

20 TCS DSA Practice Questions

1. Write a program to reverse a string without using built-in reverse functions.
2. Find the largest and second largest element in an array.
3. Write a program to check whether a number is a palindrome.
4. Implement a function to find the LCM and HCF (GCD) of two numbers.
5. Given an array, move all zeros to the end while maintaining order.
6. Check if a string is an anagram of another string.
7. Implement a stack using arrays and perform push, pop, and peek operations.
8. Implement a queue using linked list.
9. Detect a cycle in a linked list.
10. Find the frequency of each element in an array.
11. Write a program to find the first non-repeating character in a string.
12. Implement binary search on a sorted array.
13. Find the maximum subarray sum using Kadane's Algorithm.
14. Reverse a linked list iteratively.
15. Check whether a binary tree is balanced.
16. Perform inorder traversal of a binary tree (recursive and iterative).
17. Find the intersection point of two linked lists.
18. Write a program to implement merge sort.
19. Detect duplicates in an array of integers.
20. Solve the Two Sum problem using hashing.