

Assignment No. 1

Data Structures and Object-Oriented Programming

Instructor: Dr. Naveed Anwar Bhatti

Total Marks: 20 Due Date:

Section A: 30th September Section B: 2nd October Section C: 26th September

Instructions

Please read the following instructions carefully before submitting assignment:

It should be clear that your assignment will not get any credit if:

- The assignment is submitted after due date.
- The submitted assignment does not open or file is corrupt.
- All types of plagiarism are strictly prohibited.

Submission Procedure:

You have to make a project in Microsoft Visual Studio and email the complete solution. If you will submit code in .doc (Word document) you will get zero marks. Email zip file and the name and the subject of email must be in the following format:

ASSIGNMENT1_SECTION_ROLL FIRSTNAME

Example: ASSIGNMENT1 A 150600 NAVEED

Email ID: naveed.bhatti@mail.au.edu.pk

Objective

The objective of this assignment is to provide hands on experience of

Structures in C++

Guidelines

• Code should be properly aligned and well commented.

Assignment

Problem Statement:

You are required write a program to keep records and perform statistical analysis for a class of 10 students. Your code should take students data form user. You will make *StudentRecord* structure.

The **StudentRecord** structure must have following members:

- ID Card Number (This should be primary key)
- Name
- Midterm Marks
- Final Exam Marks

You will need a 1-dimensional array of *StudentRecord* struct to store all the data entered by user. Once you collect the data from the user, you are required to calculate and display the following statistics for **Midterm** and **Final Exam**:

- Lowest score.
- Highest score.
- Average score.

You will create three functions:

- void calcLowest(StudentRecord Student[10])
- void calcHighest(StudentRecord Student[10])
- void calcAverage(StudentRecord Student[10])

After collecting data from the user, you will call these functions one-by-one and they will print the highest, lowest and average of both the exams: Midterm and Final.

Deadline

Section A: 30th September Section B: 2nd October Section C: 26th September