## **Core Python & Logic**

- 1. Reverse a string
- 2. Check if a string is a palindrome
- 3. Find the second largest number in a list
- 4. Remove duplicates from a list
- 5. Count frequency of elements in a dictionary
- 6. Validate an email address format
- 7. Validate a password strength (min 8 chars, upper, lower, digit)
- 8. Find the GCD of two numbers
- 9. Find the LCM of two numbers
- 10. Convert a string to title case
- 11. Find subarray with a given sum
- 12. Check if two strings are anagrams
- 13. Find the longest word in a sentence
- 14. Move all zeros to the end of a list
- 15. Rotate a list by K steps
- 16. Check if a string is a pangram
- 17. Group anagrams from a list of strings
- 18. Merge two sorted arrays
- 19. Find all pairs with a given sum
- 20. Find duplicates in an array
- 21. Count unique words in a paragraph
- 22. Find majority element in a list
- 23. First non-repeating character in a string
- 24. Reverse a string recursively

- 25. Calculate factorial using recursion
- 26. Binary to decimal conversion
- 27. Decimal to binary conversion
- 28. Simulate a login system using dict
- 29. Find the missing number in a list from 1 to N
- 30. Check if a list is a subset of another