

## Chapter 3 - Study Guide

1. Computer systems consist of hardware and software. A big part of the software is the operating system.
  - What is the overall purpose of an operating system?
  - Using your answer, discuss how the \_\_\_\_\_ contributes to or is involved in accomplishing that purpose.
    - User interface
    - File manager
    - Device drivers
    - Memory manager
    - Scheduler and dispatcher
    - Boot loader
  
2. What is the distinction between application software and system software?
  
3. Why is a boot loader necessary? In other words, why can't the computer just start the operating system as soon as it is powered on?
  
4. Suppose we have an OS that runs each process one at a time from start to finish without interruptions. Why would this be unsuitable for a modern laptop user? In what context might this type of behavior be ok?
  
5. What complications could arise in an operating system if two processes require access to the same file at the same time? Are there cases in which the file manager should grant such requests? Are there cases in which the file manager should deny such requests?