University of Engineering & Management, Kolkata

Department of Computer Science & Engineering

DATA STRUCTURE LAB

Subject Code - CS392

SESSION- 2018 ODD SEM

ASSIGNMENT – I

Objective – To implement the concept of Dynamic Array

Date of Assignment - 11.07.2018

DATE of Submission - 18.07.2018

1.1 Write a program to display n number of elements. Memory should be allocated dynamically using malloc( ).

1.2 Write a program to display n number of elements. Memory should be allocated dynamically using calloc( ).

1.3 Write a program to allocate memory using malloc( ) and then reallocate the previously allocated memory using realloc( ). Display the elements which have been taken after reallocation.

1.4 Write a program to allocate memory using calloc( ) and then reallocate the previously allocated memory using realloc( ). Display the elements which have been taken after reallocation.

1.5 Write a program to allocate memory dynamically, print n number of characters and then release the allocated memory using free( ).

1.6 Write a C program to search an element in an Array using dynamic memory allocation.

1.7 Write a C program to find the3rd maximum element in an array using dynamic memory allocation.

1.8 Write a C program to find the minimum element in an array using dynamic memory allocation.

1.9 Write a C program to search an element in a 2D-Array using dynamic memory allocation.

1.10 Write a C program to find the maximum element in a 2D-array using dynamic memory allocation.

1.11 Write a C program to find the minimum element in a 2D-array using dynamic memory allocation.

1.12 Write a C program to merge two sorted dynamic array.

1.13 Write a C program to merge two unsorted dynamic array in sorted order.

1.14 Write a C program to delete a range of data from a dynamic array.

1.15 Write a C program to modify the size of an array and utilize that during run time.

1.16 Write a C program to program to find the3rd maximum element in a 2D array using dynamic memory allocation.

1.17 Write a C program to store the ages in a 2D dynamic array. Every row must have a specific range. At the time of taking input data will go to a specific position of a row if it is blank otherwise display full message.

1.18 Write a C program to store multiple name in a 2D dynamic array and then count the length of the different name.

1.19 Write a C program to store the week name in an array efficiently and then print them.

1.20 Write a C program to declare n number of dynamic 1D array and then combine them to generate a dynamic 2d array. Also display the same.