

ARRAY DSA Questions

EASY

	COMPANY	QUESTION NAME	APPROACH	GFG	LEETCODE	NOTES
1	Infosys, Oracle Wipro, Morgan Stanley	Largest Element in Array TC: $O(n)$ SC : $O(1)$		GFG		If n is not initialized, u r using the size of the vector &arr, you must explicitly initialize <code>int n = arr.size();</code>
2	SAP Labs, Rockstand	Second Largest elem in array without sorting TC: $O(n)$ SC : $O(1)$		GFG		Visible array → <code>arr[0]</code> . Invisible data → <code>INT_MIN</code> Can't trust the data → <code>INT_MAX</code> <code>INT_MIN</code> → start with the worst max <code>INT_MAX</code> → start with the worst min
3		Check if array is sorted TC: $O(n)$ SC : $O(1)$		GFG		
4	Zoho, Morgan Stanley, Microsoft, Samsung, Google, Wipro, Xome	Remove Duplicates Sorted Array TC: $O(n)$ SC : $O(1)$	2 pointers	GFG	LEETCODE	
5		Rotate Array by One (clockwise direction/right) TC: $O(n)$ SC : $O(1)$		GFG		Whenever they say rotate left/right, look at the key elem that moves, either first/last & shift accordingly. Right Rotation by 1 → last element (<code>arr[n-1]</code>) Left Rotation by 1 → first element (<code>arr[0]</code>) Dont focus on shifting all elements.
6	Amazon, Microsoft, MAQ Software	Rotate the array to the left (counter-clockwise) rotate the array to the right		GFG	LEETCODE	Left = F-R-A → First-Rest-All Right = A-F-R → All-First-Rest
7	Paytm, Amazon Microsoft, Samsung, SAP Labs, LinkedIn, Bloomberg	Move All Zeroes to End TC: $O(n)$ SC : $O(1)$	2 pointers	GFG	LEETCODE	
8	Amazon	Union of 2 Sorted Arrays TC: $O(n1 + n2)$ SC : $O(n1 + n2)$ WC	2 pointers	GFG		
9		Intersection of two sorted arrays TC: $O(n1 + n2)$ SC : $O(n1 + n2)$ WC Intersection of two unsorted arrays (LC)	2 pointers	GFG	LEETCODE	Intersection of two unsorted arrays (LC) We used unordered map
				GFG	LEETCODE	
				GFG	LEETCODE	
				GFG	LEETCODE	