Assignment 5: Arrays

- 1. WAP to add corresponding elements of two 1-Dimensional arrays and store in the third array, also calculate the average of the third array.
- 2. WAP to sort an array in descending order.
- 3. WAP to count total no of odd and even numbers from the 1-D array.
- 4. WAP to exchange the smallest and largest values in 1-D array.
- 5. WAP to delete an element of an array given by the user.
- 6. WAP to insert an element in an array specified by the user.
- 7. Given an array arr[] of size N. The task is to find the sum of arr[i] % arr[j] for all valid pairs.

Answer can be large. So, output answer modulo 1000000007

Input: $arr[] = \{1, 2, 3\}$

Output: 5

$$(1 \% 1) + (1 \% 2) + (1 \% 3) + (2 \% 1) + (2 \% 2)$$

- 9. Given an array of integers of size n, find out if the numbers in the array appear in a palindromic order. A palindrome is a sequence that reads the same when you flip it. For example, 121 is a palindrome, 3 is a palindrome, and 234432 is also a palindrome
- 10. Given two sorted arrays of sizes m and n, write a program that merges the two into another array of size m + n such that this new array also remains sorted.
- 11. WAP to subtract 2-D Matrices.