

Recursion Practice Questions

Easy Level

1. Write a recursive function to print numbers from **1 to N**.
2. Write a recursive function to print numbers from **N to 1**.
3. Find the **sum of first N natural numbers** using recursion.
4. Find the **factorial of a number** using recursion.
5. Find the **nth Fibonacci number** using recursion.
6. Count the **number of digits** in a given number using recursion.
7. Find the **sum of digits** of a number using recursion.
8. Reverse a **string** using recursion.
9. Check whether a string is **palindrome** using recursion.
10. Find the **maximum element** in an array using recursion.

◆ Medium Level

11. Print the elements of an **array in reverse order** using recursion.
12. Find the **GCD of two numbers** using recursion.
13. Implement **binary search** using recursion.
14. Calculate **power of a number (a^b)** using recursion.
15. Print the **first N terms of Fibonacci series** using recursion.

16. Count the **number of vowels in a string** using recursion.
17. Print the **sum of elements of an array** using recursion.
18. Print the **product of elements of an array** using recursion.
19. Reverse a number using recursion.
20. Find whether a number is **Armstrong number** using recursion.

◆ **Hard Level**

21. Solve the **Tower of Hanoi problem** using recursion.
22. Print all possible **subsets of a string** using recursion.
23. Find all possible **permutations of a string** using recursion.
24. Solve the **Josephus Problem** using recursion.
25. Find the **nth Catalan number** using recursion.
26. Print the **sum of alternate nodes in an array** using recursion.
27. Implement **merge sort** using recursion.
28. Implement **quick sort** using recursion.
29. Perform **DFS (Depth First Search)** on a graph using recursion.
30. Print all possible **paths in a maze** using recursion.