Object Oriented Programming LAB – BSDSF22

(Morning and Afternoon)

Lab 10 – 01-12-2023

TASK 1: Create a program that displays the following text menu and accept the input accordingly.

`a) Add, s) Search, d) Delete, l) List All, e) Edit, and q) Quit`

The valid inputs are a, s, d, l, e, and q. if user enter otherwise, the program informs him, **`invalid input, choose from below`** mentioned options and display the menu again. In case the user input a valid option the program performs the appropriate functionality for the **courses** data and display the menu after that.

The structure of the courses data is **code**: str of maximum length 8 characters, **title**: str of maximum length 40 characters, **credits hours**: int, **default semester**: int and **type**: ***core*** or ***elective***.

You may use any method to manage data from text files of any format, binary files, pickle objects, json objects, database, and you are responsible for your choice.

TASK 2: Consider a ***BankAccount*** class has ***minbal*** (Minimum Balance) and ***curbal*** (Current Balance) as float data members. A member function **withdraw(amount)** has to reduce the ***curbal*** by amount but maintain it above the ***minbal***, and in this exceptional case, and withdraw function should raises a ***LowBalException*** or just Exception.

Create the ***BankAccount*** class with all basic requirements and using good programming practices, i.e., constructors, string function, private data members, etc, along with the ***withdraw*** function. Create list of several ***BankAccount***s and demonstrate the working of ***withdraw*** on some of them in all possible scenarios. If time allowed, must create ***LowBalException*** class too.

TASK 3: Just promise here that before the next LAB, you will revise all the concepts learned so far. The next LABs must be in LAB activities and absence is not allowed in them.