

Due to Prof. Walker by 5pm on Wednesday 7 December 2005
(hand directly to Prof. Walker, slide under door of MSB 233a, or give to a CS secretary)
typed answers preferred

1. In a distributed file system, what are the tradeoffs between client-initiated and server-initiated cache validation?
2. Three sender-initiated load distribution algorithms were studied by eager, Lazowska, and Zohorjan, which differ only in their location policy. Would the use of broadcast or multicast (broadcast to a specific subset of nodes) improve any of these three location policies or would that only decrease performance? Explain.
3. How does supporting Processor Consistency improve the performance of a memory system, and what extra burden does it put on the programmer in return for that improved performance?
4. What are the main advantages and disadvantages of public key cryptography over private key cryptography?
5. How does a hard real-time deadline compare to a soft real-time deadline?

My homework assignments are intended to test your knowledge of some of the material presented in my lectures and in the textbook. On these homeworks, I expect clear, well-focused answers to the questions asked, answers that balance brevity and detail. While brevity is desirable, one-sentence “answers”, or lists of examples without further explanation, will probably not suffice. While detail and examples are desirable, two-page answers to each question are probably unnecessary. Furthermore, unattributed “quoting” of sentences from the class textbook, from other textbooks, from the Internet, or from anywhere else will be considered plagiarism and is totally unacceptable (see the section on the course syllabus on Academic Dishonesty). I expect you to answer the question in **your own words** to convince me that you understand the material.