

# Array

## *Intermediate level Questions:*

1. Find the Union and Intersection of the two sorted arrays.  
[practice here: <https://practice.geeksforgeeks.org/problems/union-of-two-arrays/0> ]
2. Write a program to cyclically rotate an array by one.  
[Practice here: <https://practice.geeksforgeeks.org/problems/cyclically-rotate-an-array-by-one/0> ]
3. You are given a list of  $n-1$  integers and these integers are in the range of 1 to  $n$ . There are no duplicates in the list. One of the integers is missing in the list. Write an efficient code to find the missing integer.  
[Practice here: <https://practice.geeksforgeeks.org/problems/missing-number-in-array/0> ]
4. Find all pairs on integer array whose sum is equal to given number.  
[Practice here: <https://practice.geeksforgeeks.org/problems/count-pairs-with-given-sum/0> ]
5. Find duplicates in an array.  
[Practice here : <https://practice.geeksforgeeks.org/problems/find-duplicates-in-an-array/1> ]
6. Sort an Array using Quicksort algorithm.  
[ Follow link: <https://www.geeksforgeeks.org/quick-sort/> ]
7. Find common elements in three sorted arrays  
[Practice here: <https://practice.geeksforgeeks.org/problems/common-elements/0> ]
8. Find the first repeating element in an array of integers.  
[Practice here: <https://practice.geeksforgeeks.org/problems/first-repeating-element/0> ]
9. Find the first non-repeating element in a given array of integers.  
[Solution: <https://www.geeksforgeeks.org/non-repeating-element/> ]

**10. Given an array with all distinct elements, find the largest three elements. Expected time complexity is  $O(n)$  and extra space is  $O(1)$ .**

Input: `arr[] = {10, 4, 3, 50, 23, 90}`

Output: 90, 50, 23

**11. Rearrange the array in alternating positive and negative items with  $O(1)$  extra space.** [follow link : <https://www.geeksforgeeks.org/rearrange-array-alternating-positive-negative-items-o1-extra-space/> ]

**12. Find if there is any subarray with sum equal to zero**  
[Practice here: <https://practice.geeksforgeeks.org/problems/subarray-with-0-sum/0> ]

**13. Find Largest sum contiguous Subarray. [Very Important]**  
[Practice here: <https://practice.geeksforgeeks.org/problems/kadanes-algorithm/0> ]

**14. Find the factorial of a large number.**  
[Practice here: <https://practice.geeksforgeeks.org/problems/factorials-of-large-numbers/0> ]

**15. Find Maximum Product Subarray.**  
[Practice here: <https://practice.geeksforgeeks.org/problems/maximum-product-subarray/0> ]

**16. Find longest consecutive subsequence.**  
[Practice here: <https://practice.geeksforgeeks.org/problems/longest-consecutive-subsequence/0> ]

**17. Find the minimum element in a rotated and sorted array.**  
[Practice here: <https://practice.geeksforgeeks.org/problems/minimum-element-in-a-sorted-and-rotated-array/0> ]

**18. Given an array of size  $n$  and a number  $k$ , find all elements that appear more than  $n/k$  times.**  
[Practice here: <https://practice.geeksforgeeks.org/problems/count-element-occurrences/1> ]

**19. GCD of given index ranges in an array**  
[Solution : <https://www.geeksforgeeks.org/gcds-of-a-given-index-ranges-in-an-array/> ]

**20. Maximum profit by buying and selling a share at most twice.**  
[ Practice here : <https://www.geeksforgeeks.org/maximum-profit-by-buying-and-selling-a-share-at-most-twice/> ]

**21. Minimize the maximum difference between the heights.**

**[*ADOBE spl.*]**

[Practice here: <https://practice.geeksforgeeks.org/problems/minimize-the-heights/0> ]

**22. Minimum number of Jumps to reach end.**

[Practice here: <https://practice.geeksforgeeks.org/problems/minimum-number-of-jumps/0> ]

**23. Find the two repetitive elements in a given array.**

[Practice here: <https://practice.geeksforgeeks.org/problems/two-repeated-elements/0> ]

**24. Find a triplet that sum to a given value.**

[Practice here: <https://practice.geeksforgeeks.org/problems/triplet-sum-in-array/0> ]

**25. Create an N\*M matrix and take input from the user to populate it and then print the matrix**

**26. Find the row with maximum number of 1's.**

[Practice here: <https://practice.geeksforgeeks.org/problems/row-with-max-1s/0> ]

**27. Find the median in a row wise sorted matrix.**

[Practice here: <https://practice.geeksforgeeks.org/problems/median-in-a-row-wise-sorted-matrix/0> ]

**28. Print the matrix in a Spiral manner. [ *Very IMP* ]**

[Practice here: <https://practice.geeksforgeeks.org/problems/spirally-traversing-a-matrix/0> ]

**29. Find whether an array is a subset of another array.**

[Practice here: <https://practice.geeksforgeeks.org/problems/array-subset-of-another-array/0> ]

**30. Implement two Stacks in an array.**

[Practice here: <https://practice.geeksforgeeks.org/problems/implement-two-stacks-in-an-array/1> ]