

Description

Hints

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Discussions

Notes

Easy Graph Queries

Difficulty 1 sec 256000KB 100
Time Limit Memory Score

80/80 XP

30/30

Description

You have given an undirected graph G with N nodes and M edges. You've to answer Q queries. Each query is either of the following two types:

- 1 X : Print the size of the connected components containing node X .
- 2 X Y : Print 'YES' (without quotes) if node X and Y belong to the same connected component, else print 'NO' (without quotes).

Input Format

The first line of input contains three space-separated integers N , M , and Q ($1 \leq N, M, Q \leq 10^5$).

Next M lines contain two space-separated integers u and v ($1 \leq u, v \leq N$).

Each of the next Q lines contains queries of one of the types as described in the statement.

Output Format

Print Q lines as the answer to the Q queries, each on a new line.

Constraints

C++14

00:00:00

12 px

```
1 #include<bits/stdc++.h>
2 using namespace std;
3 #define endl "\n"
4 using lli=long long int;
5 lli m = 1e9 + 7;
6
7 vector<vector<int>>>g;
8 vector<int>vis;
9 vector<int>color;
10 vector<int>colnum;
11 void dfs(int node,int col){
12     vis[node]=1;
13     color[node]=col;
14     colnum[col]++;
15     for(auto i:g[node]){
16         if(!vis[i]){
17             dfs(i,col);
```

Sample Tests

Manual Tests

Test Case 1

Input

```
6 5 5
1 2
2 3
1 3
4 4
5 6
```

Console

Run on Sample