

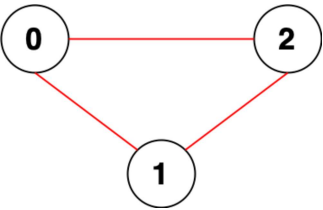
2316. Count Unreachable Pairs of Nodes in an Undirected Graph

Medium 242 3 Add to List Share

You are given an integer  $n$ . There is an **undirected** graph with  $n$  nodes, numbered from  $0$  to  $n - 1$ . You are given a 2D integer array `edges` where `edges[i] = [ai, bi]` denotes that there exists an **undirected** edge connecting nodes  $a_i$  and  $b_i$ .

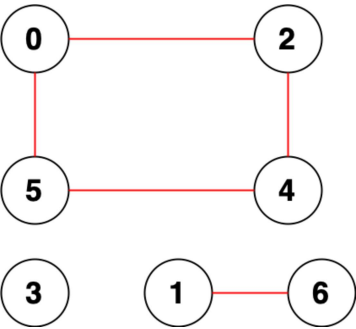
Return the **number of pairs** of different nodes that are **unreachable** from each other.

Example 1:



**Input:** `n = 3, edges = [[0,1],[0,2],[1,2]]`  
**Output:** `0`  
**Explanation:** There are no pairs of nodes that are unreachable from each other. Therefore, we return `0`.

Example 2:



**Input:** `n = 7, edges = [[0,2],[0,5],[2,4],[1,6],[5,4]]`  
**Output:** `14`  
**Explanation:** There are 14 pairs of nodes that are unreachable from each other: `[[0,1],[0,3],[0,6],[1,2],[1,3],[1,4],[1,5],[2,3],[2,6],[3,4],[3,5],[3,6],[4,6],[5,6]]`. Therefore, we return `14`.

Constraints:

- $1 \leq n \leq 10^5$
- $0 \leq \text{edges.length} \leq 2 * 10^5$
- `edges[i].length == 2`
- $0 \leq a_i, b_i < n$
- $a_i \neq b_i$
- There are no repeated edges.

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```
1 class Solution {
2     public long countPairs(int n, int[][] edges) {
3
4     }
5 }
```