Applied Programming I

Project #1   **Nov. 24, 2011**

Ver. 3.0

Prepare a VF computer program to implement the calculation of the load line for a ship of type A, applying the recommendations specified by IMO. The computer program must have the following characteristics:

- Read from a separate text file all the required information (ship, superstructures dimensions, description of sheer curve, etc.).
- Write the input data, and, intermediate (basic freeboard, corrections, etc.) and final result (Required freeboard and corresponding draft).
- 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 usually includes:

- Index of content.
- General description of the program.
- Definition of the terminology used.
- Description of the variables that need to be read (units).
- Description of the results.
- Example 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%)

	Index/# pages,Fig.&Tabl.	5
	Gen. Description of program	10
Quality of Written report	Definition of Terminology/Variables	5
	Description of examples	15
	Conclus. & Recomm.	5
	Motivation of topic and objectives	5
	Voice: volume and Pronunciation	5
Quality of Oral Presentation	Quality of material	5
	Summary and conclusions	5
	Interaction with audience	5
	Answering questions	5
Accuracy of Results	Discussion of results	10
	Accuracy	20

Do not forget: you must report the number of hours employed to complete the project.

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