CSE 122 : Object Oriented Programming Lab Lab - 2

Intake 52 Section - 04

January 16, 2024

In all the tasks, employ private data variables

Task 1

- Create a class called Person to represent a person's information.
- Define private attributes like name, age within the class.
- Implement getter functions for each attribute to retrieve their values.
- Implement setter functions for each attribute to modify their values.
- Demonstrate the usage of the getter and setter functions by creating objects of the Person class. Access and modify the attribute values using these functions.

Task 2

- · Develop a class called Rectangle to represent a rectangle shape.
- · Specify attributes for length and width.
- Write a parameterized constructor to initialize the dimensions of the rectangle. Add member functions to calculate the area and perimeter of the rectangle.
- Demonstrate the usage of the class by creating objects, invoking the member functions, and displaying the results.

Task 3

- Design a class named Book to encapsulate information about a book, such as title, author, and publication year.
- Implement a non-parameterized constructor to set default values for the attributes. Additionally, include a destructor that displays a message when an object of the class is destroyed.
- Provide an example of creating objects of the Book class, accessing their attributes, and observing the destructor message upon object destruction.

Task 4

- · Create a class named Triangle having data member height, base as double type.
- Implement a member function display () is used to show the values of height and base and a parameterized constructor is used to initialize the values of height and base for the first object.
- Create two objects ob1(10,20) and ob2. ob2 will copy the contents of ob1 using user defined copy constructor and show the values of height and base for both objects.