AMERICAN INTERNATIONAL UNIVERSITY-BANGLADESH (AIUB)

Faculty of Science and Technology (FST)

Department of Computer Science (CS)

Introduction to Programming [LAB Task on Class]

- 1. Create a class named 'Student' with a string variable 'name' and an integer variable 'id'. Assign the value of id as '2222' and that of name as "John" by creating an object of the class Student.
- 2. Assign and print the roll number, phone number and address of two students having names "Sam" and "John" respectively by creating two objects of the class 'Student'.
- **3.** Write a program to print the area and perimeter of a triangle having sides of 3, 4 and 5 units by creating a class named 'Triangle' with a function to print the area and perimeter.
- **4.** Write a program to print the area and perimeter of a triangle having sides of 3, 4 and 5 units by creating a class named 'Triangle' with the constructor having the three sides as its parameters.
- **5.** Write a program to print the area of two rectangles having sides (4,5) and (5,8) respectively by creating a class named 'Rectangle' with a function named 'Area' which returns the area. Length and breadth are passed as parameters to its constructor.
- **6.** Write a program to print the area of a rectangle by creating a class named 'Area' having two functions. First function named as 'setDim' takes the length and breadth of the rectangle as parameters and the second function named as 'getArea' returns the area of the rectangle. Length and breadth of the rectangle are entered through keyboard.
- 7. Write a program to print the area of a rectangle by creating a class named 'Area' taking the values of its length and breadth as parameters of its constructor and having a function named 'returnArea' which returns the area of the rectangle. Length and breadth of the rectangle are entered through keyboard.
- **8.** Print the average of three numbers entered by the user by creating a class named 'Average' having a function to calculate and print the average without creating any object of the Average class.
- **9.** Print the sum, difference and product of two complex numbers by creating a class named 'Complex' with separate functions for each operation whose real and imaginary parts are entered by the user.
- **10.**Write a program to print the volume of a box by creating a class named 'Volume' with an initialization list to initialize its length, breadth and height. (just to make you familiar with initialization lists)
- **11.** A program that would print the information (name, year of joining, salary, address) of three employees by creating a class named 'Employee'. The output should be as follows:

Name Year of joining Address
Robert 1994 64C- WallsStreat
Sam 2000 68D- WallsStreat
John 1999 26B- WallsStreat

12. Add two distances in inch-feet by creating a class named 'AddDistance'.