

## Assignment No 10

Programs to demonstrate matrix problems, string operations, sorting problems.

- 1) Write a program in C to store elements in an array and print it. Test Data :  
Input 10 elements in the array :  
element - 0 : 1  
element - 1 : 1  
element - 2 : 2
- 2) Write a program in C to merge two arrays of same size sorted in descending order.
- 3) Write a program in C to count the frequency of each element of an array.
- 4) Write a program in C to find the maximum and minimum element in an array.
- 5) Write a program in C to sort elements of array in ascending order.
- 6) Write a program in C to insert New value in the array (sorted list )..  
Test Data :  
Input the size of array : 3  
Input 3 elements in the array in ascending order:  
element - 0 : 5  
element - 1 : 7  
element - 2 : 9  
Input the value to be inserted : 8  
*Expected Output :*  
The exist array list is :  
5 7 9  
After Insert the list is :  
5 7 8 9
- 7) Write a program in C for a 2D array of size 3x3 and print the matrix.
- 8) Write a program in C for addition of two Matrices of same size.
- 9) Write a program in C to find transpose of a given matrix.
- 10) Write a program in C to print all possible combinations of r elements in a given array.
- 11) Write a program in C to find the length of a string with and without using library function.
- 12) Write a program in C to count the total number of words in a string.
- 13) Write a program in C to copy one string to another string.

14) Write a program in C to print individual characters of string in reverse order.

15) Write a C program to sort a string array in ascending order.