

Certainly! Here are 50 basic logical questions for arrays:

1. Reverse an array.
2. Find the maximum element in an array.
3. Find the minimum element in an array.
4. Find the sum of all elements in an array.
5. Calculate the average of elements in an array.
6. Find the second largest element in an array.
7. Find the second smallest element in an array.
8. Count the number of even elements in an array.
9. Count the number of odd elements in an array.
10. Check if an array is sorted in ascending order.
11. Check if an array is sorted in descending order.
12. Remove duplicates from an array.
13. Find the intersection of two arrays.
14. Find the union of two arrays.
15. Find the missing number in an array of 1 to N.
16. Move all zeros to the end of an array.
17. Rotate an array to the right by K positions.
18. Find the "Kth" largest element in an array.
19. Find the "Kth" smallest element in an array.
20. Implement a linear search algorithm.
21. Implement a binary search algorithm.
22. Count occurrences of an element in an array.
23. Find the majority element (element that appears more than  $n/2$  times).
24. Find the leaders in an array (elements with no element greater to its right).
25. Find the equilibrium index of an array (sum of elements on the left equals sum on the right).
26. Implement a stack using an array.
27. Implement a queue using an array.
28. Implement two stacks in an array.
29. Implement a circular queue.
30. Implement a dynamic array (resizeable array).
31. Find the largest subarray with equal number of 0s and 1s (Binary Subarray with Equal 0s and 1s).
32. Implement an algorithm to rotate an array.
33. Implement an algorithm to sort an array using Bubble Sort.
34. Implement an algorithm to sort an array using Selection Sort.
35. Implement an algorithm to sort an array using Insertion Sort.
36. Implement an algorithm to sort an array using Merge Sort.
37. Implement an algorithm to sort an array using Quick Sort.
38. Implement an algorithm to sort an array using Heap Sort.
39. Find the maximum product subarray.
40. Find the longest increasing subsequence in an array.
41. Find the "Kth" largest and "Kth" smallest element in an unsorted array.
42. Implement an algorithm to reverse a group of "K" elements in an array.
43. Implement an algorithm to find the median of two sorted arrays.
44. Implement an algorithm to rearrange positive and negative numbers alternatively.

45. Implement an algorithm to find the contiguous subarray with the largest sum (Kadane's Algorithm).
46. Implement an algorithm to rotate a 2D array (matrix) by 90 degrees.
47. Implement an algorithm to find the common elements in three sorted arrays.
48. Implement an algorithm to search in a rotated sorted array.
49. Implement an algorithm to segregate 0s and 1s in an array.
50. Implement an algorithm to find the first repeating element in an array.

These questions cover a variety of array-related problems and should provide a good starting point for practice.