

Applied Programming I

Project #1

Nov. 15, 2012

Ver. 2.0

Prepare a VF computer project to implement the calculation the Load line of ships of type B, applying the recommendations specified by IMO (Chapter III, Annex I, Part 3 of Load lines, 2005). The computer program must have the following characteristics:

- Read from a separate text file all the required information (ship characteristics, superstructure dimensions, description of sheer curve, etc.). Name of the file has to be specified by the user.
- Write the intermediate (basic freeboard, corrections, etc.) and final results (Required freeboard and corresponding draft), in an external text file with name specified by the user.
- Each rule must be implemented as a separate subroutine.
- The code must include enough comments that allows the developer future improvements.

The report must consist of a User's manual, which includes:

- Index of content.
- Description of the program.
- Definition of the terminology used.
- Description of the variables that need to be read (units).
- Description of the results.
- Examples of the application of the program, which correspond to a ship which will be assigned by the instructor.

The grade will be assigned according to:

- Quality of written report. (40%)
- Quality of oral presentation (15 minutes plus 5 minutes for Q&A). (30%)
- Accuracy of results. (30%)

If the program does not work properly, the Project will not be accepted.

The head of the group must present an outline on how the work will be organized, and this document must be included as an Appendix of the report. Also do not forget to report the number of hours employed to complete each part of the project: programming, report, and presentation.

The first version of the report (*it is recommended not to present this version printed with colors*) is due on Thursday Nov 29th, 9h30, and the instructor will provide a first review on next day. The final version of the report must be submitted on Wednesday Dec. 5th, previous to the public dissertation. The PPoint presentations must be entered in the Sidweb before 12 pm Tuesday 4th.