PT07Y - Is it a tree

[#dfs](https://www.spoj.com/problems/tag/dfs)

You are given an unweighted, undirected graph. Write a program to check if it's a tree topology.

Input

The first line of the input file contains two integers *N* and *M* --- number of nodes and number of edges in the graph (0 < *N* <= 10000, 0 <= *M* <= 20000). Next *M* lines contain *M* edges of that graph --- Each line contains a pair (*u*, *v*) means there is an edge between node *u* and node *v* (1 <= *u*, *v* <= *N*).

Output

Print *YES* if the given graph is a tree, otherwise print *NO*.

Example

**Input:**

3 2

1 2

2 3

**Output:**

YES

A screen shot of a computer program

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.