

Greg is working as a volunteer for a large conference that is expected to have thousands of participants. There are several ways people can participate in the conference: one can register, one can be an invited speaker, and one can be a member of the society sponsoring the conference. Unfortunately, it is possible for a person to be an invited speaker and a member of the society. This results in many duplicate names.

Greg would like to remove all the duplicates from this array of names. Fortunately, the list is sorted so it should be somewhat easier...

Assignment Definition

Create a design for a program that will read a list of sorted names from a file into an array, remove all the duplicates, and write the list out to another file. Of course, we want this design to be as efficient as possible...

Please do the following:

- Create a representation of a solution to this problem using any combination of design tools presented this semester
- Evaluate the quality of your design using appropriate metrics presented this semester
- Validate the design by applying appropriate quality tools or techniques

Grading

1	Exceptional	Good	Acceptable	Developing	Missing
Design Quality 60%	100% The optimal solution was found	90% A workable solution was found that has acceptable performance characteristics	70% A correct solution was found with poor performance or a minor flaw exists with the presented solution	Part of the problem was solved but there exists serious issues with the design	The solution as presented is not on track to solve the problem
Tools 10%	The design was unambiguously and clearly described	An appropriate design tool was utilized and the tool was used without error	Minor ambiguity exists in the design presentation or a minor error exists in how the design tool was utilized	The design tool was utilized poorly	The solution does not demonstrate mastery of the design tools of the semester
Metrics 10%	Every nuance of the design was correctly characterized	A suitable metric was utilized and the metric was used without error	A minor error exists in the use of the metric	A serious problem exists in the use of the quality metric	No knowledge of a quality metric was demonstrated
Quality 20%	It is difficult to image how a defect could exist in the code	The design was verified through a suitable application of a quality technique	The design was not adequately verified, but knowledge of quality techniques were demonstrate	Familiarity with quality techniques were demonstrate somewhere in the submitted paper	No knowledge of quality techniques were demonstrated