

## **Assignment – 03**

### **(Classes and Objects)**

- 1) *Implement a method Box, containing three variables: height, width and depth. Write a method, which calculate and return volume of box as double data type. Write another class, wherein, 2 instances of class Box should be there initialize their values. Implement the method of Box class, to get appropriate values.*
- 2) *Write Java program to define following classes:*
  - (1) Define Car as class with instance variables color and body initialize to blue and wagon. Define Car () as a default constructor and another constructor with parameters color and body. Display() is a method that display the color and body except for blue color otherwise display car is blue.
  - (2) Define CarDemo that contains main() method. Create an instance of Car class with color red and body as water tank
- 3) *Write Java program to define following classes: A class having three overloading methods. The first method accepts no parameters, the second method accept one string and third method accept one string and an integer. These methods display the following messages*
  - (i) Rose is beautiful flower once using first method.
  - (ii) Sunflower is beautiful flower twice using second method.
  - (iii) Marigold is beautiful flower n number of times using third method (where n is passed as integer value to the third number). Write a class having main() method to invoke above methods.
- 4) *Write a Java program containing following classes:*

Class Marks containing marks in two papers of a subject. Use parameterized constructor to initialize the values. Class Marks1 defines an object of the above class and pass the parameters of your choice. Define an instance variable name of the student. Write a method to find the average of two papers and a method to display name of the subject, marks in two papers and an average marks of the student.

## Extra Credit Assignment: Library Management

