## L. D. COLLEGE OF ENGINEERING Computer Engineering

## Java - Assignment 2 (Array)

(1) Why does in newer technologies like C, C++, Java etc..., Array index always starts from 0, but in older technologies like FORTRAN, it was not mandatory? Find out a few more language other than FORTRAN.

## For all questions from 2 to 13 use only anonymous array

(2) Make a class Arraydemo in which you have to create static functions for following problems and do not use any standard sorting algorithm:

**Hint**: Static because these functions are not going to perform any object related functionalities

- Find out Maximum in 1-D array.
- Find out Minimum in 1-D array.
- Find out Maximum in 2-D array.
- Find out Minimum in 2-D array.
- (3) Implement merge sort.
- (4) Write a function to find Union value.
- (5) Write a function to find Intersection value.
- (6) Add two 2-dimensional Matrices.
- (7) Multiply two 2-dimensional Matrices.
- (8) Find Maximum value in Upper triangle matrix.
- (9) Find Minimum value in Upper triangle matrix.
- (10) Write a function to find sum of Upper triangle matrix.
- (11) Write a function to find sum of Lower triangle matrix.
- (12) Find Maximum value in Lower triangle matrix.
- (13) Find Minimum value in Lower triangle matrix.
- (14) Write a short note on Object class and describe at least 4-5 methods of this class.