CSE 208: Data Structures and Algorithms II
Online on Flow & Matching

Department of Computer Science and Engineering
Term: July 2025
Time: 45 Minutes

You are designing a multiplayer board game played on a graph of N cells. Cell 1 is the **Start** and Cell N is the **Finish**. There are directed paths (snakes, ladders, or corridors) connecting these cells.

The Twist: The dungeon floor is crumbling. Once a player steps on a specific cell or uses a specific corridor, it collapses. This means **no two players can ever share the same cell or the same edge** (except for the Start and Finish cells, which are indestructible).

Task Requirements

Find the maximum number of players that can navigate from Start to Finish simultaneously without any of them falling into the void.

Input Format

- The first line contains two integers N and M, the number of cells and paths.
- In the next M lines, there will be two integers u, v, representing a directed path from cell u to cell v.

Output Format

- Print a single integer: the maximum number of players.

Sample I/O

Input	Output
6 7 1 2 1 3 2 4 3 4 4 5 2 5 5 6	1