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| https://upload.wikimedia.org/wikipedia/commons/thumb/4/4e/VU_Logo.png/260px-VU_Logo.png | Data Structures (CS301)  Assignment # 01  Semester Fall 2020 | Total Marks = 20  Deadline Date  26th Nov 2020 |
| Please carefully read the following instructions before attempting assignment.  RULES FOR MARKING  It should be clear that your assignment would not get any credit if:   * The assignment is submitted after the due date. * The submitted assignment does not open or file is corrupt. * Strict action will be taken if submitted solution is copied from any other student or from the internet.   Lectures:   * Lectures 1 to 7 are covered in this assignment | | |
| NOTE  No assignment will be accepted *after the due date via email in any case* (whether it is the case of load shedding or internet malfunctioning etc.). Hence refrain from uploading assignment in the last hour of deadline. It is recommended to upload solution file at least one day before its closing date.  If you people find any mistake or confusion in assignment (Question statement), please consult with your instructor before the deadline. After the deadline no queries will be entertained in this regard.  For any query, feel free to email at: [cs301@vu.edu.pk](mailto:cs301@vu.edu.pk) | | |

**Problem Statement:**

Suppose you are asked to make a Ranking information chart of students in a dynamic list called linked list using C++ language. The data will be stored in this list in order i.e. the highest marks student will be on top position with other information whereas the next highest marks student will be on second top position and so on.

Your program will get the information of a student in the form of input (Student ID, Name, Marks) through console. After filling the required information, the student will be inserted in linked list at right place. The right place of student will be decided on the basis of marks.

**Furthermore,** you are required to use only classes for this assignment. As we are not covering **Struct** in this course so using it in assignment solution is not allowed.

**Sample Output:**

See the gif file attached with this assignment file.

**Note:**

**DO REMEMBER that you must use your VUID as an input in this program.**

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| **Submission details**  Following Files Must be submitted in a single **zip** or **rar** file.   * **C**++ code file (file name should be your VUID) * A .**gif** file which shows only “**execution”** of your Application (*For Recording .gif a software named Screentogif is uploaded on LMS, or you can use any other gif recording tool as well*) * First record must be with your own VU-ID in .gif file. |

*If you do not submit any of the above-mentioned file or use some other VU-ID, you will be awarded Zero Marks.*

**“The End”**