1. Find a definition of Operating System that you like. Give the definition that you find, with a citation. Discuss the strengths and weaknesses of your definition.

2. In class we saw that the two main purposes of an OS are to make more efficient use of resources and to make the machine easier to use. State and describe two ways that an OS can make the use of resources more efficient and two ways that it can make the machine easier to use.

3. Define the terms interrupt and trap, clarify the difference between them and explain the role that each plays in the implementation of an operating system.

4. Define the term dual mode operation and explain why it is important for operating system implementation.

5. For each of the following instructions indicate if it should be a kernel mode or a user mode instruction:
   a. Set the timer device
   b. Read the system clock
   c. Erase a block of memory
   d. Issue a trap (software interrupt/system call).
   e. Disable interrupts
   f. Enable interrupts
   g. Modify an entry in the interrupt vector
   h. Switch from user mode to kernel mode
   i. Switch from kernel mode to user mode
   j. Write a block to disk

6. Compare and contrast the monolithic and microkernel approaches to OS implementation with respect to speed, maintainability and security.