Level 0(Arrays)

1. **Take input from user and to store in array**

   Write a program to take input from the user and store it in an array using Scanner Class.

   Input Format:

   First line contains a single integer N.

   Next line contains N space separated integer values.

   Sample Input:

   5

   1 2 3 4 5

2. **Numbers in array.**

   Write a program to print numbers present in each index in an array.

   Input Format:

   First line contains a single integer N.

   Next line contains N space separated integer values.

   Output Format:

   Print space separated integer values stored in each index in the array.

   Sample Input:

   5

   1 4 6 3 10

Sample Output:

1 4 6 3 10

3. **Numbers in array reverse order**

   Write a program to print numbers present in each index in an array in reverse order

   Input Format:

   First line contains a single integer N.

   Next line contains N space separated integer values.

   Output Format:

   Print space separated integer values stored in each index in the array in reverse order.

   Sample Input:

   5

   1 4 6 3 10

   Sample Output:

   10 3 6 4 1

4. **Numbers in Even index of an Array**

   Write a program to print numbers present in the even index of an array.

   Input Format:

   First line contains a single integer N.

   Next line contains N space separated integer values.

   Output Format:

   Print space separated integer values stored in the even index of the array.

   Sample Input:

5

1 4 6 3 10

Sample Output:

1 6 10

5. **Numbers in Odd index of an Array**

Write a program to print numbers present in the odd index of an array.

Input Format:

First line contains a single integer N.

Next line contains N space separated integer values.

Output Format:

Print space separated integer values stored in the odd index of the array.

Sample Input:

5

1 4 6 3 10

Sample Output:

4 3

6. **Even numbers in Array**

Write a program to print even numbers present in an array.

Input Format:

First line contains a single integer N.

Next line contains N space separated integer values.

Output Format:

Print space separated even integer values stored in an array.

Sample Input:

5

1 4 6 3 10

Sample Output:

4 6 10

7. **Odd numbers in Array**

   Write a program to print odd numbers present in an array.

   Input Format:

   First line contains a single integer N.

   Next line contains N space separated integer values.

   Output Format:

   Print space separated odd integer values stored in an array.

   Sample Input:

   5

   1 4 6 3 10

   Sample Output:

   1 3

8. **Even numbers in Array in Reverse Order**

   Write a program to print even numbers present in an array in reverse order.

   Input Format:

   First line contains a single integer N.

   Next line contains N space separated integer values.

Output Format:

Print space separated even integer values stored in an array in reverse order.

Sample Input:

5

1 4 6 3 10

Sample Output:

10 6 4

9. **Odd numbers in Array in Reverse Order**

Write a program to print odd numbers present in an array in reverse order.

Input Format:

First line contains a single integer N.

Next line contains N space separated integer values.

Output Format:

Print space separated odd integer values stored in an array in reverse order.

Sample Input:

5

1 4 6 3 10

Sample Output:

3 1

10. **Sum of elements in array**

Write a program to find the sum of all elements present in an array.

Input Format:

First line contains a single integer N.

Next line contains N space separated integer values.

Output Format:

Print sum of all elements in an array.

Sample Input:

5

1 4 6 3 10

Sample Output:

24

11. Sum of even elements in array

Write a program to find the sum of all even elements present in an array.

Input Format:

First line contains a single integer N.

Next line contains N space separated integer values.

Output Format:

Print sum of all even elements in an array.

Sample Input:

5

1 4 6 3 10

Sample Output:

20

12. Sum of odd elements in array

Write a program to find the sum of all odd elements present in an array.

Input Format:

First line contains a single integer N.

Next line contains N space separated integer values.

Output Format:

Print sum of all odd elements in an array.

Sample Input:

5

1 4 6 3 10

Sample Output:

4

13. Elements divisible by 2 and 3 in array

Write a program to print the elements which are divisible by 2 and 3 in an array.

Input Format:

First line contains a single integer N.

Next line contains N space separated integer values.

Output Format:

Print elements which are divisible by 2 and 3 in an array

Sample Input:

5

1 4 6 3 10

Sample Output:

4 6 3 10

14. Sum of elements divisible by 3 and 5 in array

Write a program to find the sum of elements which are divisible by 3 and 5 in an array.

Input Format:

First line contains a single integer N.

Next line contains N space separated integer values.

Output Format:

Print sum elements which are divisible by 3 and 5 in an array

Sample Input:

5

1 4 6 3 10

Sample Output:

13

15. Sum of positive elements and negative elements

Write a program to find the sum of positive elements and negative elements separately in an array.

Input Format:

First line contains a single integer N.

Next line contains N space separated integer values.

Output Format:

First line print sum of positive elements in an array.

Second line print sum of negative elements in an array.

Sample Input:

6

1 -4 -6 3 10 -20

Sample Output:

14

-30

16. Absolute Sum of elements in array

Write a program to find the absolute sum of all elements present in an array.

Input Format:

First line contains a single integer N.

Next line contains N space separated integer values.

Output Format:

Print sum of all elements in an array.

Sample Input:

6

1 -4 -6 3 10 -20

Sample Output:

16

17. Average of elements in array

Write a program to find the average of all elements present in an array.

Input Format:

First line contains a single integer N.

Next line contains N space separated integer values.

Output Format:

Print float value of average of all elements in an array.

Sample Input:

5

1 4 6 3 10

Sample Output:

4.8

18. Even, Odd and Negative elements in an Array

Write a program to print negative elements, even elements and odd elements present in an array separately.

Input Format:

First line contains a single integer N.

Next line contains N space separated integer values.

Output Format:

First line prints space separated negative elements in an array.

Second line prints space separated odd elements in an array.

Third line prints space separated even elements in an array.

Sample Input:

10

1 -4 6 3 -10 24 -50 5 34 45

Sample Output:

-4 -10 -50

1 3 5 45

6 24 34

19. Largest element in an array

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

Input Format:

First line contains a single integer N.

Next line contains N space separated integer values.

Output Format:

Print largest element in an array

Sample Input:

5

1 4 65 3 10

Sample Output:

65

20. Smallest element in an array

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

Input Format:

First line contains a single integer N.

Next line contains N space separated integer values.

Output Format:

Print smallest element in an array

Sample Input:

5

1 4 65 3 10

Sample Output:

1

21. Replace even elements in an array

Write a program to find the even elements in an array and replace all even elements with '0'.

Input Format:

First line contains a single integer N.

Next line contains N space separated integer values.

Output Format:

Print the required output

Sample Input:

5

1 4 65 34 15

Sample Output:

1 0 65 0 15

22. Swapping Indexes

Write a program to swap all the even index elements with odd index elements

Input Format:

First line contains a single integer N.

Next line contains N space separated integer values.

Output Format:

Print the required output

Sample Input:

6

1 4 6 3 10 15

Sample Output:

Before Swapping

Even Index elements - 1 6 10

Odd Index elements - 4 3 15

After Swapping

Even Index elements - 4 3 15

Odd Index elements - 1 6 10

23. Occurance of Largest element

Write a program to find the occurrence of the largest element in an array.

Input Format:

First line contains a single integer N.

Next line contains N space separated integer values.

Output Format:

Print the occurrence of largest element

Sample Input:

6

1 4 6 15 10 15

Sample Output:

2

24. Occurance of smallest element

Write a program to find the occurrence of the smallest element in an array.

Input Format:

First line contains a single integer N.

Next line contains N space separated integer values.

Output Format:

Print the occurrence of smallest element

Sample Input:

6

1 1 6 15 1 15

Sample Output:

3