



Paths, Paths, Paths

Submit solution

All submissions
Best submissions

✓ Points: 100 (partial)② Time limit: 1.0s

■ Memory limit: 256M

✓ Allowed languages C, C++

Problem Statement

A country has n cities numbered from 1 to n and has m roads numbered from 1 to m. Using Road i, you can travel from City u_i to v_i , or **vice versa** in **one hour**.

Your task is to find **how many** paths are there in which you can get from City 1 to City n as **early as possible**. Since these values can be very large, print the value for each city after modulo with $10^9 + 7$.

Input Format

The first line of input contains two integers n and m denoting the number of cities and the number of roads respectively.

Each of the next m lines contains two integers u_i and v_i , representing a road between these two cities.

Constraints

 $2 \le n \le 200,000$

 $0 \le m \le 200,000$

 $1 \le u_i < v_i \le n$

Note: The pairs (u_i, v_i) are distinct.

Output Format

Print a single integer representing the answer. If is impossible to get from City 1 to City n, print 0.

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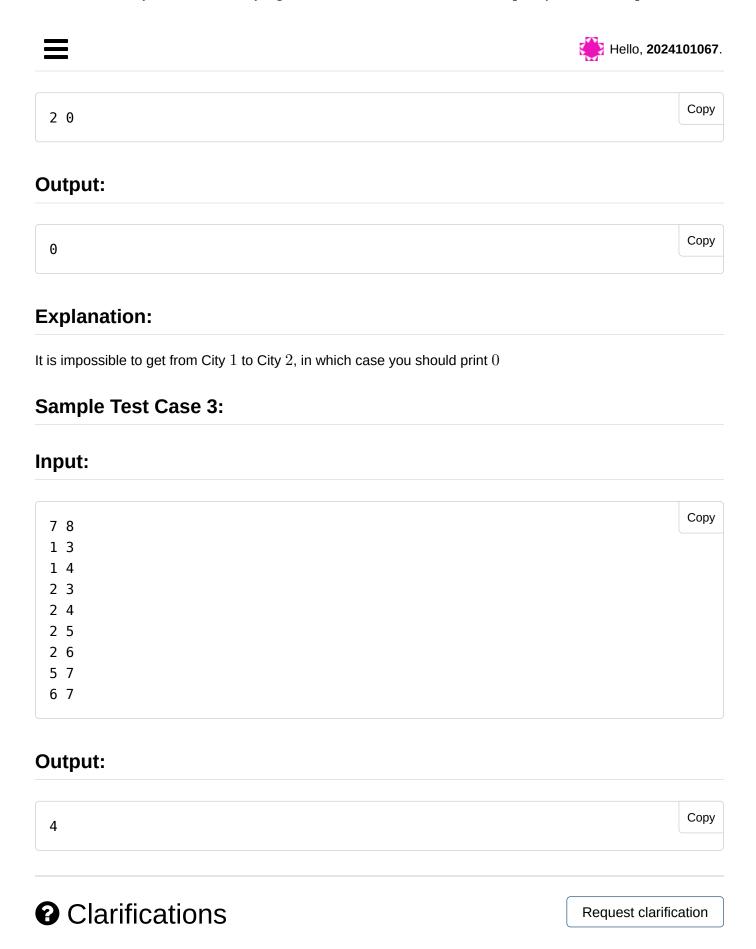
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Hello, 202410 2	
4 5 2 4 1 2 2 3 1 3 3 4	Сору
Output:	
2	Сору
Explanation:	
The shortest time needed to get from City 1 to City 4 is 2 hours, which is achieved by two paths: 1 and $1 \rightarrow 3 \rightarrow 4$	> 2 -> 4
Input:	
4 3 1 3	Сору
2 3 2 4	
2 4	Сору

The shortest time needed to get from City 1 to City 4 is 3 hours, which is achieved by one path: $1 \to 3 \to 2 \to 4$

Sample Test Case 2:

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No clarifications have been made at this time.

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