



CX TECHNOLOGIES

(PVT) LTD.

Solve all the following questions with the best possible approach. If you finish early, try to optimize your algorithm. There is no language or syntax restriction, do it in any language you feel comfortable. Please do not use any built-in functions like sort, reverse, etc. Try to complete it in under 1 hour.

- Q#1:** Write a function that will take an array as input, sort, and return the array in descending order. For example, if the array is [3,2,7,4,6,9] the result should be [9,7,6,4,3,2].
- Q#2:** Write a function that will take a string as input, check and return if it is palindrome or not. For example, if the string is "madam" the function should return true and if the string is "doctor" it should return false.
- Q#3:** Write a function that will take an array as input and return the sum of the two largest numbers in a n array. For example, in the array [3,7,1,5,11,19] the result would be 30 because 11 and 19 are the largest numbers.
- Q#4:** Write a function that will take an array as input and return an array with every missing element from 0 to the highest entry. For example, in an array [3,4,9,1,7,3,2,6] the highest entry is 9, and missing numbers are [0,5,8]
- Q#5:** Write a function that will take an array of numbers and return the number most repeated in the array with how many times it was repeated. For example, if the array is [4,3,5,6,4,7,9,2,4,6,3,4,6,3,4,8,5,1,5] the function should return 4 is repeated 5 times.
- Q#6:** Write a function that will take an array as input, it will rotate the array to the right 1 time and return the rotated array. Rotation of the array means that each element is shifted right by one index. For example, the rotation of array A = [3,8,9,7,6] is [6,3,8,9,7]