

Problem B. Double Clique

Input file: *standard input*
Output file: *standard output*
Time limit: 1 second
Memory limit: 512 mebibytes

You are given an undirected graph G with n nodes and m edges. The set of vertices is V and the set of edges is E .

Let the *Complement* of G be G' . The *Complement* of a graph is a graph with all of the same nodes, but if there's no edge between nodes a and b in G , then there is an edge between a and b in G' , and if there is an edge between a and b in G , then there is no edge between a and b in G' .

A *Clique* is a subset of nodes that have an edge between every pair. A subset of nodes S is called a *Double Clique* if S forms a clique in G , and $V - S$ forms a clique in G' . Note that an empty set of nodes is considered a clique.

Given a graph, count the number of double cliques in the graph modulo $10^9 + 7$.

Input

Each input will consist of a single test case. Note that your program may be run multiple times on different inputs. Each test case will begin with a line with two integers n and m ($1 \leq n, m \leq 2 \times 10^5$), where n is the number of nodes and m is the number of edges in the graph. The nodes are numbered $1..n$. Each of the next m lines will contain two integers a and b ($1 \leq a < b \leq n$), representing an edge between nodes a and b . The edges are guaranteed to be unique.

Output

Output a single integer, which is the number of Double Cliques in the graph modulo $10^9 + 7$.

Examples

standard input	standard output
3 3 1 3 1 2 2 3	4