

## **Day.2**

Introduction to arrays
Programming using arrays

**Q1)** Create a Stack class that can hold any number of integers. Provide methods like push and pop. Use appropriate OOPs principles.

**Hint:** encapsulate an int array with some predefined size. During push operation, if there is an overflow, then the array size should be increased. Make sure that values are not lost in process of doing this.

**Q2)** Write a program to construct two matrices and display the sum of those.

**Q3)** Find smallest and largest number in an array of 10 elements without sorting the array.

**Q4)** Find a given no in an array

**Q5)** Accept ten names into an array and find the second largest name.

**Q6)** Write a program to taken inputs from user for two 3 x 3 Arrays and display if both the arrays are equal or not. If not, print which elements are not equal. Note: code should not use `java.util.Arrays.equals()` method.

Q7) Write a program to take inputs from user for a 1xn array and sort it in ascending and descending order.