# 1899. Merge Triplets to Form Target Triplet

Medium Topics Companies Hint

A **triplet** is an array of three integers. You are given a 2D integer array `triplets`, where `triplets[i] = [a_i, b_i, c_i]` describes the $i^{th}$ **t**

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 != 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`

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

**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
The target triplet [2,7,5] is now an element of triplets.
```

**Example 2:**

```
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 trip
```

**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
- Choose the third and fourth triplets [[2,5,3],[2,3,4],[2,5,5],[5,2,3]]. Update the fourth triplet
The target triplet [5,5,5] is now an element of triplets.
```

**Constraints:**

- `1 <= triplets.length <= 10^5`
- `triplets[i].length == target.length == 3`
- `1 <= a_i, b_i, c_i, x, y, z <= 1000`

Seen this question in a real interview before? 1/4

Yes No

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Hint 1

Hint 2

Discussion (8)