

# Problem 1346: Check If N and Its Double Exist

## Problem Information

Difficulty: **Easy**

Acceptance Rate: 0.00%

Paid Only: No

## Problem Description

Given an array

`arr`

of integers, check if there exist two indices

`i`

and

`j`

such that :

$i \neq j$

$0 \leq i, j < \text{arr.length}$

$\text{arr}[i] == 2 * \text{arr}[j]$

Example 1:

Input:

`arr = [10,2,5,3]`

Output:

true

Explanation:

For  $i = 0$  and  $j = 2$ ,  $\text{arr}[i] == 10 == 2 * 5 == 2 * \text{arr}[j]$

Example 2:

Input:

`arr = [3,1,7,11]`

Output:

false

Explanation:

There is no  $i$  and  $j$  that satisfy the conditions.

Constraints:

$2 \leq \text{arr.length} \leq 500$

$-10$

$3$

$\leq \text{arr}[i] \leq 10$

$3$

## Code Snippets

**C++:**

```

class Solution {
public:
    bool checkIfExist(vector<int>& arr) {

    }
};

```

### Java:

```

class Solution {
    public boolean checkIfExist(int[] arr) {

    }
}

```

### Python3:

```

class Solution:
    def checkIfExist(self, arr: List[int]) -> bool:

```

### Python:

```

class Solution(object):
    def checkIfExist(self, arr):
        """
        :type arr: List[int]
        :rtype: bool
        """

```

### JavaScript:

```

/**
 * @param {number[]} arr
 * @return {boolean}
 */
var checkIfExist = function(arr) {

};

```

### TypeScript:

```

function checkIfExist(arr: number[]): boolean {

```

```
};
```

### C#:

```
public class Solution {  
    public bool CheckIfExist(int[] arr) {  
  
    }  
}
```

### C:

```
bool checkIfExist(int* arr, int arrSize) {  
  
}
```

### Go:

```
func checkIfExist(arr []int) bool {  
  
}
```

### Kotlin:

```
class Solution {  
    fun checkIfExist(arr: IntArray): Boolean {  
  
    }  
}
```

### Swift:

```
class Solution {  
    func checkIfExist(_ arr: [Int]) -> Bool {  
  
    }  
}
```

### Rust:

```
impl Solution {  
    pub fn check_if_exist(arr: Vec<i32>) -> bool {
```

```
}  
}
```

### Ruby:

```
# @param {Integer[]} arr  
# @return {Boolean}  
def check_if_exist(arr)  
  
end
```

### PHP:

```
class Solution {  
  
    /**  
     * @param Integer[] $arr  
     * @return Boolean  
     */  
    function checkIfExist($arr) {  
  
    }  
}
```

### Dart:

```
class Solution {  
    bool checkIfExist(List<int> arr) {  
  
    }  
}
```

### Scala:

```
object Solution {  
    def checkIfExist(arr: Array[Int]): Boolean = {  
  
    }  
}
```

### Elixir:

```

defmodule Solution do
  @spec check_if_exist(arr :: [integer]) :: boolean
  def check_if_exist(arr) do

  end

end

```

## Erlang:

```

-spec check_if_exist(Arr :: [integer()]) -> boolean().
check_if_exist(Arr) ->
.

```

## Racket:

```

(define/contract (check-if-exist arr)
  (-> (listof exact-integer?) boolean?)
)

```

# Solutions

## C++ Solution:

```

/*
 * Problem: Check If N and Its Double Exist
 * Difficulty: Easy
 * Tags: array, hash, sort, search
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */

class Solution {
public:
    bool checkIfExist(vector<int>& arr) {

    }

};

```

## Java Solution:

```

/**
 * Problem: Check If N and Its Double Exist
 * Difficulty: Easy
 * Tags: array, hash, sort, search
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */

class Solution {
public boolean checkIfExist(int[] arr) {

}

}

```

### Python3 Solution:

```

"""
Problem: Check If N and Its Double Exist
Difficulty: Easy
Tags: array, hash, sort, search

Approach: Use two pointers or sliding window technique
Time Complexity: O(n) or O(n log n)
Space Complexity: O(n) for hash map
"""

class Solution:
def checkIfExist(self, arr: List[int]) -> bool:
# TODO: Implement optimized solution
pass

```

### Python Solution:

```

class Solution(object):
def checkIfExist(self, arr):
"""
:type arr: List[int]
:rtype: bool
"""

```

## JavaScript Solution:

```
/**
 * Problem: Check If N and Its Double Exist
 * Difficulty: Easy
 * Tags: array, hash, sort, search
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
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/**
 * @param {number[]} arr
 * @return {boolean}
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var checkIfExist = function(arr) {

};
```

## TypeScript Solution:

```
/**
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 * Difficulty: Easy
 * Tags: array, hash, sort, search
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */

function checkIfExist(arr: number[]): boolean {

};
```

## C# Solution:

```
/*
 * Problem: Check If N and Its Double Exist
 * Difficulty: Easy
 * Tags: array, hash, sort, search
 */
```



```

* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(n) for hash map
*/

public class Solution {
public bool CheckIfExist(int[] arr) {

}

}

```

### C Solution:

```

/*
* Problem: Check If N and Its Double Exist
* Difficulty: Easy
* Tags: array, hash, sort, search
*
* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(n) for hash map
*/

bool checkIfExist(int* arr, int arrSize) {

}

```

### Go Solution:

```

// Problem: Check If N and Its Double Exist
// Difficulty: Easy
// Tags: array, hash, sort, search
//
// Approach: Use two pointers or sliding window technique
// Time Complexity: O(n) or O(n log n)
// Space Complexity: O(n) for hash map

func checkIfExist(arr []int) bool {

}

```

### Kotlin Solution:

```
class Solution {  
    fun checkIfExist(arr: IntArray): Boolean {  
  
    }  
}
```

### Swift Solution:

```
class Solution {  
    func checkIfExist(_ arr: [Int]) -> Bool {  
  
    }  
}
```

### Rust Solution:

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// Problem: Check If N and Its Double Exist  
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// Time Complexity: O(n) or O(n log n)  
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impl Solution {  
    pub fn check_if_exist(arr: Vec<i32>) -> bool {  
  
    }  
}
```

### Ruby Solution:

```
# @param {Integer[]} arr  
# @return {Boolean}  
def check_if_exist(arr)  
  
end
```

### PHP Solution:

```

class Solution {

    /**
     * @param Integer[] $arr
     * @return Boolean
     */
    function checkIfExist($arr) {

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}

```

### Dart Solution:

```

class Solution {
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object Solution {
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