Check If N and Its Double Exist

# Question

Given an array arr of integers, check if there exists two integers N and M such that N is the double of M ( i.e. N = 2 \* M).

More formally check if there exists two indices i and j such that :

i != j

0 <= i, j < arr.length

arr[i] == 2 \* arr[j]

**Example 1:**

Input: arr = [10,2,5,3]

Output: true

Explanation: N = 10 is the double of M = 5,that is, 10 = 2 \* 5.

**Example 2:**

Input: arr = [7,1,14,11]

Output: true

Explanation: N = 14 is the double of M = 7,that is, 14 = 2 \* 7.

**Example 3:**

Input: arr = [3,1,7,11]

Output: false

Explanation: In this case does not exist N and M, such that N = 2 \* M.

# Pseudo Code

If the size of the Array is 0 or 1

Return false

If number of Zeros are greater than 1

Return true

Run the Outer For Loop with var i

Run the Inner For Loop with var j

If arr[j] = 2 x arr[i]

Return true

Return false

# Source Code

## v1.0

1. bool checkIfExist(int\* arr, int arrSize){
3. if(arrSize == 0 || arrSize == 1) {
4. return false;
5. }
7. int countZeros = 0;
9. for(int i=0 ; i<arrSize ; i++) {
10. if(arr[i] == 0)
11. countZeros++;
12. }
14. if(countZeros > 1) {
15. return true;
16. }
18. for(int i=0 ; i<arrSize ; i++) {
20. for(int j=0 ; j<arrSize ; j++) {
22. if(arr[i] == 0) {
23. break;
24. }
26. if(arr[j] == (2 \* arr[i])) {
27. return true;
28. }
29. }
30. }
31. return false;
32. }