Valid Assignment

Input file:	*standard input*
Output file:	*standard output*
Time limit:	1 second
Memory limit:	1024 mebibytes

You are given an undirected graph without self-loops or multiple edges.

Assign a nonnegative integer value to each vertex of the graph. An assignment is *valid* if it satisfies two conditions:

- any two adjacent vertices have values that differ by exactly 1;
- if the value of a vertex is strictly less than the values of all its neighbors, then it is equal to 0.

Find the number of valid assignments modulo 998 244 353. Two assignments are different if there exists a vertex that has different values in these assignments.

Input

The first line contains an integer t, the number of test cases.

The first line of each test case contains two integers n and m ($2 \le n \le 10^6$, $1 \le m \le 10^6$): the number of vertices and edges in the graph.

Each of the next m lines contains two integers u and v ($1 \le u, v \le n$, $u \ne v$): the endpoints of the corresponding edge. The graph does not contain self-loops or multiple edges. Every vertex has at least one neighbor.

The sum of m over all test cases does not exceed 10^6.

Output

For each test case, output one integer: the number of valid assignments modulo 998 244 353.

Example

standard input	*standard output*
2 4 3 1 2 2 3 3 4 3 3 1 2 2 3 1 3	6 0