

Faculty of Engineering & Technology, Haridwar
Department of Computer Science & Engineering

Java Programming (BCE-C501)

Assignment 4

1. Write a JAVA program to find the addition of two time data using class. Time data is of the form, hour, minutes and seconds. Take one data from user and another using constructor. For example given two time data 08:20:46 and 12:24:34, the resultant time will be 20:45:10.
2. Write a class named **Date** whose data members are **day**, **month** and **year**. Include methods to perform the following tasks using JAVA Program:
 - (a) To create the date
 - (b) To modify the date
 - (c) To display the date (display September 12, 2015 when input date is 12-09-2015).
3. Write a JAVA program to find the addition of two distances using class. Distance data is of the form, Kilometers, Meters and Centimeters. Take one data from user and another using parameterized constructor. In the parameterized constructor use 'this' keyword to distinguish between local variable and instance variable. For example, if given two distances data are 08KM 820M 86CM and 12KM 750M 65CM, then the resultant distance will be 21KM 571M 51CM.
4. Write a JAVA program to implement a Matrix class for 3-by-3 matrices: Include a default constructor and parameterized constructor, an `inverse()` function that returns the inverse of the matrix, a `det()` function that returns the determinant of the matrix, a Boolean function `isSingular()` that returns 1 or 0 according to whether the determinant is zero, a `rank()` function that returns the rank of the matrix and a `print()` function. Use `this()` to invoke the current class constructor