

File Handling

1. Write a recursive function to find the factorial of a given number.
2. Write a recursive function to compute the Fibonacci sequence.
3. Write a recursive function to find the GCD of two numbers.
4. Write a recursive function to compute the power of a number.
5. Write a recursive function to reverse a string.
6. Write a recursive function to find the sum of all the elements in a list.
7. Write a recursive function to flatten a nested list.
8. Write a recursive function to find the maximum element in a list.
9. Write a recursive function to check if a given string is a palindrome.
10. Write a recursive function to find the length of a string.
11. Write a recursive function to convert a decimal number to binary.
12. Write a recursive function to merge two sorted lists.
13. Write a recursive function to perform binary search on a sorted list.
14. Write a recursive function to find the sum of the digits of a given number.
15. Write a recursive function to find the greatest common divisor (GCD) of a list of numbers.
16. Write a recursive function to count the number of occurrences of a given element in a list.
17. Write a recursive function to perform a depth-first search on a graph.
18. Write a recursive function to check if a given string is a valid palindrome.
19. Write a recursive function to find the minimum element in a list.
20. Write a recursive function to generate all possible permutations of a given string.