

## 5785. Merge Triplets to Form Target Triplet

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A **triplet** is an array of three integers. You are given a 2D integer array `triplets`, where `triplets[i] = [ai, bi, ci]` describes the  $i^{\text{th}}$  **triplet**. You are also given an integer array `target = [x, y, z]` that describes the **triplet** you want to obtain.

To obtain `target`, you may apply the following operation on `triplets` **any number** of times (possibly **zero**):

- Choose two indices (**0-indexed**)  $i$  and  $j$  ( $i \neq j$ ) and **update** `triplets[j]` to become  $[\max(a_i, a_j), \max(b_i, b_j), \max(c_i, c_j)]$ .
  - For example, if `triplets[i] = [2, 5, 3]` and `triplets[j] = [1, 7, 5]`, `triplets[j]` will be updated to  $[\max(2, 1), \max(5, 7), \max(3, 5)] = [2, 7, 5]$ .

Return `true` if it is possible to obtain the **target triplet** `[x, y, z]` as an **element** of `triplets`, or `false` otherwise.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Medium

## Example 1:

**Input:** `triplets = [[2,5,3],[1,8,4],[1,7,5]]`, `target = [2,7,5]`

**Output:** `true`

**Explanation:** Perform the following operations:

– Choose the first and last triplets `[2,5,3]`, `[1,8,4]`, `[1,7,5]`. Update the last triplet to be  $[\max(2,1), \max(5,7), \max(3,5)] = [2,7,5]$ . The target triplet `[2,7,5]` is now an element of `triplets`.

## Example 2:

**Input:** `triplets = [[1,3,4],[2,5,8]]`, `target = [2,5,8]`

**Output:** `true`

**Explanation:** The target triplet `[2,5,8]` is already an element of `triplets`.

## Example 3:

**Input:** `triplets = [[2,5,3],[2,3,4],[1,2,5],[5,2,3]]`, `target = [5,5,5]`

**Output:** `true`

**Explanation:** Perform the following operations:

– Choose the first and third triplets `[2,5,3]`, `[2,3,4]`, `[1,2,5]`, `[5,2,3]`. Update the third triplet to be  $[\max(2,1), \max(5,2), \max(3,5)] = [2,5,5]$ .

– Choose the third and fourth triplets `[2,5,3]`, `[2,3,4]`, `[2,5,5]`, `[5,2,3]`. Update the fourth triplet to be  $[\max(2,5), \max(3,2), \max(5,3)] = [5,5,5]$ . The target triplet `[5,5,5]` is now an element of `triplets`.

## Example 4:

**Input:** `triplets = [[3,4,5],[4,5,6]]`, `target = [3,2,5]`

**Output:** `false`

**Explanation:** It is impossible to have `[3,2,5]` as an element because there is no 2 in any of the triplets.

## Constraints:

- $1 \leq \text{triplets.length} \leq 10^5$
- $\text{triplets}[i].\text{length} == \text{target.length} == 3$
- $1 \leq a_i, b_i, c_i, x, y, z \leq 1000$

JavaScript



```
1 /**
2  * @param {number[][]} triplets
3  * @param {number[]} target
4  * @return {boolean}
5  */
6 var mergeTriplets = function(triplets, target) {
7
8  };
```

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