

Array related problems (total 21 questions)

SL	Problem statement	Difficulty levels						
1.	<p>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).</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 5px;">Sample input</th><th style="text-align: center; padding: 5px;">Sample output</th></tr> </thead> <tbody> <tr> <td style="padding: 5px;">5 1 2 3 4 5</td><td style="padding: 5px;">5 4 3 2 1</td></tr> <tr> <td style="padding: 5px;">6 2 8 3 9 0 1</td><td style="padding: 5px;">1 0 9 3 8 2</td></tr> </tbody> </table>	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	*
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							
2.	<p>WAP that will take n integer numbers into an array, and then sum up all the integers in that array.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 5px;">Sample input</th><th style="text-align: center; padding: 5px;">Sample output</th></tr> </thead> <tbody> <tr> <td style="padding: 5px;">5 1 2 3 4 5</td><td style="padding: 5px;">15</td></tr> <tr> <td style="padding: 5px;">6 2 8 3 9 0 1</td><td style="padding: 5px;">23</td></tr> </tbody> </table>	Sample input	Sample output	5 1 2 3 4 5	15	6 2 8 3 9 0 1	23	*
Sample input	Sample output							
5 1 2 3 4 5	15							
6 2 8 3 9 0 1	23							
3.	<p>WAP that will take n integer numbers into an array, and then sum up all the even integers in that array.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 5px;">Sample input</th><th style="text-align: center; padding: 5px;">Sample output</th></tr> </thead> <tbody> <tr> <td style="padding: 5px;">5 1 2 3 4 5</td><td style="padding: 5px;">6</td></tr> <tr> <td style="padding: 5px;">6 2 8 3 9 0 1</td><td style="padding: 5px;">10</td></tr> </tbody> </table>	Sample input	Sample output	5 1 2 3 4 5	6	6 2 8 3 9 0 1	10	*
Sample input	Sample output							
5 1 2 3 4 5	6							
6 2 8 3 9 0 1	10							
4.	<p>WAP that will take n floating point numbers into an array, and then find the average of those numbers.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 5px;">Sample input</th><th style="text-align: center; padding: 5px;">Sample output</th></tr> </thead> <tbody> <tr> <td style="padding: 5px;">5 1.2 5.6 10.3 4.5 5.2</td><td style="padding: 5px;">5.36</td></tr> <tr> <td style="padding: 5px;">8 2.1 8.3 3.7 9.2 0.6 1.5 6.4 10.1</td><td style="padding: 5px;">8.38</td></tr> </tbody> </table>	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	8.38	*
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	8.38							
5.	<p>WAP that will take n integer numbers into an array, and then sum up all the even indexed integers in that array.</p>	*						

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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.							

	<table border="1"> <thead> <tr> <th>Sample input</th><th>Sample output</th></tr> </thead> <tbody> <tr> <td>5 1 2 3 4 5 2 8 3 4 8</td><td>3 10 6 8 13</td></tr> <tr> <td>8 2 8 3 9 0 1 6 10 5 1 4 8 9 3 1 5</td><td>7 9 7 17 9 4 7 15</td></tr> </tbody> </table>	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	
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							
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.	**						
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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.	**						
	<table border="1"> <thead> <tr> <th>Sample input</th> <th>Sample output</th> </tr> </thead> <tbody> <tr> <td>5 1 2 3 4 5</td> <td>Max: 5, Index: 4 Min: 1, Index: 0</td> </tr> <tr> <td>6 2 8 3 9 0 1</td> <td>Max: 9, Index: 3 Min: 0, Index: 4</td> </tr> </tbody> </table>	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	
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	

11.	<p>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.</p> <table border="1" data-bbox="208 213 1377 418"> <thead> <tr> <th data-bbox="208 213 796 255">Sample input</th><th data-bbox="796 213 1377 255">Sample output</th></tr> </thead> <tbody> <tr> <td data-bbox="208 255 796 340">8 7 8 1 3 2 6 4 3</td><td data-bbox="796 255 1377 340">Array A : 7 8 1 3 2 6 4 3 Array B : 3 4 6 2 3 1 8 7</td></tr> <tr> <td data-bbox="208 340 796 418">3 3 2 1</td><td data-bbox="796 340 1377 418">Array A : 3 2 1 Array B : 1 2 3</td></tr> </tbody> </table>	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	*
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.	<p>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.</p> <table border="1" data-bbox="208 608 1377 889"> <thead> <tr> <th data-bbox="208 608 796 650">Sample input</th><th data-bbox="796 608 1377 650">Sample output</th></tr> </thead> <tbody> <tr> <td data-bbox="208 650 796 762">10 9 11 34 23 16 15 2 37 89 54 number: 78 position: 4</td><td data-bbox="796 650 1377 762">9 11 34 23 78 16 15 2 37 89 54</td></tr> <tr> <td data-bbox="208 762 796 889">5 32 14 9 48 6 number: 16 position: 0</td><td data-bbox="796 762 1377 889">16 32 14 9 48 6</td></tr> </tbody> </table>	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	**
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.	<p>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.</p> <table border="1" data-bbox="208 1009 1377 1290"> <thead> <tr> <th data-bbox="208 1009 796 1051">Sample input</th><th data-bbox="796 1009 1377 1051">Sample output</th></tr> </thead> <tbody> <tr> <td data-bbox="208 1051 796 1163">10 9 11 34 23 16 15 2 37 89 54 position: 4</td><td data-bbox="796 1051 1377 1163">9 11 34 23 15 2 37 89 54</td></tr> <tr> <td data-bbox="208 1163 796 1290">5 32 14 9 48 6 position: 0</td><td data-bbox="796 1163 1377 1290">14 9 48 6</td></tr> </tbody> </table>	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	*
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.	<p>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.</p> <table border="1" data-bbox="208 1410 1377 1607"> <thead> <tr> <th data-bbox="208 1410 796 1453">Sample input</th><th data-bbox="796 1410 1377 1453">Sample output</th></tr> </thead> <tbody> <tr> <td data-bbox="208 1453 796 1607">8 7 8 1 3 2 6 4 3 3 3 2 1</td><td data-bbox="796 1453 1377 1607">Array A : 3 2 1 Array B : 7 8 1 3 2 6 4 3</td></tr> </tbody> </table>	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	**		
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.	<p>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.</p>	*						

	<table border="1"> <thead> <tr> <th>Sample input</th><th>Sample output</th></tr> </thead> <tbody> <tr> <td>8 7 8 1 3 2 6 4 3</td><td>7 8 1 -1 2 -1 4 -1</td></tr> <tr> <td>3 3 2 1</td><td>-1 2 1</td></tr> </tbody> </table>	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	
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.							
	<table border="1"> <thead> <tr> <th>Sample input</th> <th>Sample output</th> </tr> </thead> <tbody> <tr> <td>8 7 8 1 3 2 6 4 3</td> <td>7 0 1 0 2 0 4 0</td> </tr> <tr> <td>3 3 2 1</td> <td>3 0 1</td> </tr> </tbody> </table>	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	
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.	<p>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.</p> <p>Reference: http://en.wikipedia.org/wiki/Bubble_sort</p> <table border="1"> <thead> <tr> <th>Sample input</th> <th>Sample output</th> </tr> </thead> <tbody> <tr> <td>8 7 8 1 3 2 6 4 3</td> <td>1 2 3 3 4 6 7 8</td> </tr> <tr> <td>3 3 2 1</td> <td>1 2 3</td> </tr> </tbody> </table>	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	***
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							

18.	<p>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.</p> <table border="1" data-bbox="208 213 1377 494"> <thead> <tr> <th data-bbox="208 213 796 255">Sample input</th><th data-bbox="796 213 1377 255">Sample output</th></tr> </thead> <tbody> <tr> <td data-bbox="208 255 796 340">8 2 8 1 3 2 6 4 3</td><td data-bbox="796 255 1377 340">2 8 1 3 6 4</td></tr> <tr> <td data-bbox="208 340 796 424">3 3 3 3</td><td data-bbox="796 340 1377 424">3</td></tr> <tr> <td data-bbox="208 424 796 494">4 6 7 8 9</td><td data-bbox="796 424 1377 494">6 7 8 9</td></tr> </tbody> </table>	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	**
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.	<p>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.</p> <table border="1" data-bbox="208 684 1377 1047"> <thead> <tr> <th data-bbox="208 684 796 726">Sample input</th><th data-bbox="796 684 1377 726">Sample output</th></tr> </thead> <tbody> <tr> <td data-bbox="208 726 796 895">8 7 8 1 5 2 6 4 3 6 1 3 6 0 9 2</td><td data-bbox="796 726 1377 895">1 2 6 3</td></tr> <tr> <td data-bbox="208 895 796 1047">3 1 2 3 2 4 5</td><td data-bbox="796 895 1377 1047">Empty set</td></tr> </tbody> </table>	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	**		
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.	<p>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.</p> <table border="1" data-bbox="208 1239 1377 1603"> <thead> <tr> <th data-bbox="208 1239 796 1281">Sample input</th><th data-bbox="796 1239 1377 1281">Sample output</th></tr> </thead> <tbody> <tr> <td data-bbox="208 1281 796 1450">8 7 8 1 5 2 6 4 3 6 1 3 6 0 9 2</td><td data-bbox="796 1281 1377 1450">7 8 1 5 2 6 4 3 0 9</td></tr> <tr> <td data-bbox="208 1450 796 1603">3 1 2 3 2 4 5</td><td data-bbox="796 1450 1377 1603">1 2 3 4 5</td></tr> </tbody> </table>	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	**		
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									

- 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

