## **Project Specifications: Data Structures and Functions**

* Design and implement the **extended** version of the manager, including:
  + PCB, RCB, and RL data structures
  + functions *create(), destroy(), request()*, *release()*, *timeout(), scheduler(), init()*
* Design and implement the shell (see command language and output specifications)
* Instantiate manager to include the following at start-up:
  + A process descriptor array PCB[16]
  + A resource descriptor array RCB[4] with multiunit resources
    - RCB[0] and RCB[1] have 1 unit each; RCB[2] has 2 units; RCB[3] has 3 units
  + A 3-level RL
* The init function should always perform the following tasks:
  + Erase all previous contents of the data structures PCB, RCB, RL
  + Create a single running process at PCB[0] with priority 0
  + Enter the process into the RL at the lowest-priority level 0