2685. Count the Number of Complete Components

Solved ●

Medium Topics Companies Hint

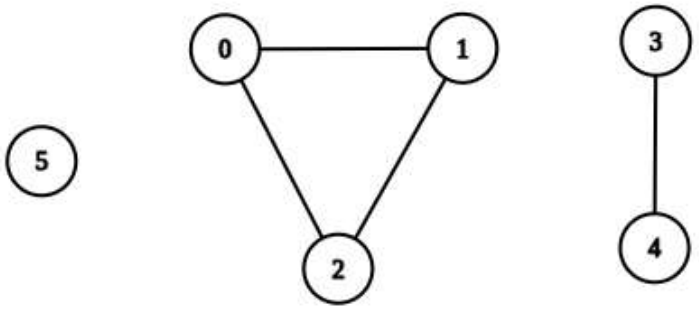
You are given an integer `n`. There is an **undirected** graph with `n` vertices, numbered from `0` to `n - 1`. You are given a 2D integer array `edges` where `edges[i] = [a_i, b_i]` denotes that there exists an **undirected** edge connecting vertices `a_i` and `b_i`.

Return *the number of **complete connected components** of the graph*.

A **connected component** is a subgraph of a graph in which there exists a path between any two vertices, and no vertex of the subgraph shares an edge with a vertex outside of the subgraph.

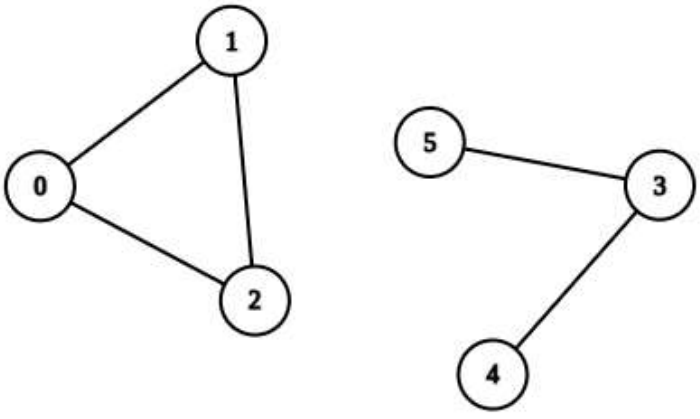
A connected component is said to be **complete** if there exists an edge between every pair of its vertices.

Example 1:



> **Input:** n = 6, edges = [[0,1],[0,2],[1,2],[3,4]]
> **Output:** 3
> **Explanation:** From the picture above, one can see that all of the components of this graph are complete.

Example 2:



> **Input:** n = 6, edges = [[0,1],[0,2],[1,2],[3,4],[3,5]]
> **Output:** 1
> **Explanation:** The component containing vertices 0, 1, and 2 is complete since there is an edge between every pair of two vertices. On the other hand, the component containing vertices 3, 4, and 5 is not complete since there is no edge between vertices 4 and 5. Thus, the number of complete components in this graph is 1.

Constraints:

- $1 <= n <= 50$
- $0 <= edges.length <= n * (n - 1) / 2$
- $edges[i].length == 2$
- $0 <= a_i, b_i <= n - 1$
- $a_i != b_i$
- There are no repeated edges.

Seen this question in a real interview before? 1/5

Yes No

Accepted 129.9K Submissions 165.2K Acceptance Rate 78.6%

Topics

Companies

Hint 1

Hint 2

Hint 3

Similar Questions

Discussion (129)