Given a set of N people (numbered 1, 2, ..., N), we would like to split everyone into two groups of **any** size.

Each person may dislike some other people, and they should not go into the same group.

Formally, if dislikes[i] = [a, b], it means it is not allowed to put the people numbered a and b into the same group.

Return true if and only if it is possible to split everyone into two groups in this way.

**Example 1:**

**Input:** N = 4, dislikes = [[1,2],[1,3],[2,4]]

**Output:** true

**Explanation**: group1 [1,4], group2 [2,3]

**Example 2:**

**Input:** N = 3, dislikes = [[1,2],[1,3],[2,3]]

**Output:** false

**Example 3:**

**Input:** N = 5, dislikes = [[1,2],[2,3],[3,4],[4,5],[1,5]]

**Output:** false

**Note:**

1. 1 <= N <= 2000
2. 0 <= dislikes.length <= 10000
3. 1 <= dislikes[i][j] <= N
4. dislikes[i][0] < dislikes[i][1]
5. There does not exist i != j for which dislikes[i] == dislikes[j].