**Array related problems (total 21 questions)**

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| **SL** | **Problem statement** | **Difficulty levels** |
|  | WAP that will take n integer numbers into an array, and then print all the integers into reverse order (from the last valid index to index 0).   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 5  1 2 3 4 5 | 5 4 3 2 1 | | 6  2 8 3 9 0 1 | 1 0 9 3 8 2 | | \* |
|  | WAP that will take n integer numbers into an array, and then sum up all the integers in that array.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 5  1 2 3 4 5 | 15 | | 6  2 8 3 9 0 1 | 23 | | \* |
|  | WAP that will take n integer numbers into an array, and then sum up all the even integers in that array.   |  |  | | --- | --- | | Sample input | Sample output | | 5  1 2 3 4 5 | 6 | | 6  2 8 3 9 0 1 | 10 | | \* |
| **4.** | WAP that will take n floating point numbers into an array, and then find the average of those numbers.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 5  1.2 5.6 10.3 4.5 5.2 | 5.36 | | 8  2.1 8.3 3.7 9.2 0.6 1.5 6.4 10.1 | 5.24 | | \* |
| **5.** | WAP that will take n integer numbers into an array, and then sum up all the even indexed integers in that array.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 5  1 2 3 4 5 | 9 | | 6  2 8 3 9 0 1 | 5 | | \* |
| **6.** | Wap that will take n integer numbers in an array, n different integer numbers in a second array and put the sum of the same indexed numbers from the two arrays in a third array.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 5  1 2 3 4 5  2 8 3 4 8 | 3 10 6 8 13 | | 8  2 8 3 9 0 1 6 10  5 1 4 8 9 3 1 5 | 7 9 7 17 9 4 7 15 | |  |

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| **7.** | WAP that will take n integer numbers into an array, and then reverse all the integers within that array. Finally print them all from 0 index to last valid index.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 5  1 2 3 4 5 | 5 4 3 2 1 | | 6  2 8 3 9 0 1 | 1 0 9 3 8 2 | | \*\* |
| **8.** | WAP that will take n integer numbers into an array, and then find the maximum -minimum among them with its index position.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 5  1 2 3 4 5 | Max: 5, Index: 4  Min: 1, Index: 0 | | 6  2 8 3 9 0 1 | Max: 9, Index: 3  Min: 0, Index: 4 | | \*\* |
| **9.** | WAP that will take n alphabets into an array, and then count number of vowels in that array.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 7  AKIOUEH | Count: 5 | | 29  UNITEDINTERNATIONALUNIVERSITY | Count: 13 | | \* |
| **10.** | WAP that will take n integers into an array, and then search a number into that array. If found then print its index. If not found then print “NOT FOUND”.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 8  7 8 1 3 2 6 4 3  3 | FOUND at index position: 3, 7 | | 8  7 8 1 3 2 6 4 3  5 | NOT FOUND | | \* |

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| **11.** | WAP that will take n integers into an array A, and then copy all numbers in reverse order from array A to another array B. Finally show all elements of both array A and B.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 8  7 8 1 3 2 6 4 3 | Array A : 7 8 1 3 2 6 4 3  Array B : 3 4 6 2 3 1 8 7 | | 3  3 2 1 | Array A : 3 2 1  Array B : 1 2 3 | | \* |
| **12.** | WAP that will take n integer numbers as input in an array and then insert a number in a position specified by the user in the array.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 10  9 11 34 23 16 15 2 37 89 54  number: 78 position: 4 | 9 11 34 23 78 16 15 2 37 89 54 | | 5  32 14 9 48 6  number: 16 position: 0 | 16 32 14 9 48 6 | | \*\* |
| **13.** | WAP that will take n integer numbers as input in an array and then delete a number from a position specified by the user in the array.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 10  9 11 34 23 16 15 2 37 89 54  position: 4 | 9 11 34 23 15 2 37 89 54 | | 5  32 14 9 48 6  position: 0 | 14 9 48 6 | | \* |
| **14.** | WAP that will first take n integers into an array A and then m integers into array B. Now swap all elements between array A and B. Finally show all elements of both array A and B.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 8  7 8 1 3 2 6 4 3  3  3 2 1 | Array A : 3 2 1  Array B : 7 8 1 3 2 6 4 3 | | \*\* |
| **15.** | WAP that will take n positive integers into an array A. Now find all the integers that are divisible by 3 and replace them by -1 in array A. Finally show all elements of array A.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 8  7 8 1 3 2 6 4 3 | 7 8 1 -1 2 -1 4 -1 | | 3  3 2 1 | -1 2 1 | | \* |
| **16.** | WAP that will take n positive integers into an array A. Now find all the integers that have an odd index and replace them by 0 in array A. Finally show all elements of array A.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 8  7 8 1 3 2 6 4 3 | 7 0 1 0 2 0 4 0 | | 3  3 2 1 | 3 0 1 | |  |
| **17.** | WAP that will take n integers into an array A. Now sort them in ascending order within that array. Finally show all elements of array A.  Reference: <http://en.wikipedia.org/wiki/Bubble_sort>   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 8  7 8 1 3 2 6 4 3 | 1 2 3 3 4 6 7 8 | | 3  3 2 1 | 1 2 3 | | \*\*\* |

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| **18.** | WAP that will take n integers into an array A. Now remove all duplicates numbers from that array. Finally print all elements from that array.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 8  2 8 1 3 2 6 4 3 | 2 8 1 3 6 4 | | 3  3 3 3 | 3 | | 4  6 7 8 9 | 6 7 8 9 | | \*\* |
| **19.** | WAP that will take n integers into array A and m positive integers into array B. Now find the intersection (set operation) of array A and B.     |  |  | | --- | --- | | **Sample input** | **Sample output** | | 8  7 8 1 5 2 6 4 3  6  1 3 6 0 9 2 | 1 2 6 3 | | 3  1 2 3  2  4 5 | Empty set | | \*\* |
| **20.** | WAP that will take n integers into an array A and m positive integers into array B. Now find the union (set operation) of array A and B.     |  |  | | --- | --- | | **Sample input** | **Sample output** | | 8  7 8 1 5 2 6 4 3  6  1 3 6 0 9 2 | 7 8 1 5 2 6 4 3 0 9 | | 3  1 2 3  2  4 5 | 1 2 3 4 5 | | \*\* |

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| **21.** | WAP that will take n integers into an array A and m positive integers into array B. Now find the difference (set operation) of array A and B or (A-B).     |  |  | | --- | --- | | **Sample input** | **Sample output** | | 8  7 8 1 5 2 6 4 3  6  1 3 6 0 9 2 | 7 8 5 4 | | 3  1 2 3  2  4 5 | 1 2 3 | | \*\* |