

DescriptionHintsSubmissionsDiscussionsNotes

Round Trip II

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DifficultyTime LimitMemoryScore

80/80 XP30/30

Description

Zenithland has n cities and m flight connections. Your task is to design a round trip that begins in a city, goes through one or more other cities, and finally returns to the starting city. Every intermediate city on the route has to be distinct.

Input Format

First line contains T – Number of test cases.

First input line of each test case has two integers n and m : the number of cities and flights. The cities are numbered $1, 2, \dots, n$.

Then, for each test case, there are m lines describing the flights. Each line has two integers a and b : there is a flight connection from city a to city b . All connections are one-way flights from a city to another city.

Output Format

For each test case, Print "Yes" if such round trip exists, otherwise print "No" in a new line.

Constraints

$1 \leq T \leq 10$ $1 \leq n \leq 10^5$ $1 \leq m \leq 2 \cdot 10^5$ $1 \leq a, b \leq n$

Sample Input 1

14 51 32 1

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19 }20 void solve(){21 is_cycle=false;22 state.clear();23 g.clear();24 int n,m;25 cin>>n>>m;26 g.resize(n+1);27 state.assign(n+1,0);28 for(int i=0;i<m;i++){29 int a,b;30 cin>>a>>b;31 g[a].emplace_back(b);32 }33 for(int i=1;i<=n;i++){34 if(state[i]==0){35 dfs(i);36 }37 }38 }39 int main(){40 ios_base::sync_with_stdio(0);41 cin.tie(0);42 cout.tie(0);43 int t;44 cin>>t;45 while(t--){46 solve();47 if(is_cycle){48 cout<<"Yes"<<endl;49 }50 else{51 cout<<"No"<<endl;52 }53 }54 }

Sample TestsManual Tests

ConsoleRun on Sample