

Assignment 1: CSE 103

Theory assignment on structure. Must be handwritten. Due: 16/01/2020, Thursday at the beginning of the class. This is a hard deadline, you cannot submit after the theory class. However you are welcome to submit at any time before the deadline.

1. (a) Write down a structure **movieStar** that is capable of storing the following information about movie stars of the film industry: (5)

- Name
- Age
- Annual income
- Gender

(b) Use the **movieStar** structure to take input of N movie stars' information. N will also be input to your program. The gender information must be stored as a character 'M' or 'F' to represent male and female movie stars respectively. (5)

(c) Write down a function that will take an array of **movieStar** structure and the number of movie stars as parameters and returns the income of the highest annual earning movie star. (5)

(d) Write down a function that will take an array of **movieStar** structure and the number of movie stars as parameters and returns the age of the youngest movie star in the industry. (5)

2. (a) Write down a structure capable of storing the following information about a student registered in CSE 103 course: (5)

- ID
- Gender
- Class test score
- Mid-term score
- Final Exam score
- Total score

(b) Use the above structure to take input of N students' information as input in an array of structure. N will also be input to your program. (5)

(c) In the same program, write down a function that will take students' information (within an array of structure) and the number of the students as parameters and returns how many of them failed. Assume that a student needs to obtain total 60 in order to pass in the exam. (5)

(d) In the same program, write down another function that will take students' information (within an array of structure) and the number of students as parameters and returns the ID of the student obtaining the highest marks. (5)