CA3001 - Programming and Data Structures using C

Assignment 7

[18.01.2021 - Monday - Lab 7]

Common to All Students:

Write a C Program for the following problem statements

- 1. read n number of values in an array and display it in reverse order.
- 2. find the sum of all elements of the array.
- 3. copy the elements of one array into another array.
- 4. count a total number of duplicate elements in an array.
- 5. find the maximum and minimum element in an array.
- 6. separate odd and even integers in separate arrays.
- 7. insert New value in the array.
- 8. delete an element at desired position from an array.
- 9. find the second largest element in an array.
- 10. find the median of two sorted arrays of same size.
- 11. multiplication of two square Matrices
- 12. find transpose of a given matrix.
- 13. find the sum of left diagonals of a matrix.
- 14. check whether a given matrix is an identity matrix.
- 15. search an element in a row wise and column wise sorted matrix.

Practice Questions [Optional]:

Write a C Program for the following problem statements

- 1. print all unique elements in an array.
- 2. count the frequency of each element of an array.
- 3. sort elements of the array in descending order
- 4. find the second smallest element in an array.
- 5. find the row with maximum number of 1s.
- 6. find numbers that occur odd number of times in an array.
- 7. rearrange positive and negative numbers alternatively in a given array.
- 8. subtraction of two Matrices
- 9. find sum of right diagonals of a matrix.
- 10. display the lower triangular of a given matrix.
- 11. calculate determinant of a 3 x 3 matrix.
- 12. return only the unique rows from a given binary matrix.
