## 1-D Array Programs By Ramana Sir

- 1. Write a Java program to store characters in an array and print the characters in reverse order.
- 2. Write a Java program to print even index values of an array.

3. Write a Java program to print odd index values of an array.

4. Write a Java program to print even elements present in an array.

5. Write a Java program to print odd elements present in an array.

```
Input-{1,2,3,4,5,6}
Output-{1,3,5}
```

6. Write a Java program to print the sum of an array of elements.

```
Input-{1,2,3,4,5,6}
Output-{21}
```

7. Write a Java program to print even index values sum and odd index values sum.

```
Input-{1,2,3,4,5,6}
Output-{ 9 (sum of even index), 12(sum of odd index) }
```

8. Write a Java program to print even elements sum.

```
Input-{1,2,3,4,5,6}
Output-{12}
```

9. Write a Java program to print odd elements sum.

```
Input-{1,2,3,4,5,6}
Output-{9}
```

10. Write a Java program to print the 2nd last element of an array.

```
Input-{1,2,3,4,5,6}
Output-{5}
```

11. Write a Java program to print prime numbers present in an array.

```
Input-{1,2,3,4,5,6}
Output-{2,3,5}
```

12. Write a Java program to print ovals present in an array.

```
Input-{a,b,c,d,e,f,g} output-{a,e}
```

13. Write a Java program to count the number of zeros(0) present in a given array.

```
Input-{1,0,3,0,5,6,0}
Output-{3}
```

- 14. Write a Java program to insert even values in an array, the user will enter the values.
- 15. Write a Java program to print an array's last index value of a given element.

```
Input-{1,2,9,3,9,4,9,6,7,8} find the last index of 9
Output-{5}
```

16. Write a Java program to count the occurrence of each element in a given array.

```
Input-{1,2,1,3,2,4,}
Output-{1-2, 2-2, 3-1, 4-1}
```

17. Write a Java program to find the maximum occured element in a given array.

```
Input-{1,2,1,3,1,4,}
Output-{1-3}
```

18. Write a Java program to find the minimum occured element in a given array.

Input-{1,2,1,1,2,1}
Output-{2-2}

19. Input-{1,2,3,4,5}

**Output-{1,4,9,16,25} ( square of each element )** 

20. Write a Java program to find the largest element in a given array.

Input-{1,2,1,3,2,4,}
Output-{4}

21. Write a Java program to find the smallest element in a given array.

Input-{1,2,1,3,2,4,}
Output-{1}

22. Write a Java program to find 2nd largest element in a given array.

Input-{1,2,1,3,2,4,}

Output-{3}

23. Write a Java program to find 2nd smallest element in a given array.

Input-{1,2,1,3,2,4}
Output-{2}

24. Write a Java program to convert 0 into -1 and -1 into 0.

Input-{0,2,-1,0,2,-1,3} Output-{-1,2,0,-1,2,0,3}

25. Input-{23,55,57,93,10,1}

Output-{5,1,3,3,1,1} ( Sum of each element up to single digit )

26. Write a Java program to remove the elements present more than once.

Input-{1,2,1,3,2,4} Output-{3,4}

27. Write a Java program to remove duplicates.

Input-{1,2,1,3,2,4} Output-{1,2,3,4} 28. Input-{23,55,57,93,1}
Output-{32,55,75,39,1} ( Reverse each element )

29. Write a Java program to add elements of 2 arrays.

Test case -1	<u>Test case -2</u>
Input-1-{2,3,4,1}	Input-1-{2,3,5,6,7,8,9}
Input-2-{2,3,5,6,7,8,9}	Input-2-{2,3,4,1}
Output-{4,6,9,7,7,8,9}	Output-{4,6,9,7,7,8,9}

30. Input-{231,554,572,962,24,1}

Output-{2,4,2,8,6,1} ( Sum of even digits of each element )

31. Write a Java program to merge two arrays.

Input-1-{1,2,3}
Input-2-{4,5,6}
output-{1,2,3,4,5,6}

32. Write a Java program to shift zeros (0) to the right side of the array.

Input-{2,0,5,3,1,0,3,1} output-{2,5,3,1,3,1,0,0}

33. Write a Java program to shift zeros (0) to the left side of the array.

Input-{2,0,5,3,1,0,3,1} output-{0,0,2,5,3,1,3,1}

- 34. Write a Java program to find the length of an array without using the length attribute.
- 35. Write a Java program to print repeated elements present in an array.

Input-{1,2,3,4,3,2} Output-{2,3}

36. Input-{1,2,3,4} insert 5 in index 3 output-{1,2,3,5,4}

37. Input-{1,2,3,4} delete 2nd index element output-{1,2,4}

38. Write a Java program to print distinct elements present in two arrays.

Input-1-{1,2,4,5,6} Input-2-{2,5,8,9,3,1} output-{4,6,8,9,3}

39. Write a Java program to print common elements present in two arrays.

Input-1-{1,2,4,5,6} Input-2-{2,5,8,9,3,1} output-{1,2,5}

40. Write a Java program to shift half of the elements to the right side of the array.

Input-{2,5,8,9,3,1} output-{9,3,1,2,5,8}

41. Write a Java program to print missing elements.

Input-{2,4,6,8,13} output-{3,5,7,9,10,11,12}

42. Write a Java program to convert numbers into words

**Input-2917** 

**Output-two thousand nine hundred seventeen** 

- 43. Write a Java program to shuffle array elements each time we execute the program.( using Math.random() method ).
- 44. Write a Java program to remove the elements present before the given index number.

Test case-1	<u>Test case-2</u>
a={1,2,4,5,1,3,2}	a={1,2,4,5,1,3,2}
Index-3	Index-5
Output-{5,1,3,2}	output-{3,2}

- 45. Write a Java program to copy an array using arraycopy() method.
- 46. Write a Java program for linear search.
- 47. Write a Java program for binary search.
- 48. Write a Java program to sort array elements in ascending order Input-{9,5,6,1,2,7}
  Output-{1,2,5,6,7,9}
- 49. Write a Java program to sort array elements in descending order Input-{9,5,6,1,2,7}Output-{9,7,6,5,2,1}
- 50. Write a Java program for bubble sorting.
- 51. Write a Java program for insertion sort.
- 52. Write a Java program for selection sort.
- 53. Write a Java program for quick sorting.
- 54. Write a Java program for merge sort.
- 55. Write a Java program to sort array elements using the sort() method.
- 56. Write a Java program to arrange the given string array into ascending order.

```
input-{"Ram"," Amar"," Cel"," David"," Bunny"}
output-{," Amar"," Bunny"," Cel"," David", "Ram"}
```

57. Write a Java program to arrange the given character array into ascending order.

```
input-{R, A, C, D, B}
output-{A, B, C, D, R}
```