SLIIT
Discover Your Future

BSc (Hons) in Information Technology
Year 2

Tutorial 2

IT2030 – Object Oriented Programming **Semester 1, 2023**

Exercise 1

Write a program to input marks of three subjects for a student and calculate the average marks. In your class.

a) Include a constructor to initialize the three marks to 0.
b) Include a method to calculate and store the average.
c) Include a method to display the ID, name and the average marks of the student.

Exercise 2

Write a program to represent a class called Point3D that stores the coordinates of a point in 3D space. Add a constructor to initialize the variables passed. Add a method called distance() to calculate the distance from origin to a point.

Create another class called PointApp with the main function and create two objects of the class Point3D. Calculate and display the distance to the origin of these objects.

Note: distance = sqrt(x^2 +y^2 + z^2)

Exercise 3

Implement a class **BankAccount** with private attributes for account number, account holder's name, and balance. Write a default constructor and overloaded constructors that initializes these variables appropriately. Include getter and setter methods for the balance, along with methods to deposit and withdraw funds. Create a display method to display all the details.
Create another class call **BankApp** including a main method. Create two BankAccount objects and assign values. Call the display method and print the values of both the objects.