DASALGO Case Study #3 – Exploring Data Structures and Logic Formulation Challenges ☺

Deadline for submission: MARCH 20, 2015 (FRIDAY), ON OR BEFORE 11.45AM (TO THE ST SECRETARY, MS. MARICAR OCAMPO)

1. Each group is given 4 UVA problems[1] to work on.
2. Each group is expected to work on the assigned problems as **honestly and truthfully**.
3. All the problems came from and will be evaluated using http://uva.onlinejudge.org/.
4. Solution judged correctly by UVA automatically grants the group 12.5 points (for the implementation). If the group fails to give the correct solution as judged by UVA, the work will be marked accordingly to what have done.
5. Each group must submit their solution to UVA to determine whether or not they have solved the problem correctly.
6. Each group must then write an independent document for each of the problem solved containing the following:
    (a) Discussion of the proposed algorithm (give the actual code as well) – how the solution was conceptualized? What solution strategy was adopted? What are the issues encountered in constructing the algorithm/solution?
    (b) Frequency count for each line code and program's overall frequency count and time complexity.
    (c) Discuss as well the difficulties encountered when submitting solutions to UVA – What are the problems encountered and how the group handled and solved them?

Document format:
(1) Following Letter-sized paper.
(2) Margins – Normal (in all sides following 0.25")
(3) Font Type – Calibri. Normal. Font Size = 11.
(4) Page Number must be placed at the upper right corner of every page.
(5) For Program Codes – Courier New. Font Size 11.

Submission of the project must be on a **short brown envelope** with names listed. The envelope must contain:
● Signed Group's Declaration of Work
● CD containing the source codes for the problems solved correctly. (If you did not solve the problem correctly, still put a copy of the unfinished source code in the CD). The CD contents must be organized as follows:
    o Create a folder named **Problem <Problem Code>** for every problem solved. The problem <Problem Code> must follow the problem letters/numbers given/assigned to you. **The folder must contain ALL source codes needed for submission to UVA**
    o The folder must also contain a soft-copy of problem's documentation in text/PDF/MS Word format containing relevant discussion as instructed in the previous paragraph.
● Printed hard-copy of all solved problems' documentation.
● Place a similar table below at the front/main side of your brown envelope. Indicate the outcome of your testing from UVA to each and every problem solved at the middle column (i.e., Accepted, LTE, etc). Leave the last column blank.

UVA Problem Code	Group's Self-TEST	
Code #		
Code #		
Code #		
Code #		

Little details:
1. All algorithms/solutions must be supported with documentation. **No documentation, no credit for the entire problem.**
2. This is a group-effort activity.
3. Other instructions and specifics will be coming from your Dasalgo Lecturer as necessary.

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[1] Each problem is worth 25 points. 12.5 points are allotted to implementation and 12.5 points for the corresponding document. For the group that has 5 members, each problem is worth 20 points: 10 points allotted to implementation and 10 points for the corresponding document.