Chapter 3 Objectives

Quiz questions will be created based on the following objectives

* Weekly Objectives – Be Able To:
  + define and explain what a process is, and how a process is used by Operating Systems (OS)
  + define and explain what a Process Control Block (PCB) is and what it does
  + identify and briefly explain the states in which a process may reside
    - be able to analyze and/or describe either Silberschatz’s 5-state or Stallings’ 7-state models
  + explain the switch operations conducted in Figure 3.6, including the OS’ part of the operation
  + explain the relationship between the long-term scheduler and the degree of multiprogramming?
  + explain the difference between a CPU-bound and an I/O-bound process
  + briefly explain the actions that occur in the computer and/or OS during a context switch
  + explain different ways resources can be shared between a parent and a child process
  + explain different ways parent and children processes can execute (with respect to each other)
    - be able to analyze and explain the process and results of forking
  + explain the potential value of interprocess communication (IPC)
  + briefly explain how a resource such as a common set of data might be considered IPC
  + briefly explain how message passing might be blocking or non-blocking
    - be able to provide examples of these
  + briefly explain how blocking and non blocking might be related to synchronous and asynchronous operations
  + End of Chapter
    - Exercises: 3.11.1, 311.2, 3.12.1, 3.12.4, 3.12.5, 3.12.6, 3.12.9
    - Programming Problems: none