1. Write a program to reverse a string without using any built-in functions.
2. Implement a function to find the maximum element in an integer array.
3. Write a program to merge two sorted arrays into a single sorted array.
4. Create a function to count the occurrence of a specific character in a string.
5. Implement a function to check if a given string is a palindrome.
6. Write a program to remove duplicate elements from an array.
7. Create a function to compute the factorial of a number using recursion.
8. Implement a function to find the sum of all elements in a 2D array.
9. Write a program to sort an array of strings in alphabetical order.
10. Create a function to check if two strings are anagrams of each other.
11. Implement a function to perform matrix multiplication.
12. Write a program to find the intersection of two arrays.
13. Create a function to find the longest common prefix among a set of strings.
14. Implement a program to convert a decimal number to binary without using the built-in functions.
15. Write a function to find the maximum and minimum elements in an array without traversing it twice.
16. Create a program to find the transpose of a matrix.
17. Implement a function to find the median of an unsorted array.
18. Write a program to count the number of vowels and consonants in a string.
19. Create a function to generate all possible permutations of a string.
20. Implement a program to find the largest sum contiguous subarray in an array.
21. Write a function to check if a given number is prime or not.
22. Create a program to rotate an array by a given number of positions.
23. Implement a function to convert a string to uppercase without using library functions.
24. Write a program to find the second largest element in an array.
25. Create a function to reverse the words in a given string.