Operating Systems, Spring 2002
CS 4/53201
Department of Math and Computer Science
Kent State University
Take Home Assignment#1
100x10=1000 points (Due date: Feb 18)

All problem and page numbers refer to your text book (6th Edition, OS Concepts, Silberschartz). If you are using a different version of the book make sure you match the problem number correctly.

1. Explain the steps a Computer System must take to process an interrupt. How interrupt improves the performance of computer?

2. When are caches useful? What problems do they solve? What problems do they cause? Why we do name make caches very large?

3. Which hardware aids can be used to improve CPU and Memory protection? Explain their operations.

4. Problem 3.7
5. Problem 3.10

6. Describe the actions taken by a kernel to context switch (a) among threads, (b) among processes.

7. Problem 4.1
8. Problem 4.7
9. Problem 5.3
10. Problem 5.6

Notes to Grader:

(a) Look for copy. Report immediately, if you suspect any.
(b) Give more marks for to-the-point and more detail (but relevant too) descriptions.
(c) Add ample comments to explain the mistakes that you track.
(d) Grade using pencil.
(e) Email me a grade sheet which shows scores for each question plus total.