Python List Problems: Fundamentals to Advanced

Fundamentals

1. Sum of All Elements

2. Product of All Elements

3. Remove All Occurrences of a Specific Element

4. Find the Largest and Smallest Elements

5. Count Odd and Even Numbers

6. Find Unique Elements in a List

7. Find the Most Frequent Element

8. Merge Two Lists Alternatingly

9. Shift Elements Left by N Positions

10. Check for Consecutive Numbers

11. Replace Even Numbers with Zero

12. Cumulative Sum of Elements

13. Interleave Two Lists

14. Find Pairs with a Specific Difference

15. Group Elements by Parity

16. Split a List into Chunks of Size N

17. Find the Longest Increasing Subsequence

18. Remove Duplicates Without Using Sets

19. Find the Second Smallest Element

20. Rotate Elements Right by N Positions

21. Reverse the Elements in a List

22. Find All Elements Greater Than N

23. Check if a List is Palindromic

24. Multiply Corresponding Elements of Two Lists

25. Count the Number of Vowels in a List of Strings

Intermediate

26. Flatten a Nested List

27. Find the Intersection of Two Lists

28. Find All Pairs That Sum to a Specific Target

29. Calculate Factorials of Numbers in a List

30. Find the Top K Largest Elements

31. Convert List of Strings to Integers

32. Sort a List of Dictionaries by a Key

33. Find the Union of Two Lists Without Duplicates

34. Remove the Nth Element from the List

35. Rotate a List Until it is Sorted

36. Find All Permutations of a List

37. Count the Frequency of Each Element

38. Replace Negative Numbers with Absolute Values

39. Find the Smallest Missing Positive Integer

40. Filter Out Prime Numbers from a List

41. Find All Subarrays with a Given Sum

42. Sort a List Using Bubble Sort

43. Replace Sublist with Another List

44. Extract Digits from List of Mixed Data Types

45. Create a Matrix from a List

46. Calculate Moving Average of a List

47. Group Elements by Length of String

48. Calculate Median of a List

49. Remove Outliers from a List

50. Find Longest Substring Without Repeating Characters in a List of Strings