

Java Final Assignment – 2015
ICT 126 2.0 Introduction to Computer Programming
Department of Computer Science, University of Sri Jayewardenepura

Deadline : 18th Friday, December 2015 (On or before 3.00 PM)

Deadline of the viva, demonstration & code modification: Date will be noticed later.

Deliverable :

- **Soft copy** (CD or DVD) – Working system with a sample database (a **text file** with data).
 - **Source codes** as a Netbeans project or as a single java file which can run in the textpad.
 - **Runnable jar** file with suitable package structure and the database (**text file**).
 - Index number and other details need to be in a **Readme.txt** file.
- **Hard copy** – Printed document which explain the design (Modularity, functions, data structures, test cases and test results, etc.), screen shots to prove your work, and any other important features of your system.

Marks will be given to:

- **Modularity** of the system (Explain the design in your document).
- Proper coding practices (meaningful identifiers, white spaces, proper modularity, use of constant, etc).
- **Validations of input data.**
- **Graphical design of menus and graphs** & the implementation of the system.

Problem:

Develop a Java based menu driven console application to manipulate AL results of 100 students as explained to you earlier. In brief, it should be possible to enter index numbers, marks of three subjects of students and view their results such as sorted result sheet with their grades and Z-scores, subject analysis report with relevant statistics, and graphical representations of student results and subject analysis.

You are given freedom to decide other features based on your skills and knowledge. **Extra marks** will be given for such exceptional features. However, it is your responsibility to use good programming practices as much as possible. Submit a working system by the deadline.

- **Must be a menu driven program.**
- **Should be possible to store data in a file and retrieve.**
- **Must produce at least two graphs and two reports.**