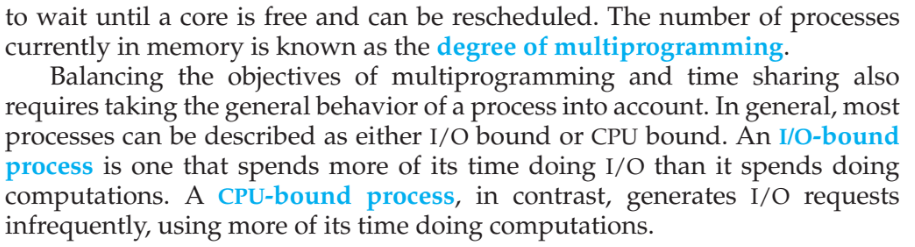




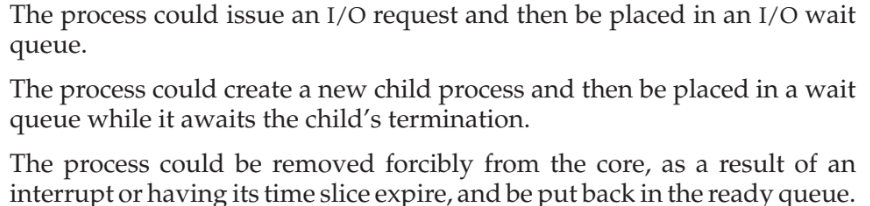
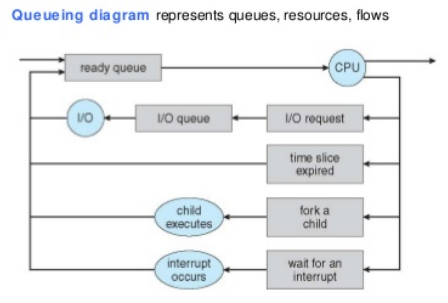
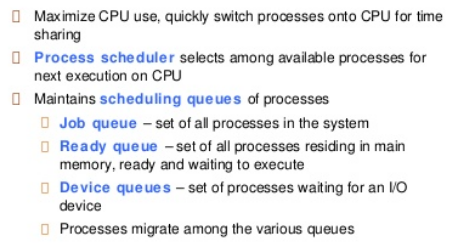
3.1.4 Threads

3.2 Process Scheduling

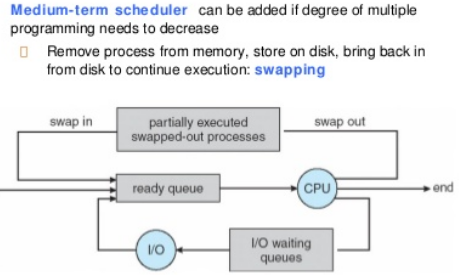
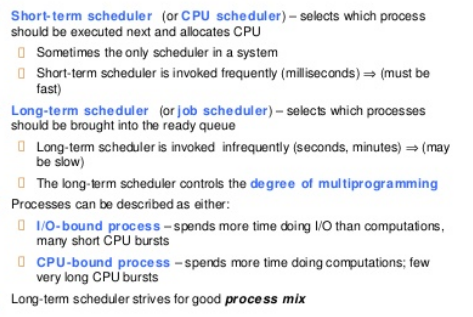




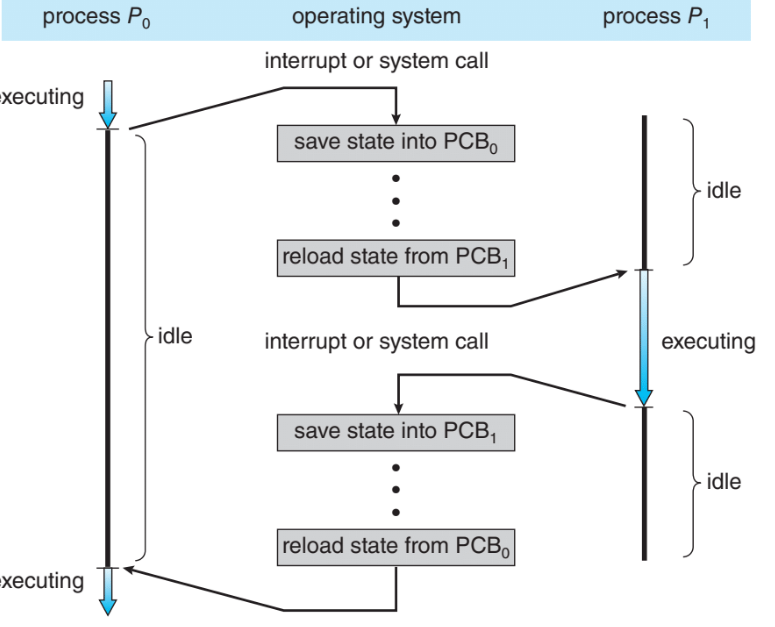
3.2.1 Scheduling queues

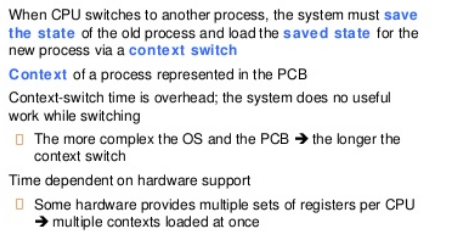


3.2.2 CPU Scheduling

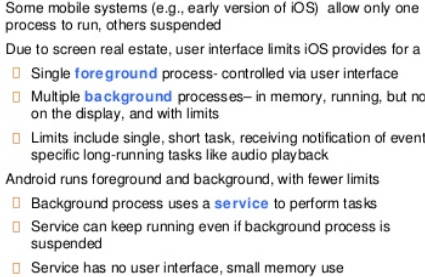


3.2.3 Context Switch



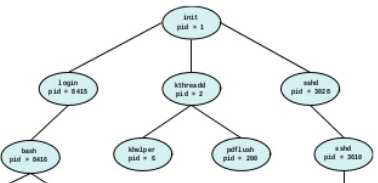
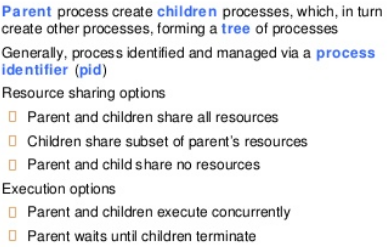


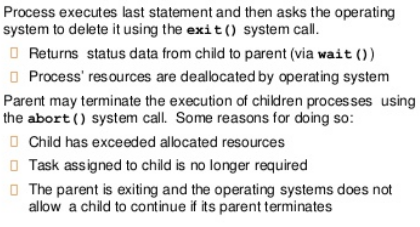
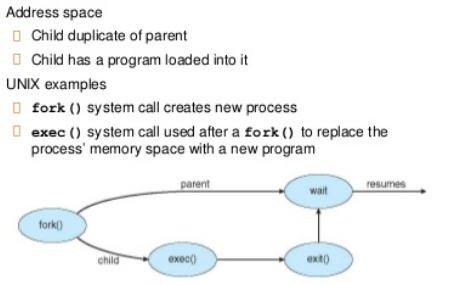
Mobile systems



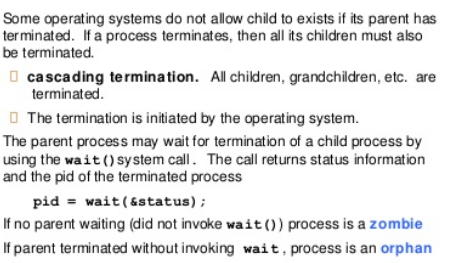
3.3 Operations on Processes

3.3.1 Process Creation

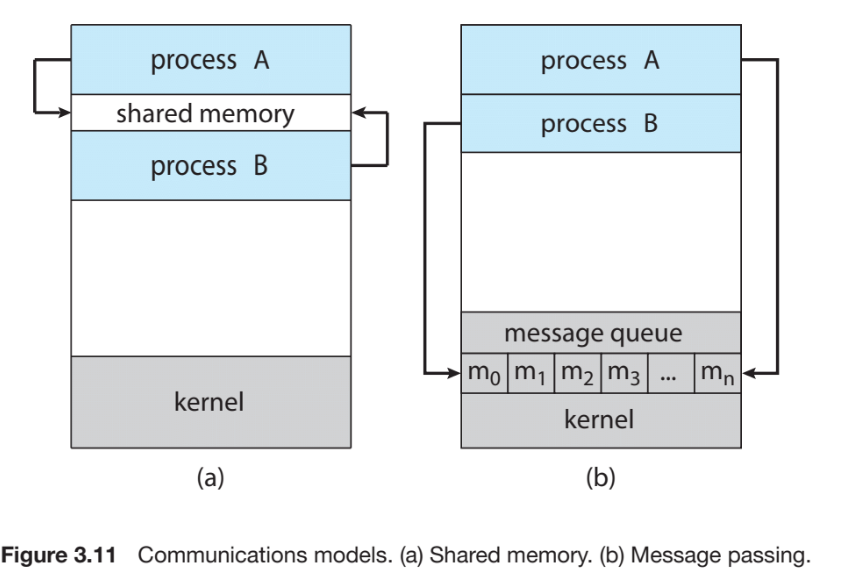
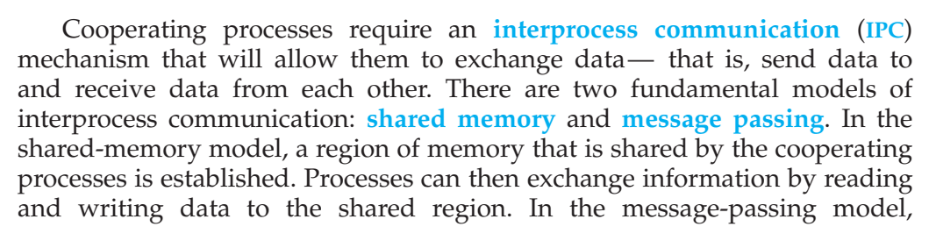
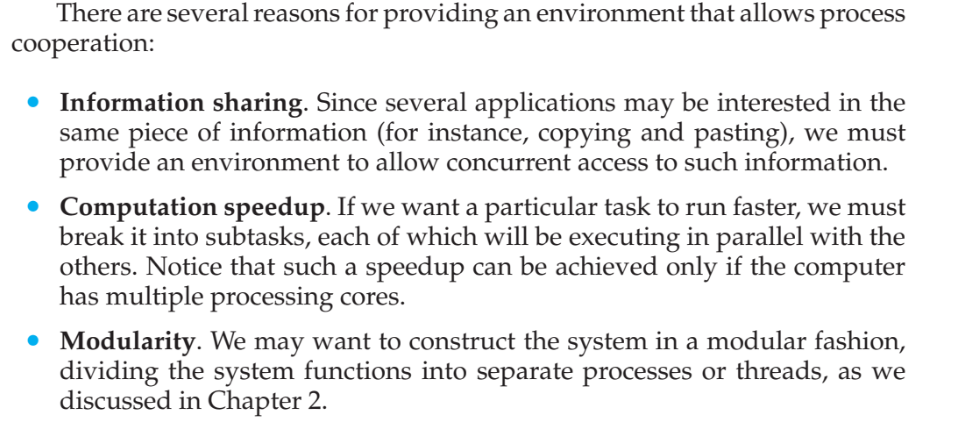
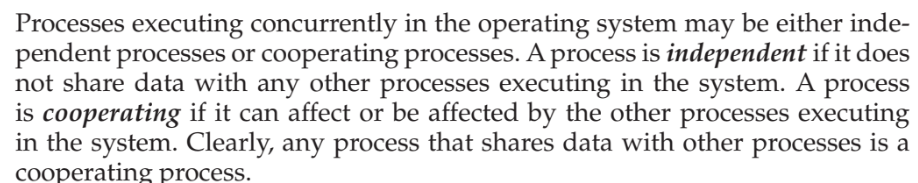




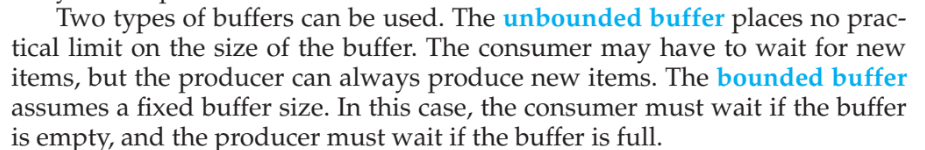
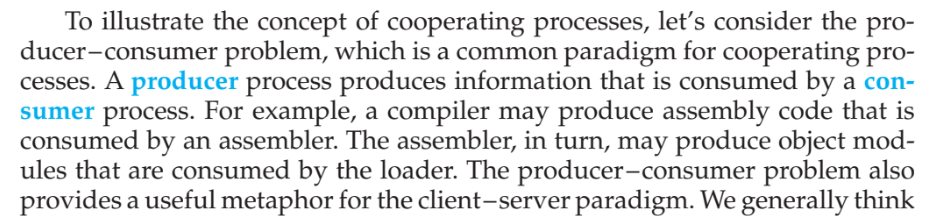
3.3.2 Process Termination



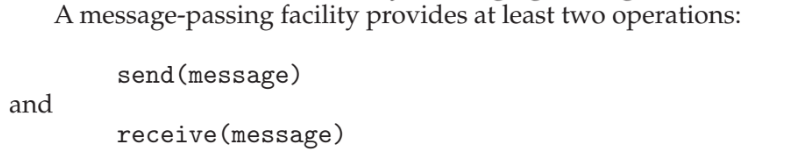
3.4 InterProcess Communication

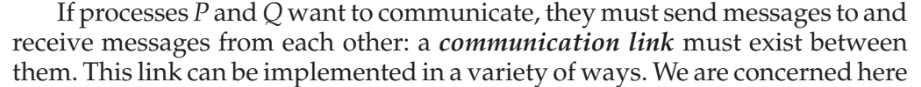


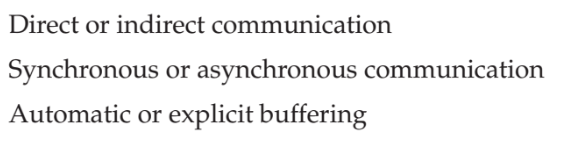
3.5 IPC in Shared-Memory System



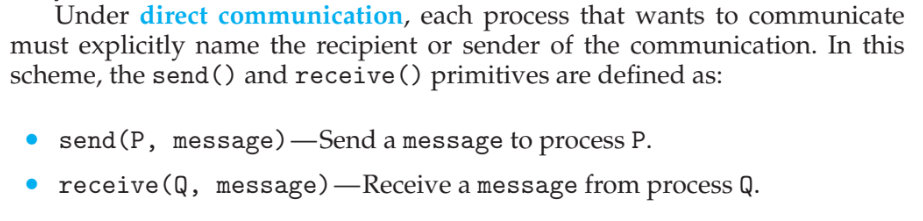
3.6 IPC in Message-Passing System

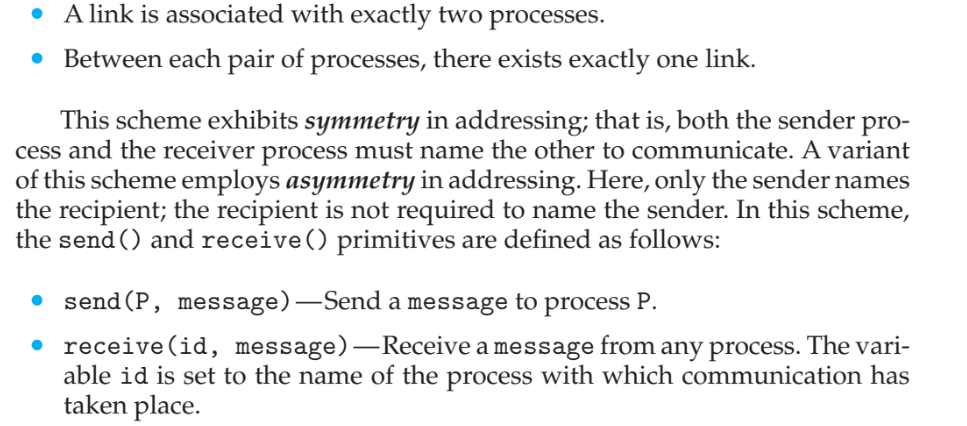
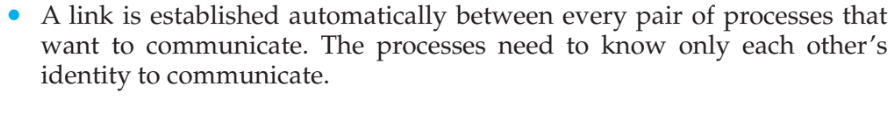


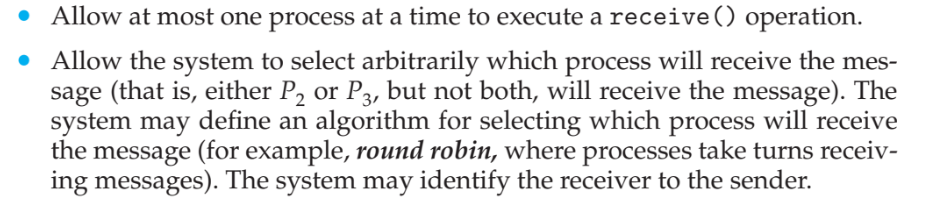
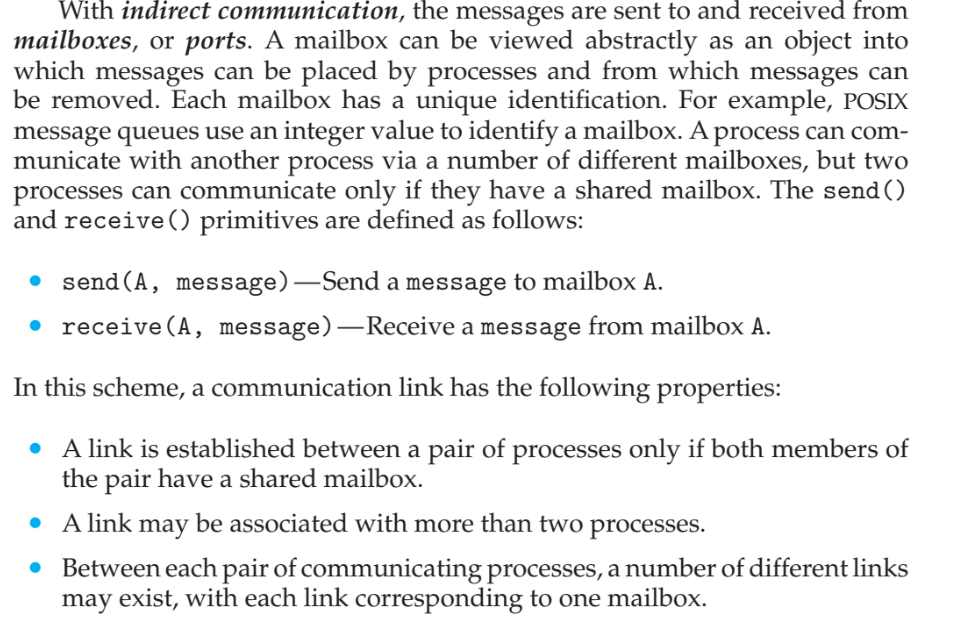




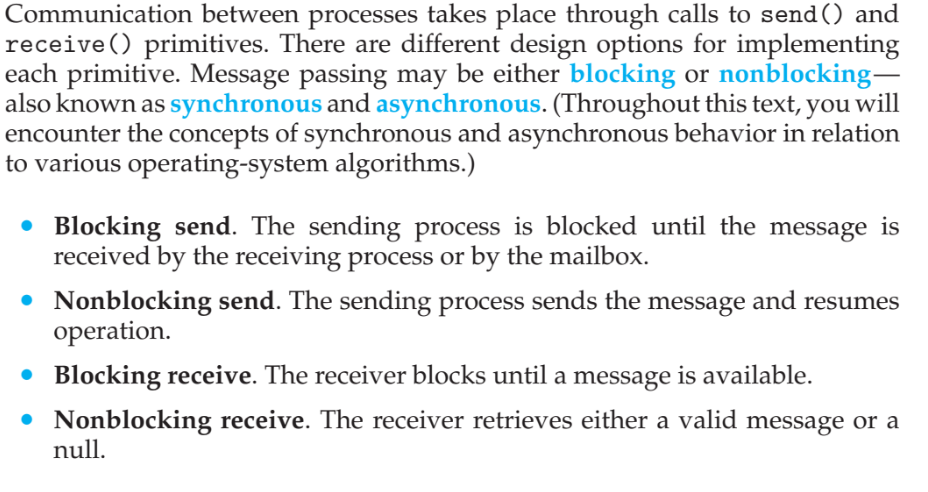
3.6.1 Naming



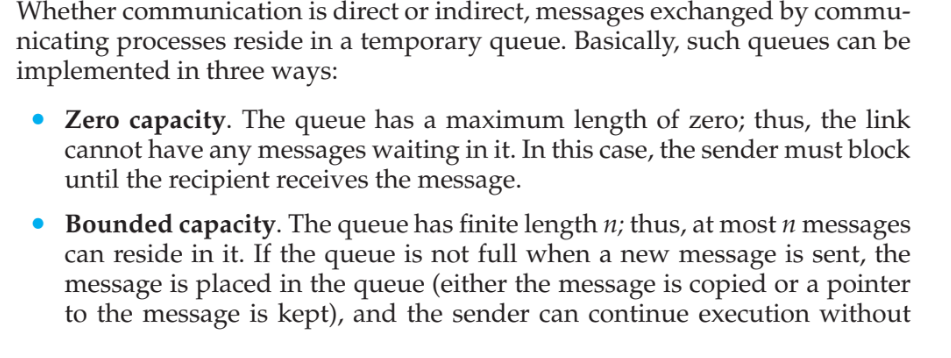


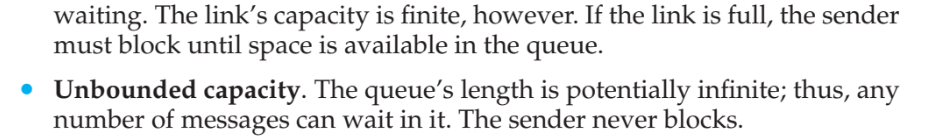




3.6.2 Synchronization

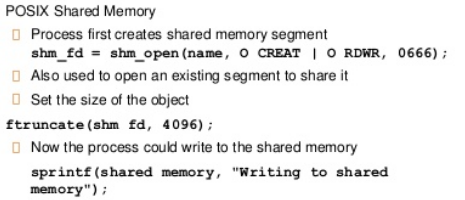
3.6.3 Buffering

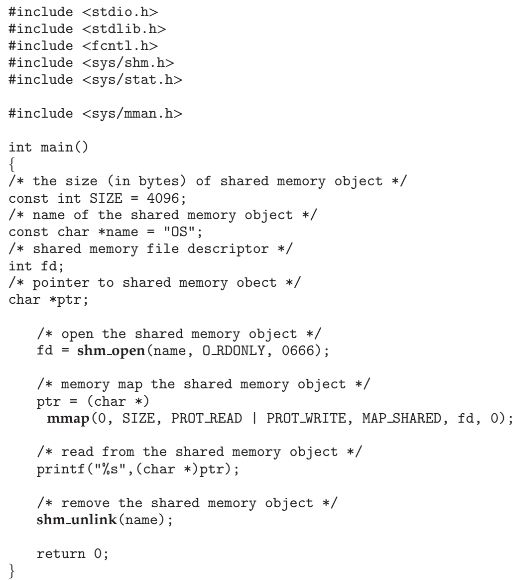
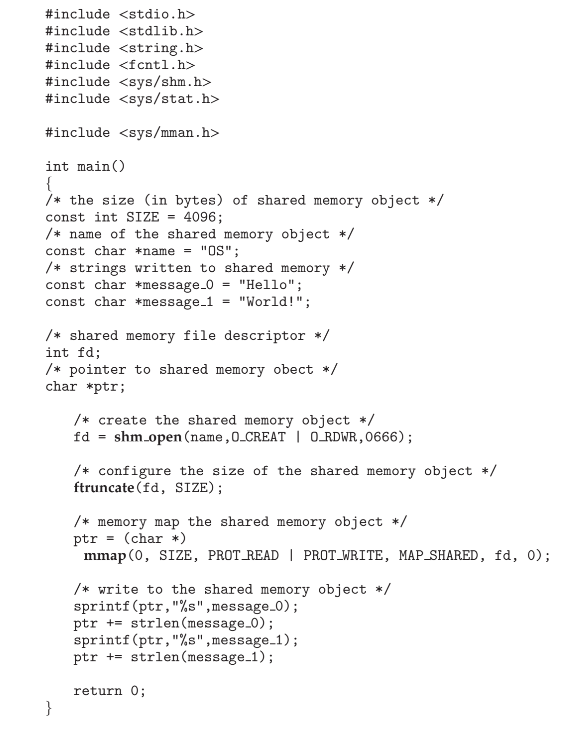




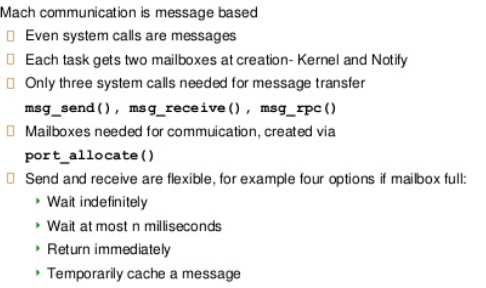
3.7 Examples of IPC Systems

3.7.1 POSIX Share Memory

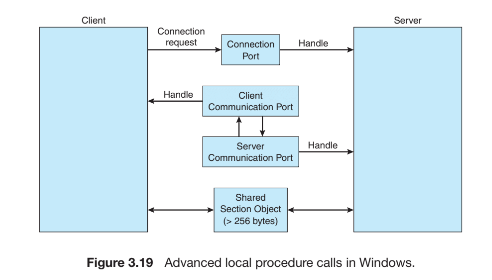
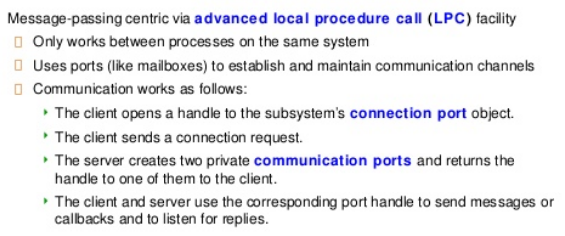




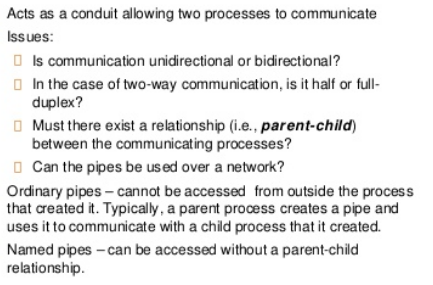
3.7.2 Mach messaging Passing

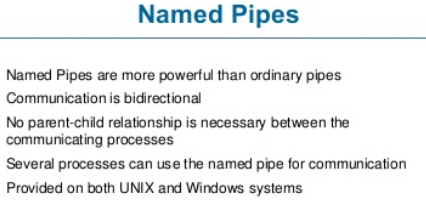
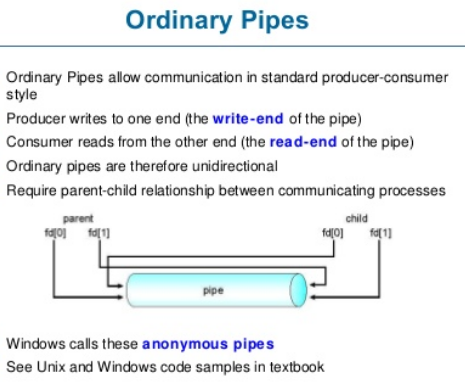


3.7.3 Windows

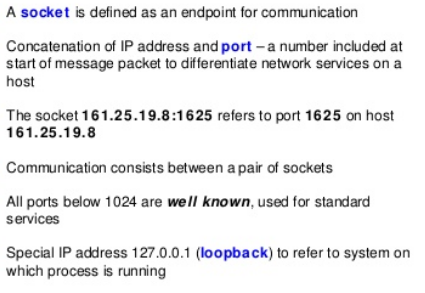


3.7.4 Pipes

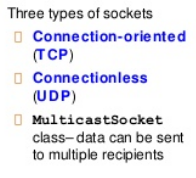




3.8 Communication in Client-Server Systems-3.8.1 Sockets



Socket in JAVA



3.8.2 Remote procedure calls

