Unsorted Array: Basic Array Operations

1. Given an unsorted integer array A, find the sum of all the elements in A.

2. Given an unsorted array of size N, return the sum of all the elements in the even positions. Consider index 0 to be even for this case.

3. Given an unsorted array of size N, return the sum of all the elements in the odd positions.

4. Given an unsorted array of size N, find if the sum of all the elements in the odd positions is equal to the sum of all the elements in the even positions. Consider index 0 to be even for this case.

5. Given an unsorted array A of size N, subtract the element found in index 0 from all elements in the array.

6. Given an unsorted integer array A, find the mean.

7. Given an unsorted integer array A, find the count of all non-zero elements in the array.

8. Given an unsorted integer array A, find the count of all positive elements in the array.

9. Given an unsorted integer array A, find the count of all negative elements in the array.

10. Given an unsorted integer array A, find if the count of all positive elements in the array is equal to the count of all negative elements in the array. For this case, 0 is considered positive.

11. Given an unsorted integer array A, find if the sum of all positive elements in the array is equal to the sum of all negative elements in the array.

12. Given an unsorted integer array A, find the mean, ignoring the elements with a value of 0.

13. Given an unsorted integer array as input, return the number of odd numbers in it.

14. Given an unsorted integer array as input, return the number of even numbers in it.

15. Given an unsorted integer array as input, return the number of perfect squares in it.

16. Given an unsorted integer array as input, return the number of prime numbers in it.