

# C++ Programming Concept Based Questions

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## Array Questions

1. Write a program to find the largest element in an array.
2. Create a program to find the smallest element in an array.
3. Write a program to calculate the average of elements in an array.
4. Create a program to reverse the elements of an array.
5. Write a program to sort an array in ascending order using bubble sort.
6. Create a program that merges two arrays into one.
7. Write a program that removes duplicates from an array.
8. Create a program to count occurrences of a specific element in an array.
9. Write a program that rotates an array to the left by k positions.
10. Create a program that rotates an array to the right by k positions.
11. Write a program to find the intersection of two arrays.
12. Create a program that finds the union of two arrays.
13. Write a program to check if an array is a palindrome.
14. Create a program that finds the missing number in an array of n-1 integers.
15. Write a program to implement linear search in an array.
16. Create a program to implement binary search in a sorted array.
17. Write a program to find the second largest element in an array.
18. Create a program that counts the number of even and odd numbers in an array.
19. Write a program to find the sum of all elements in an array.
20. Create a program that finds the maximum difference between two elements in an array.
21. Write a program to implement a 2D array and perform operations like addition and subtraction.
22. Create a program that transposes a matrix.
23. Write a program that checks if two arrays are equal.
24. Create a program that duplicates an array.
25. Write a program that rotates a 2D matrix 90 degrees clockwise.
26. Create a program that finds the largest sum of a contiguous subarray.

- 27. Write a program that implements selection sort on an array.**
- 28. Create a program that implements insertion sort on an array.**
- 29. Write a program that finds common elements between two arrays.**
- 30. Create a program that counts how many times a number appears in an array.**