Practice 10.5 Array-related problems

1. 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	15
1 2 3 4 5	
6	23
2 8 3 9 0 1	

2. WAP that will take n integer numbers into an array, and then sum up all the integers in the even indexed Position.

Sample input	Sample output
5	9
1 2 3 4 5	
6	5
2 8 3 9 0 1	

3. 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 the last valid index.

Sample input	Sample output
5	5 4 3 2 1
1 2 3 4 5	
6	1 0 9 3 8 2
2 8 3 9 0 1	

4. 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	Max: 5, Index: 4
1 2 3 4 5	Min: 1, Index: 0
6	Max: 9, Index: 3
2 8 3 9 0 1	Min: 0, Index: 4

5. 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	FOUND at index position: 3, 7
78132643	
3	
8	NOT FOUND
78132643	
5	

6. WAP that will take n integers into an array A and m positive integers into array B. Now find the intersection (set operation) of arrays A and B.

Sample input	Sample output
8	1 2 6 3
78152643	
6	
1 3 6 0 9 2	
3	Empty set
1 2 3	
2	
4 5	

7. 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 -1 2 -1 4 -1
78132643	
3	-1 2 1
3 2 1	

8. WAP that will take n integers into an array A. Now remove all duplicate numbers from that array. Finally, print all elements from that array.

Sample input	Sample output
8	281364
28132643	
3	3
3 3 3	
4	6789
6789	