General Instructions

You have been assigned a problem and have been given an algorithm to solve the problem. You have been individually assigned one of four problems. You must work on the one you have been given.

Your task is to write a self contained paper (about 3 to 5 pages) which argues that the algorithm correctly solves the problem. Here "self-contained" means that a person in the target audience should be able to understand the paper without reading the handouts given in the class. The target audience for this paper consist of persons who understand computer science at the level of CMSC 341 Data Structures (i.e., your peers in this class).

Your paper must:

- Present the problem.

- Present the algorithm.

- Use examples where needed to illustrate potentially confusing parts of the problem and/or algorithm.

- Argue that the algorithm is correct.

You will be asked to submit two copies of revision 1 of your paper. So, make sure that your paper can at least be photocopied. It should go without saying that the paper must be legible. If your handwriting is poor, consider using a word processing system of some sort.

Grading

The paper must use grammatically correct English with good sentence and paragraph construction. Grammar, spelling, sentence construction and paragraph construction count for 15% of the grade of this assignment. However, poorly written papers are likely to be unreadable as well and will lose much more than the 15%.

In addition, the presentation must be clear, concise, correct and convincing. The definition of these terms are:

Clear: that the audience understands your intended meaning.

Concise: that only matters directly relevant to the proof are included.

Correct: that the claims made are actually true.

Convincing: that a semi-skeptical reader would believe the argument.

You will submit a draft of the paper and make 2 revisions based upon the comments of the instructor and an anonymous critique from a classmate. You will receive a grade with each submission, but the intention is for the final grade of the assignment to be based upon the last submission (with the critique counting 5%). However, failure to submit a reasonable draft or revision will incur a permanent point loss of up to 20%.

Cheating

This assignment must be accomplished through individual effort. You may get help on grammar, sentence and paragraph construction from the Writing Center or from others who are not taking this course, but all technical work must be done individually. Writing assignments that are found to have as much as a single sentence copied will receive a grade of zero. This penalty applies to both the copier and to the copied. So, do not allow another student to look at your writing assignment.

Due Dates

The due dates for this assignment (as listed in the syllabus) are:

Draft	Sep 10
First Revision	Sep 26
Critique	Oct 1
Second Revision	Oct 10