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.

**Constraints:**

* 2 <= arr.length <= 500
* -10^3 <= arr[i] <= 10^3