

# DSA Lab Report Problems

SL No.	Problem Title	Problem Date
1	Find any elements in an array and find the element's position and Occurrences	17/11/2024
2	Menu based insertion, deletion of elements in any certain position of an array	17/11/2024
3	Use of random function to generate array elements and search any element's position and occurrences	17/11/2024
4	Take string input from a pre-saved text file, store it character by character in an array and find out Vowels, Consonants, Digits, Special characters and their total number	17/11/2024
5	Use Class/Structure to take input of name roll and marks of some certain students and print them according to their marks in descending order(input taking procedure will stop after a specific key is pressed)	
6	Implementation of Bubble Sort	
7	Implementation of Selection Sort	
8	Implementation of Insertion Sort	
9	Menu based insertion, deletion of elements in any certain position of a sorted array list(user will provide input and data, size will not be fixed and use a specific key to terminate input taking)	
10	Time Calculation for bubble, insertion, selection sort of 10000 elements (use random function for input)	
11	Take unsorted integer input from pre-saved file, sort them and save the sorted elements in another file	
12	Menu based insertion, deletion of elements using the concept of Stack	6/1/2025
13	Menu based insertion, deletion of elements using the concept of Queue	6/1/2025
14	Implementation of Circular Queue	
15	Use Structure to take input of name, roll and marks of some certain students, print them according to their marks in descending order and use menu based insertion and deletion of students	
16	A problem on Pointer concept	
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18	Write a program using the concept of linked list for some fixed input/pre-defined input and print them	20/01/2025
19	Menu based(element insert, element delete and exit) implementation of linked list.	20/01/2025
20	You are given a postfix expression(string). Evaluate the output of this expression using a programming language	1/2/2025

<b>21</b>	<b>Solve the Towers of Hanoy problem</b>	<b>1/2/2025</b>
<b>22</b>	<b>Implementation of Priority Queue</b>	<b>1/2/2025</b>
<b>23</b>	<b>Take input a set of node, print them in pre-order, post-order and in-order traverse method</b>	<b>8/2/2025</b>
<b>24</b>	<b>Implement the Sequential Representation of Binary Tree</b>	<b>8/2/2025</b>