
Graphs (1)

P56483_en

Given a directed graph with m vertices and m arcs, we wish to know if there is a directed path between two given vertices.

Input

Input starts with n i m . Then follow m pairs u, v , with $u \neq v$, indicating an arc from u to v . We have that $0 \leq u < n$ and $0 \leq v < n$ and there are no repeated arcs. Then follows, a pair x, y with $0 \leq x < n$ and $0 \leq y < n$.

Output

Write "yes" o "no" according to whether there is or not a path from x to y .

Sample input 1

```
8 10
1 4 4 6 7 2 7 5 0 3 2 5 5 2 6 3 1
1 3
```

Sample output 1

```
yes
0 0 1
```

Sample input 2

```
8 10
1 4 4 6 7 2 7 5 0 3 2 5 5 2 6 3 1
7 6
```

Sample output 2

```
no
0 0 1
```

Problem information

Author: Jordi Petit

Translator: Jordi Petit

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