Assignment 0412
This assignment should cap off your study of memory management.

Not for Submission
Read Chapters 8 and 9 in SGG.

For Submission
Exercises
Do the following exercises from SGG; submit your answers in hardcopy.
1. SGG Exercise 9.3
2. SGG Exercise 9.4
3. SGG Exercise 9.5
4. SGG Exercise 9.14
5. SGG Exercise 9.15

Programming
Write the following mini-programs and commit them to CVS. To keep interfaces and tests uniform, header and test harness files have been committed to your respective CVS repositories.

1. Paged memory:
   a. Implement a rudimentary paged memory manager as specified by the page.h and pageTest.c files that have been committed to your /homework/cmsi387/page directory.
   b. Add a myTest() function to the pageTest.c test harness that designates a new page table and additional test cases. A call to myTest() is already part of pageTest.c's main() function.

2. Segmented memory:
   a. Implement a rudimentary segmented memory manager as specified by the segment.h and segmentTest.c files that have been committed to your /homework/cmsi387/segment directory.
   b. Add a myTest() function to the segmentTest.c test harness that designates a new page table and additional test cases. A call to myTest() is already part of segmentTest.c's main() function.

3. Virtual memory page replacement:
   a. Implement FIFO and LRU page replacement algorithms (essentially SGG Exercise 9.21) as specified by the pageReplacement.h and pageReplacementTest.c files that have been committed to your /homework/cmsi387/page-repl directory. These functions are structured so that they accept a reference string then produce a “report” showing how memory allocations changed for that reference string.
   b. Add a myTest() function to the pageReplacementTest.c test harness that designates a new page table and additional test cases. A call to myTest() is already part of pageReplacementTest.c's main() function.

Commit your work “in place” at their preloaded locations and tag it as hw-0412.