Mock CCC '21 S5 - Clique and Independent Set

Time limit: 0.25s **Memory limit:** 1G

You are given an undirected graph of N vertices and M edges. Compute the number of subsets of vertices which are cliques, where the vertices not in the subset form an independent set.

Constraints

$1 \leq N, M \leq 2 \cdot 10^5$

Input Specification

The first line contains two space-separated integers, N and M.

Each of the next M lines contain two space-separated integers, a and b, indicating an edge between a and b. The input is guaranteed to contain no self-loops or parallel edges.

Output Specification

Count the number of valid subsets modulo $10^9 + 7$.

Sample Input

```
3 3
1 2
1 3
2 3
```

Sample Output

```
4
```