Object Oriented Programming LAB – BSDSF24
(Both Morning and Afternoon)
Lab 01 –04-02-2023

use notepad++ and developer command prompt for the following tasks

Task 01 (20 marks)

Code for the class **Course** is provided. Understand it. In the **main** function, create an **array** (with conventional style) of 4 courses and using **loop**, display all course line by line.

Task 02 (10 marks)

Rename the main function as maint1 and create a new main with same code as old one. But this time you have to use an array of pointers to Course class, and allocate memory on HEAP for course objects. At end of the function, never forgot to deallocate the dynamically allocated memory.

Task 03 (40 marks)

Rename the main function as maint2 and create a new main function. In the same code file, create code for another class Student with similar coding as in the Course class. The data members (private) of student class are roll number as string, name as string, credit hours as float, and array of 3 courses. For standardization take data members names as rollNo, name, creditHours, and courses. In the main function, create a student object, input its data from user in local variables and populate the student object with it. Later display the data of the student in the similar way as in task 1.

Task 04 (30 marks)

Rename the main function as maint3 and create a new main function. In newly created main function, create another array parallel to courses for student objects to store percent marks. Input or hard code fixed data for student, his courses and marks for every course. Along with the data of the student, display course wise percent marks too. At the end, display the total credit hours and sum of percent marks.

Task 05 (to confirm above)

Rename the main function as maint4. Create a new main function with just **return 0;** statement in it. Share the code with us in Google Classroom.

Thank you for your patience