

@LeetCode

Given a set of  $N$  people (numbered  $1, 2, \dots, N$ ), 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  $\text{dislikes}[i] = [a, b]$ , 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:**  $N = 4$ ,  $\text{dislikes} = [[1,2],[1,3],[2,4]]$

**Output:** `true`

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

**Example 2:**

**Input:**  $N = 3$ ,  $\text{dislikes} = [[1,2],[1,3],[2,3]]$

**Output:** `false`

**Example 3:**

**Input:**  $N = 5$ ,  $\text{dislikes} = [[1,2],[2,3],[3,4],[4,5],[1,5]]$

**Output:** `false`

**Note:**

1.  $1 \leq N \leq 2000$
2.  $0 \leq \text{dislikes.length} \leq 10000$
3.  $1 \leq \text{dislikes}[i][j] \leq N$
4.  $\text{dislikes}[i][0] < \text{dislikes}[i][1]$
5. There does not exist  $i \neq j$  for which  $\text{dislikes}[i] == \text{dislikes}[j]$ .