Searching

Subject: CSW2(CSE3141) Session: March 2023 to Aug 2023

Branch: CSE&CSIT

Section: All

- Q1. Given an unsorted list of n elements, find the first element, which is re-
- **Q2.** Given an array of n numbers, print the duplicate elements in the array.
- Q4. Write a program to remove duplicate from an integer list.
- **Q5.** In given list of n-1 elements, which are in the range of 1 to n. There are no duplicates in the array. One of the integer is missing. Find the missing
- Q6. Given an array, find the maximum and minimum value in the array and also find the values in range minimum and maximum that are absent in the array.
- Q7. Given an array in which all the elements appear even number of times except one, which appear odd number of times. Find the element which appear odd number of times.
- Q8. Given an array in which all the elements appear even number of times except two, which appear odd number of times. Find the elements which appear odd number of times in O(n) time complexity and O(1) space complexity.
- **Q9.** Given an array of size N, the elements in the array may be repeated. You need to find sum of distinct elements of the array. If there is some value repeated continuously then they should be added once.
- Q10. In given List of integers, both +ve and -ve. You need to find the two elements such that their sum is closest to zero.
- Q11. Given an array of n numbers, find two elements such that their sum is equal to "value"
- **Q12.** Given two list X and Y. Find a pair of elements (x_i, y_i) such that $x_i \in X$ and $y_i \in Y$ where $x_i + y_i = value$.
- Q13. Given an array of integers, find the element pair with minimum difference.

- **Q14.** Given two array, find minimum difference pair such that it should take one element from each array.
- Q15. Given an array of integers, you need to find a triplet whose sum 0.
- Q16. Given an array of integers, you need to find a triplet whose sum equal to given value.
- Q17. Given an array of positive integers representing edges of triangles. Find the number of triangles that can be formed from these elements representing sides of triangles. For a triangle sum of two edges is always greater than third edge.
- **Q18.** Suppose you are given an unsorted list of n distinct elements. How will you identify the second largest element with minimum number of comparisons?
- **Q19.** In an unsorted list of numbers of size n, if all the elements of the array are sorted then find the element, which lie at the index n/2.
- **Q20.** A bitonic list comprises of an increasing sequence of integers immediately followed by a decreasing sequence of integers. Find an element in a bitonic list.