

Spring 2024-2025 CMPE124/ISYE223 Algorithms and Programming LAB WORK #6

Structures

Task 1:

Consider the following structure:

```
struct student
{
    int id;
    float cgpa;
} list[10];
```

- a) Write a complete C++ program that scans 10 student IDs and corresponding cgpa into the array list.
- b) Write a function to **display all the contents** of the structure.

Task 2:

Write the following functions:

- a) A function that finds the <u>maximum cgpa</u>. The function should <u>display the student id</u> <u>and cgpa</u> of the student holding the maximum cgpa.
- b) A function that displays the students who <u>scored cgpa above the average cgpa</u>. First, find the average cgpa, then <u>traverse the array and display those having cgpa above the average</u>.